The Economic Impacts and Occupational Analysis of the North Carolina Motorsports Industry for 2005

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Section 1: Introduction

Background: This study is a follow-up of an earlier study on the economic impact of the motorsports industry in North Carolina. That study was released in September of 2004 and was based on data that was collected in the 2003 calendar year. This study is based on data collected for the motorsports industry in North Carolina for the 2005 calendar year and provides an update on the economic impact and a two-year growth analysis. In addition to the two-year follow-up of the original study, this study also adds occupational breakdowns of the various sectors within the motorsports industry and also provides educational requirements within the occupations by motorsports sector. The 2004 study contains a complete analysis of the unique character of the motorsports industry and the problems associated with estimating a diverse industry. The 2004 study is available at the following website: http://www.belkcollege.uncc.edu/news/motorsports.htm.

In general, the economic principles that drive the decisions and choices of motorsports related manufacturing and service industries are the same as for other industries. The tendency of firms within any industry is to cluster in a particular region. This tendency is known as industrial agglomeration or clustering. These agglomerations have been widely studied by various researchers and although the origins of cluster theory are not precisely known, Michael Porter's The Competitive Advantage of Nations (New York: Basic Books, 1990) has widely publicized the use of the term *industrial cluster*.

An industry cluster is a group of companies that are related through at least one of the following types of relationships:

1. Buyer-Supplier Relationships
2. Competitor and Collaborator Relationships
3. Shared Resources Relationships

In addition to these relationships, geographic proximity plays a key role in the formation of industrial clusters. These industrial clusters can be observed worldwide and are found in a variety of industries. The reasons for such clustering of firms are widely debated, but not material to this study. In the specific case of motorsports, the example of the British motorsports industry is well known and has been studied by several interest groups. Virtually the entire

British motorsports industry is clustered within a fifty-mile radius around Oxford in Southern England. The region has been named "Silicon Valley of Motor Sport" or simply "Motor Sport Valley". Approximately three quarters of the world's single seat racing cars are designed and assembled in the region. The production of equipment is focused on Formula One, Championship Auto Racing, Indy Racing League, as well as Rally cars.

A similar regional concentration of motorsports related industries can be found in North Carolina with the main difference being that most of the economic activity is tied to NASCAR. The Southeastern part of the United States has traditionally been viewed as the cradle of stock car racing, a sport that has seen a tremendous gain in popularity with a continuously expanding audience. NASCAR has expanded out of its traditional geographic region and grown to be the second most popular sport watched on television in the U.S. Traditionally, North Carolina has been the home of most NASCAR teams and together with its race tracks and events, the state has experienced the development of a sizable industrial cluster. The rapid growth of the motorsports cluster in North Carolina has been the result of the increased popularity of the sport itself as well as the historical advantage of a specialized labor pool, a well developed supplier chain, infrastructure in the form of race tracks and testing facilities, and a culture of stock car racing.

Previous Studies: For those interested in previous economic impact studies related to the motorsports industry, the following is a selection of previous research: *The Economic Impact of the European Grand Prix*, which is an economic impact study approximating the effects of the European Grand Prix on the European Union. The study was conduced in 1999 by William Lilley II and Laurence J. DeFranco. *The Economic Impact of the 2002 FIA Foster's British Grand Prix*, which was a report done by the Motorsport Industry Association in 2003. *The National Survey of Motorsport Engineering and Services*, which is a full overview of the UK motor sport industry. The research was carried out by various universities within the UK. *The Economic Impact of the Network Q Rally of Great Britain*, which is an economic impact study of the event conducted by William Lilley III and Laurence J. DeFranco conducted in 1998. *An Impact Analysis of the Dragons Ridge Motorsports Park on the Economy of New Kent County, Virginia,* conducted by Chmura Economics & Analytics in 2003. *Hampton Motorsports Complex Impact Study*, which was conducted in 2003 by Frost Motorsports, LLC. *USA Motorsport Market Research Report*, conducted by Motorsports Research Associates in 2002. *Economic Impact Analysis Proposed Autoracing Complex in Immokalee, Florida*, which was prepared by Bernhard Weinstein and Terry Clower in 2000. *The Economic Impact of Lowe's Motor Speedway on the*

Cabarrus, Iredell and Mecklenburg County Economies, prepared by John Connaughton in 2000. *The Economic Impact of Sports on the North Carolina Economy*, prepared by John Connaughton in 1997. *The Economic Impacts of the Motorsports Industry On the North Carolina Economy*, prepared by John E. Connaughton, Ronald A. Madsen, John M. Gandar, Joseph D. Arthur, and Alain A. Krapl in 2004. *Motorsports Industry in the Indianapolis Region*, prepared by the Center for Urban Policy and the Environment at Indiana University-Purdue University Indianapolis in 2004.

Section 2: Study Methodology

Data Collection: Most industries in the U.S. economy have their own unique industry classification. U.S. industries are currently classified using the North American Industrial Classification System (NAICS). This system recently replaced the Standard Industrial Classification (SIC) system. These industrial classification systems assign firms a code based on the product or service the firm produces. This allows both the U.S. Bureau of Economic Analysis (BEA), which collects and publishes output and income data, and the U.S. Bureau of Labor Statistics (BLS), which collects and publishes employment and wage data, to compute total output, income, employment, and wages by a common industry code. The objective is for NAICS to provide aggregate industry specific data for homogeneous firm groupings.

However, some industry concepts, such as the motorsports industry, are not comprised of homogeneous firms within a unique NAICS code. The motorsports industry is comprised of firms that are classified in over forty different NAICS codes, based on the product or service they provide. An additional complication is that not all of the firms within each of these industry codes produce goods or services related to motorsports. As a result, there is no secondary motorsports data source for output, income, employment, or wages. This requires collection of primary data in order to estimate the size and impact of the motorsports industry.

In this study, the primary data collection consisted of several different techniques. First, firms located in North Carolina that were known to produce motorsports goods and services were identified using several different approaches, including the membership list for the North Carolina Motorsports Association, North Carolina Department of Commerce list, Charlotte Regional Partnership list, Dunn & Bradstreet data, Reference USA data, NASCAR teams, interviews, and referrals. Surveys were sent to these firms to gather employment, output, wage, occupational categories, educational levels, and other economic information. Because of the variety of products and services provided by firms in the motorsports industry, fifteen different

industries, based on type of product or service, were identified. This required eleven different surveys which appear in Appendix B.

In addition to the direct survey approach, a second technique of data collection involved the use of proprietary databases. Firm and industry databases such as Reference USA and Dunn & Bradstreet were analyzed based on key SIC/NAICS codes and key words. This process produced a lengthy list of firms that were subsequently vetted to ensure involvement in motorsports. The output and employment estimates supplied by the proprietary databases were used for these firms.

Finally, despite all the different techniques of collecting primary data, output and employment data for a number of firms were incomplete. In order to estimate the missing data for these firms, the fifteen industry categories were each further divided based on firm size (small, medium, and large). This produced forty-five different groupings. For each class size in each category, employment and output averages were calculated based on direct survey data, proprietary data, and a combination of direct survey and proprietary data. Missing data were then estimated using the three different techniques described above. The averaging technique that produced the most conservative estimate of employment and output was used to estimate the missing data.

Impact Methodology: The economic impact of an industry or event is typically measured in terms of total output and/or jobs. To accurately assess the total economic impact, the most important piece of information is direct output. The term direct refers to the dollar output or employment associated with the firm or industry being evaluated. For the motorsports impact study, the term direct is most closely associated with the total annual sales/revenue generated by the different organizations that comprise the motorsports industry in North Carolina.

Once the estimates of direct output and employment are established, the multiplier concept can then capture the total effect of the economic activity on output, employment, value added, and employee compensation. For instance, a job multiplier value of 2.1 would mean that for each direct job in an industry, 1.1 additional jobs are generated in other parts of the economy (the total benefit to the economy being 2.1 jobs). Thus, an event or firm that creates 100 new jobs in a particular industry would, through the multiplier effect, translate into a subsequent employment gain of 110 jobs in other sectors, for a total employment gain of 210 jobs (100 x 2.1).

The basic multiplier methodology used in the motorsports study is provided by the Minnesota IMPLAN Group. IMPLAN is a multiplier methodology originally developed by the United States Government and currently maintained by the Minnesota IMPLAN Group. Table 2.1 presents the IMPLAN sectors used in this study.

IMPLAN code 4XB, Off-site fan expenditures, represents a blended multiplier. Off-site fan expenditures occur when motorsports fans spend money on non-motorsports activities while attending motorsports events. Examples of this type of spending are hotel and motel expenses, food and entertainment spending, gasoline purchases, and other retail purchases including souvenirs. The blended multiplier is a weighted average multiplier based on all expenditure categories associated with the off-site expenditures. The weights were determined using survey data collected from a Lowe's Motor Speedway fan expenditure survey conducted in 2000.

In this study, the state was divided into seven regions. These seven regions correspond to North Carolina's seven economic development regions as defined by the North Carolina Department of Commerce. Figure 2.1 presents a map showing the seven regions. For each region, an IMPLAN multi-county multiplier model was constructed. The number of industries included in the model varies by region. Table 2.2 presents the 2005 population and number of industries included in each region. (Appendix A provides the list of counties in each region and their respective 2005 populations.) The Input/Output (I/O) matrix for each region provides multipliers based on the new North American Industrial Classification System (NAICS) definitions of industries. The IMPLAN data used to estimate the region specific industry multipliers were the latest available and were based on 2002 data and adjusted for inflation to reflect the estimated effects in 2005.

Table 2.1
IMPLAN and NAICS Codes

Sector	IMPLAN Code	IMPLAN Industry	NAICS Code(s)
NASCAR Teams	350	Motor vehicle parts manufacturing	3363
Suppliers	139	Commercial printing	32311
Suppliers	145	Petroleum lubricating oil and grease manufacturing	324191
Suppliers	180	Rubber and plastics hose and belting manufacturing	32622
Suppliers	205	Iron, steel pipe and tube from purchased steel	33121
Suppliers	247	Electroplating, anodizing, and coloring metal	33281
Suppliers	286	Other engine equipment manufacturing	333618
Suppliers	347	Truck trailer manufacturing	33621
Suppliers	350	Motor vehicle parts manufacturing	3363
Suppliers	358	Boat Building	336612
Suppliers	359	Motorcycle, bicycle, and parts manufacturing	336991
Suppliers	391	Air transportation	481
Suppliers	440	Specialized design services	5414
Suppliers	446	Scientific research and development services	5417
Suppliers	450	All other miscellaneous professional and technical	54191, 54193, 54199
NASCAR Testing	446	Scientific research and development services	5417
Marketing	450	All other miscellaneous professional and technical	54191, 54193, 54199
Retail	139	Commercial printing	32311
Retail	350	Motor vehicle parts manufacturing	3363
Retail	402	Furniture and home furnishings stores	442
Retail	408	Clothing and clothing accessories stores	448
Retail	411	Miscellaneous store retailers	453
Major Track	472	Spectator sports	7112
Drag Tracks	472	Spectator sports	7112
Short-Tracks	472	Spectator sports	7112
Drag Racers	350	Motor vehicle parts manufacturing	3363
Museums	475	Museums, historical sites, zoos, and parks	712
Sanctioning Org	474	Promoters of performing arts and sports and agents	7113, 7114
Miscellaneous Firms	393	Water transportation	483
	446	Scientific research and development services	5417
	447	Advertising and related services	5418
	456	Travel arrangement and reservation services	5615
	462	Colleges, universities, and junior colleges	6112, 6113
	463	Other educational services	6114, 6115, 6116, 6117
	474	Promoters of performing arts and sports and agents	7113, 7114
	493	Civic, social, professional organizations	8134, 8139
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	3363
Short-Track Racers	350	Motor vehicle parts manufacturing	3363
Drag Racers	350	Motor vehicle parts manufacturing	3363
Travel & Tourism	4XB	Off-Site event expenditures	452, 453 ,721, 722, 8111

Figure 2.1

North Carolina Economic Development Planning Regions

Table 2.2
Planning Region 2005 Population and Industry Count

Planning Region	Population	Number of Industries	Number of Counties
Advantage West	1,045,801	372	23
Carolinas Partnership	1,997,922	434	12
Piedmont Triad Partnership	1,532,232	423	12
Research Triangle Regional Partnership	1,756,023	391	13
North Carolina's Southeast	1,026,592	347	11
North Carolina’s Eastern Region	951.770	345	13
North Carolina’s Northeast Partnership	353,334	255	16
North Carolina	8,663,674	481	100

In addition, the IMPLAN multiplier model provides a comprehensive set of disaggregated multipliers that can be used to estimate the indirect impacts and the induced impacts separately from the total impact at the regional level. The indirect impact is the additional regional economic activity of the supplier chain network caused by the economic activity of the direct industry. The induced impact is the additional regional economic activity of all other unrelated firms and households caused by the economic activity of the direct industry, as well as, the indirect impact.

This study encountered one additional complication. As part of the primary data collection process firms were grouped into industries. Some industry groups (suppliers, marketing, etc.) may represent part of the supplier chain (indirect) for other industry groups (NASCAR teams, short track teams, etc). Using the primary data directly with the multiplier

approach could result in double counting when estimating total impacts. Firms identified as part of a supplier chain received surveys that included questions asking the percent of their total business originating from within North Carolina. Based on the survey information, an adjustment was made to reduce the direct output and employment estimates of firms within a supplier chain industry. The resulting direct output and employment estimates reflect their rest of world (outside of North Carolina) business and only the portion of their in-state business not being counted as direct in another industry sector.

Using the regional models and multipliers, output, employment, employee compensation, and value added impacts were estimated for each industry within each region. In regions with either small industries or a small number of firms within an industry the reporting table suppresses the results. This is to minimize the dissemination of proprietary information. However, the, data are carried to the regional totals. State level results for output and employment by industry are the simple sum of the regional results.

Section 3: State Impacts

At the state level four different types of economic impacts generated by the motorsports industry were estimated based on the 2005 information. These impacts include: (1) output impacts; (2) employment impacts; (3) employee compensation impacts; and (4) value added impacts. These impacts were estimated for each of the seven regional economic development areas and the state results are the sum of these regional estimates.

Output Impacts: Table 3.1 contains the estimated annual output impact on the state economy of the North Carolina motorsports industry. This table is again organized by motorsports sector. In North Carolina the total direct spending by all motorsports related firms in 2005 was almost 3.8 billion dollars ($3,765,722,321). Of these direct expenditures, the largest reported total was for NASCAR Teams with 1.37 billion dollars of direct expenditures. The results show some ND (not disclosed) entries that reflect motorsports sectors and IMPLAN Industry Codes where the number of firms is sufficiently small that confidentiality requires non-disclosure. In addition to direct output impacts, there were just over 1.1 billion dollars ($1,171,546,055) of indirect (supplier chain) output impacts and another 964.9 Million ($ 964,991,961) of induced economic impacts. The total economic impact of the motorsports industry on the North Carolina economy in 2005 was just over 5.9 billion dollars ($5,902,260,336) which is the sum of the direct, indirect, and induced impacts. This large

economic impact is an indication of how important the motorsports industry has become to the economic performance of the state economy.

Table 3.1
State Output Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	$1,367,595,454	$560,619,456	$296,784,079	$2,224,998,990
Suppliers	$637,291,776	$228,400,567	$127,608,421	$993,300,721
NASCAR Testing	ND	ND	ND	ND
Marketing	$392,379,338	$42,090,203	$70,927,741	$505,397,306
Retail	$252,486,522	$72,623,103	$82,412,353	$407,521,980
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	$51,569,383	$4,316,828	$27,956,164	$83,842,378
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	$335,862,388	$67,504,304	$113,383,762	$516,750,455
Non-NASCAR Teams	$110,489,482	$36,775,457	$21,813,680	$169,078,626
Short Track Teams	$136,426,000	$45,638,157	$27,337,587	$209,401,761
Drag Track Teams	$108,558,000	$33,983,389	$20,786,553	$163,327,947
Tourism	$149,699,946	$52,269,249	$49,928,930	$251,898,111
Totals	**$3,765,722,321**	**$1,171,546,055**	**$964,991,961**	**$5,902,260,336**

Table 3.2 shows how this output impact was distributed among the North Carolina's regional economic development areas. (The breakdown of output impacts by motorsports sector and IMPLAN Industry Code for each region is presented in the regional results section.) In Table 3.2 it can be seen that the largest regional economic impact of the motorsports industry is on the Charlotte Regional Partnership.

Table 3.2
Output Impacts by Planning Region

Region	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Advantage West	$122,030,014	$33,868,391	$32,752,765	$188,651,222
Charlotte Regional Partnership	$2,879,532,187	$913,731,578	$760,593,561	$4,553,857,317
Piedmont Triad Partnership	$402,009,008	$144,517,846	$96,053,496	$642,580,379
Research Triangle Regional Partnership	$73,102,287	$24,309,818	$15,248,297	$112,660,406
North Carolina's Southeast	$79,924,833	$19,164,017	$17,485,938	$116,574,788
North Carolina's Eastern Region	$94,832,071	$19,598,050	$20,712,631	$135,142,754
North Carolina's Northeast Partnership	$114,291,921	$16,356,355	$22,145,273	$152,793,470
Total	**$3,765,722,321**	**$1,171,546,055**	**$964,991,961**	**$5,902,260,336**

This region had over 2.8 billion dollars in direct output expenditures in 2005 and the total output impact on the region was just under 4.6 billion dollars. Even in the economic development region with the smallest direct motorsports output impact, Research Triangle Partnership, the motorsports total 2005 output impact exceeded 73 million dollars. The table shows the largest output impact of the motorsports industry is in the Charlotte Regional Partnership with a total output impact that accounts for 77.15% of the total state output impact.

Employment Impacts: In addition to the output impacts, there are employment impacts for the motorsports industry in North Carolina. Table 3.3 presents the 2005 impact of the motorsports industry on total state employment by motorsports sector. The state level impacts are the sum of the regional employment impacts which are detailed in the next section of the study.

Again the results show some ND (not disclosed) entries that reflect motorsports sectors and IMPLAN Industry Codes where employment levels or the number of firms is sufficiently small that confidentiality requires non-disclosure. NASCAR Teams had the largest estimated direct employment impact with 4,445 jobs. In the Suppliers sector, there were another 2,050 direct jobs and in the Marketing sector there were 1,768 direct jobs supported. Overall the motorsports industry generated a total of 27,252 jobs in 2005 for the state economy. This employment impact consisted of 14,298 direct jobs, 6,877 indirect (supplier chain) jobs, and 6,077 induced jobs.

Table 3.4 presents the direct, indirect, and induced employment impacts by regional economic development area. The table shows the largest employment impact of the motorsports industry is in the Charlotte Regional Partnership, with a direct employment impact of 10,476 jobs accompanied by 4,971 indirect (supplier chain) jobs and 4,352 induced jobs for a total employment impact of 19,799 jobs. In the Piedmont Triad Partnership area the motorsports industry supported over 3,500 total jobs in 2005. The regional employment estimates indicate that the presence of the motorsports industry supported 375 or more total jobs in each of the seven regional economic development areas.

Table 3.3
State Employment Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	4,445	3,156	2,507	10,108
Suppliers	2,050	1,285	1,097	4,431
NASCAR Testing	ND	ND	ND	ND
Marketing	1,768	315	517	2,600
Retail	1,033	224	234	1,490
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	451	110	88	648
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	843	284	266	1,394
Non-NASCAR Teams	531	353	298	1,183
Short Track Teams	523	347	303	1,173
Drag Track Teams	417	269	236	923
Tourism	1,394	442	298	2,133
Totals	**14,298**	**6,877**	**6,077**	**27,252**

Table 3.4
Employment Impacts by Planning Region

Region	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Advantage West	598	191	190	979
Charlotte Regional Partnership	10,476	4,971	4,352	19,799
Piedmont Triad Partnership	1,550	1,088	914	3,553
Research Triangle Regional Partnership	191	93	91	375
North Carolina's Southeast	339	152	139	630
North Carolina’s Eastern Region	425	235	169	829
North Carolina’s Northeast Partnership	719	147	221	1,087
Total	**14,298**	**6,877**	**6,077**	**27,252**

For each economic development region, Table 3.5 provides a summary of the total output impacts and total employment impacts as a percentage of the corresponding state total impact. The Charlotte Regional Partnership economic development region provides 77.15 percent of the total state output impact and 72.65 percent of the total state employment impact. The Piedmont Triad Partnership economic development region provides 10.89 percent of the total state output impact and 13.04 percent of the total state employment impact. While the percentages of impacts in the other planning regions are smaller both in dollar value as well as total employment impacts, they are large in absolute terms as shown in Tables 3.2 and 3.4. The estimated output and employment impacts indicate the importance of the motorsports industry to each regional economic development area and the state as a whole.

Table 3.5
Percent of Total Output Impact and Total Employment Impact by Region

Planning Region	Percent of State Output	Percent of State Employment
Advantage West	3.20%	3.59%
Charlotte Regional Partnership	77.15%	72.65%
Piedmont Triad Partnership	10.89%	13.04%
Research Triangle Regional Partnership	1.91%	1.38%
North Carolina's Southeast	1.98%	2.31%
North Carolina's Eastern Region	2.29%	3.04%
North Carolina's Northeast Partnership	2.59%	3.99%

Compensation Impacts: In addition to the output and employment impacts, estimates of employee compensation impacts on a state level were made and these impacts were reported in Table 3.6. Compensation consists of all wage benefits and non-wage benefits for the 27,252 North Carolina jobs estimated earlier.

Table 3.6 shows that just under 1.7 billion dollars ($1,680,446,205) of employee compensation in 2005 resulted from direct, indirect, and induced economic activity related to the motorsports industry. The largest impact on compensation is in the sector NASCAR Teams with a direct 2005 compensation impact of 277.1 million dollars and a total compensation impact of 537.5 million dollars. The second largest sector impact was from Suppliers with a total compensation impact of 249.3 million dollars.

Table 3.6
State Employee Compensation Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	$277,062,458	$172,447,092	$88,020,175	$537,529,725
Suppliers	$141,177,903	$68,793,049	$39,371,205	$249,342,122
NASCAR Testing	ND	ND	ND	ND
Marketing	$77,045,253	$14,500,894	$21,023,746	$112,569,860
Retail	$96,647,639	$24,099,907	$24,307,319	$145,054,733
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	$33,762,475	$1,908,366	$8,097,237	$43,768,057
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	$129,364,829	$21,855,649	$33,499,952	$184,720,454
Non-NASCAR Teams	$31,084,431	$11,302,830	$6,361,457	$40,616,821
Short Track Teams	$28,234,837	$13,943,720	$7,947,316	$50,125,861
Drag Track Teams	$22,352,678	$10,368,681	$5,982,801	$38,704,179
Tourism	$51,260,688	$16,295,953	$14,768,340	$82,324,967
Totals	**$1,034,295,670**	**$367,638,008**	**$286,644,670**	**$1,680,446,205**

Table 3.7 provides the average compensation per job by motorsports sector for the state. This table shows that the average compensation per employee for the direct motorsports generated jobs (14,298) was $72,337 per year in 2005. Assuming non-wage benefits are 25 percent of this total, the average annual wage of these direct jobs was $54,253 in 2005. Table 3.7 also indicates the overall average compensation per employee for the state for all 27,252 direct, indirect, and induced jobs was $61,663 per year. Again assuming non-wage benefits are 25 percent of this total, the average annual wage of these jobs was $46,247 in 2005. These results show the motorsports industry supports jobs with annual average wages substantially above the overall average state wage of $34,580.

Table 3.7
State Average Employee Compensation Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	$62,331	$54,644	$35,109	$53,179
Suppliers	$68,879	$53,544	$35,906	$56,273
NASCAR Testing	ND	ND	ND	ND
Marketing	$43,578	$46,024	$40,696	$43,301
Retail	$93,560	$107,772	$104,062	$97,339
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	$74,861	$17,371	$92,426	$67,494
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	$153,458	$76,957	$125,940	$132,511
Non-NASCAR Teams	$58,539	$32,000	$21,326	$34,348
Short Track Teams	$54,011	$40,205	$26,221	$42,745
Drag Track Teams	$53,637	$38,479	$25,310	$41,952
Tourism	$36,777	$36,890	$49,598	$38,590
Totals	**$72,337**	**$53,459**	**$47,171**	**$61,663**

Value Added Impacts. The output impacts reported earlier estimate the total spending in North Carolina generated by the motorsports industry measured by the final selling prices of goods and services. Value added impacts measure the value of North Carolina inputs included in the final selling price of a good or service. These value added impacts would be interpreted as the impact of the North Carolina motorsports industry on Gross State Product (GSP). GSP is a state measure analogous to Gross Domestic Product (GDP) for the national economy. Table 3.8 presents the estimated value added impacts by motorsports sector for the state. The largest value added comes from the NASCAR Teams sector with a direct value added estimate of just under

388.3 million dollars ($338,331,028). Table 3.8 shows the NASCAR Teams sector activity also generated an indirect value added impact of 285.5 million dollars and an induced value added impact of 175.9 million dollars for the North Carolina economy. Overall the motorsports industry in 2005 was estimated to have a direct value added impact of 1.58 billion dollars ($1,586,547,682) and a total value added impact on the state economy of just under 2.8 billion dollars ($2,790,016,329).

Table 3.8
State Value Added Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	$338,331,028	$285,528,948	$175,993,200	$799,853,176
Suppliers	$174,747,589	$115,962,566	$76,002,422	$366,712,682
	ND	ND	ND	ND
Marketing	$326,474,136	$28,262,472	$42,161,977	$396,898,609
Retail	$142,684,192	$44,538,181	$48,742,565	$235,965,069
	ND	ND	ND	ND
	ND	ND	ND	ND
Short Track	$43,141,450	$3,010,382	$16,322,332	$62,474,174
	ND	ND	ND	ND
	ND	ND	ND	ND
Miscellaneous Firms	$213,331,207	$44,369,707	$67,317,670	$325,018,598
Non-NASCAR Teams	$28,028,208	$18,613,004	$12,787,405	$59,428,634
Short Track Teams	$34,478,580	$22,729,919	$15,934,714	$73,143,234
Drag Track Teams	$27,295,657	$16,895,971	$12,107,922	$56,299,564
Tourism	$74,472,743	$31,946,693	$29,742,089	$136,161,561
Totals	**$1,586,547,682**	**$631,359,748**	**$572,108,519**	**$2,790,016,329**

Summary of State Impacts: The economic impacts of the motorsports industry on the North Carolina economy in 2005 were estimated to have direct impacts that: (1) increased output by almost 3.8 billion dollars ($,3,765,722,321); (2) increased employment by 14,298 jobs; (3) increased employee compensation by 1.03 billion dollars ($1,034,295,670) with an average direct compensation per job of $72,337 per year; and (4) increased value added by just under 1.6 billion dollars ($1,586,547,682).

Adding the indirect and induced impacts to these direct impacts the economic impacts of the motorsports industry on the North Carolina economy in 2005 were estimated to have: (1) increased total output by just over 5.9 billion dollars ($5,902,260,336), (2) increased total employment by 27,252 jobs, (3) increased total employee compensation by just under 1.7 billion

dollars ($1,680,446,205), and (4) increased total value added by just under 2.8 billion dollars ($2,790,016,329).

Section 4: Regional Impacts

In this section the economic impacts generated by the motorsports industry are estimated for each of the seven state regional economic development areas. The reported regional results provide output impacts and employment impacts for each region by motorsports sector. The state results reported in the previous section are the sum of these regional estimates.

Advantage West Results: The Advantage West economic development region is made up of the twenty-three counties located in the western corner of the state (Figure 4.1). This region has 12 percent of the NC population and the region's labor force is 11 percent of the NC labor force. The largest employment sectors in this region are manufacturing and wholesale/retail trade. The fastest growing sectors in the region are construction and services.

Figure 4.1: Advantage West Region

Table 4.1 and Table 4.2 present the output and employment multipliers for the Advantage West economic development region by motorsports sector and IMPLAN Industry Code. These tables only present multipliers for the motorsports sectors and IMPLAN Industry Codes with firms in the Advantage West region. Table 4.1 shows that for each dollar of direct expenditure by a NASCAR Race Team (IMPLAN Industry Code 350) there are 31.42 cents spent in indirect (supplier chain) industries within the region and 19.91 cents in induced spending within the

region, so that the total regional output impact of $1 spent by a NASCAR Race Team increases regional output by $1.51. Each of the output multipliers in this table can be interpreted in a similar manner. Table 4.2 shows that in this region, for each direct job in the NASCAR Teams (IMPLAN Industry Code 350) there are 0.68 indirect (supplier chain) jobs, as well as 0.64

Table 4.1
Advantage West Output Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.314199	0.199095	1.513295
Suppliers	139	Commercial printing	1	0.252371	0.232791	1.485162
	145	Petroleum lubricating oil and grease manufacturing				
	180	Rubber and plastics hose and belting manufacturing	1	0.203850	0.213807	1.417657
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal	1	0.149100	0.403509	1.552608
	286	Other engine equipment manufacturing	1	0.336827	0.147215	1.484043
	347	Truck trailer manufacturing				
	350	Motor vehicle parts manufacturing	1	0.314199	0.199095	1.513295
	358	Boat building	1	0.317687	0.206302	1.523989
	359	Motorcycle, bicycle, and parts manufacturing				
	391	Air transportation	1	0.317530	0.280609	1.598138
	440	Specialized design services	1	0.188451	0.289318	1.477769
	446	Scientific research and development services	1	0.145448	0.429729	1.575177
NASCAR Testing	446	Scientific research and development services	1	0.145448	0.429729	1.575177
Marketing	350	All other miscellaneous professional and technical	1	0.084009	0.176917	1.260926
Retail	139	Commercial printing	1	0.252371	0.232791	1.485162
	350	Motor vehicle parts manufacturing	1	0.314199	0.199095	1.513295
	402	Furniture and home furnishings stores	1	0.229207	0.330304	1.559511
	408	Clothing and clothing accessories stores	1	0.214311	0.330050	1.544361
	411	Miscellaneous store retailers	1	0.331445	0.306107	1.637552
Major Track	472	Spectator sports	1	0.070567	0.556205	1.626772
Drag Track	472	Spectator sports	1	0.070567	0.556205	1.626772
Short Track	472	Spectator sports	1	0.070567	0.556205	1.626772
Museums	475	Museums, historical sites, zoos, and parks	1	0.453653	0.301743	1.755396
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.224711	0.320042	1.544753
Miscellaneous Firms	393	Water transportation				
	446	Scientific research and development services	1	0.145448	0.429729	1.575177
	447	Advertising and related services				
	456	Travel arrangement and reservation services	1	0.303052	0.304455	1.607507
	462	Colleges, universities, and junior colleges	1	0.284732	0.401803	1.686535
	463	Other educational services	1	0.191228	0.326266	1.517494
	493	Water transportation	1	0.448225	0.139161	1.587387
	474	Promoters of performing arts and sports and agents	1	0.224711	0.320042	1.544753
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.314199	0.199095	1.513295
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.314199	0.199095	1.513295
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.314199	0.199095	1.513295
Tourism	4XB	Blended Tourism				

induced jobs, which (added to the direct job) adds up to 2.32 total jobs. Each of the employment multipliers in Table 4.2 can be interpreted in a similar manner.

Table 4.2
Advantage West Employment Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.678608	0.641769	2.320377
Suppliers	139	Commercial printing	1	0.279548	0.341989	1.621537
	145	Petroleum lubricating oil and grease manufacturing				
	180	Rubber and plastics hose and belting manufacturing	1	0.243173	0.328182	1.571355
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal	1	0.089344	0.304764	1.394108
	286	Other engine equipment manufacturing	1	0.997888	0.709073	2.706961
	347	Truck trailer manufacturing				
	350	Motor vehicle parts manufacturing	1	0.678608	0.641769	2.320377
	358	Boat building	1	0.275306	0.316258	1.591564
	359	Motorcycle, bicycle, and parts manufacturing				
	391	Air transportation	1	0.926466	0.702181	2.628647
	440	Specialized design services	1	0.244710	0.333109	1.577819
	446	Scientific research and development services	1	0.038406	0.102373	1.140779
NASCAR Testing	446	Scientific research and development services	1	0.038406	0.102373	1.140779
Marketing	350	All other miscellaneous professional and technical	1	0.138615	0.231579	1.370194
Retail	139	Commercial printing	1	0.279548	0.341989	1.621537
	350	Motor vehicle parts manufacturing	1	0.678608	0.641769	2.320377
	402	Furniture and home furnishings stores	1	0.177239	0.244652	1.421891
	408	Clothing and clothing accessories stores	1	0.107041	0.157904	1.264945
	411	Miscellaneous store retailers	1	0.207609	0.183659	1.391268
Major Track	472	Spectator sports	1	0.033013	0.108283	1.141296
Drag Track	472	Spectator sports	1	0.033013	0.108283	1.141296
Short Track	472	Spectator sports	1	0.033013	0.108283	1.141296
Museums	475	Museums, historical sites, zoos, and parks	1	0.606453	0.251673	1.858126
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.135732	0.129144	1.264876
Miscellaneous Firms	393	Water transportation	1	2.907427	0.921966	4.829393
	446	Scientific research and development services	1	0.038406	0.102373	1.140779
	447	Advertising and related services	1	0.165647	0.352723	1.518370
	456	Travel arrangement and reservation services	1	0.266611	0.244619	1.511230
	462	Colleges, universities, and junior colleges	1	0.165851	0.175477	1.341328
	463	Other educational services	1	0.151926	0.177868	1.329794
	493	Civic, social, professional and similar organization	1	0.150938	0.111413	1.262351
	474	Promoters of performing arts and sports and agents	1	0.135732	0.129144	1.264876
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.678608	0.641769	2.320377
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.678608	0.641769	2.320377
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.678608	0.641769	2.320377
Tourism	4XB	Blended Tourism				

Table 4.3 contains the estimated annual output impact on the Advantage West economy by the motorsports industry, organized by motorsports sector. In 2005, total direct spending by

all motorsports related firms in the region was $122,030,014. In addition to the direct output impacts there was $33,868,391 of indirect (supplier chain) output impacts and $32,752,765 of induced economic impacts. The total output impact of the motorsports industry on the Advantage West economy in 2005 was $188,651,222.

Table 4.3
Advantage West Output Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	ND	ND	ND	ND
Suppliers	$20,050,892	$6,448,439	$3,651,634	$30,150,985
NASCAR Testing	ND	ND	ND	ND
Marketing	$7,146,761	$600,392	$1,264,384	$9,011,537
Retail	$37,030,114	$12,273,446	$11,335,177	$60,638,737
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	$4,307,412	$303,961	$2,395,804	$7,007,177
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	$20,154,270	$4,193,847	$6,850,148	$31,198,265
Non-NASCAR Teams	$7,859,416	$2,469,421	$1,564,770	$11,893,615
Short Track Teams	$16,704,000	$5,248,380	$3,325,683	$25,278,080
Drag Track Teams	$5,550,000	$1,743,804	$1,104,977	$8,398,787
Tourism	ND	ND	ND	ND
Totals	**$122,030,014**	**$33,868,391**	**$32,752,765**	**$188,651,222**

Table 4.4
Advantage West Employment Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	ND	ND	ND	ND
Suppliers	60	47	40	148
NASCAR Testing	ND	ND	ND	ND
Marketing	33	5	8	45
Retail	129	26	25	180
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	37	1	4	42
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	200	31	36	266
Non-NASCAR Teams	30	20	19	70
Short Track Teams	63	43	41	147
Drag Track Teams	21	14	13	49
Tourism	ND	ND	ND	ND
Totals	**598**	**191**	**190**	**979**

Table 4.4 presents the 2005 impact of the motorsports industry on Advantage West employment. Overall the motorsports industry generated a total of 979 jobs in 2005 for the region, consisting of 598 direct jobs, 191 indirect (supplier chain) jobs, and 190 induced jobs.

Carolinas Partnership Results: The Carolinas Partnership economic development region is made up of the 12 counties located in the south central portion of the state (Figure 4.2). This region has almost twenty-five percent of North Carolina's population and labor force. The largest employment sectors in this region are services. Manufacturing and wholesale/retail trade and the fastest growing sectors in the region are construction and services. This is the region with the largest concentration of motorsports activity and the largest number of motorsports related firms.

Figure 4.2: Charlotte Regional Partnership Region

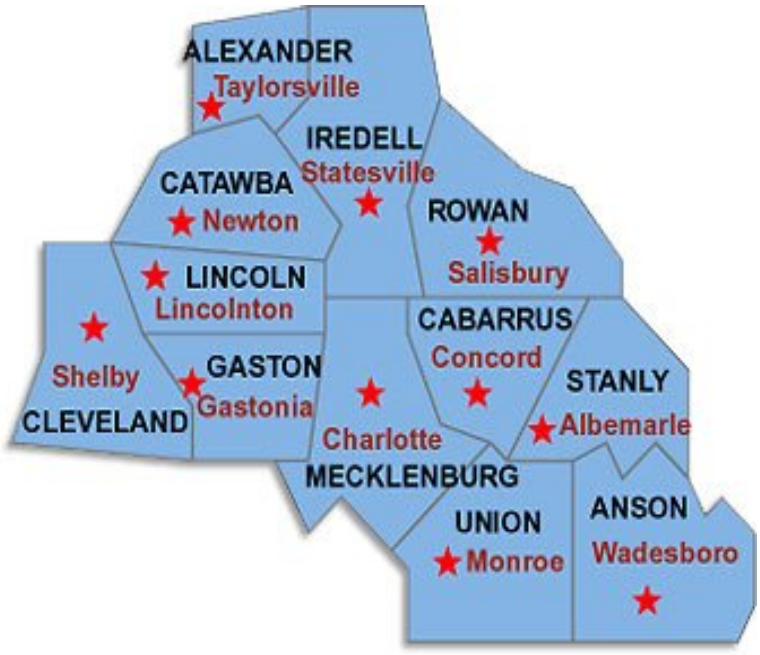


Table 4.5 and Table 4.6 present the output and employment multipliers for the Charlotte Regional Partnership region by motorsports sector and IMPLAN Industry Code. These tables only present multipliers for the motorsports sectors and IMPLAN Industry Codes for firms in the Charlotte Regional Partnership region. Table 4.5 shows that for each dollar of direct expenditure by a NASCAR Race Team (IMPLAN Industry Code 350) there are 41.46 cents spent in indirect (supplier chain) industries within the region and 21.45 cents in induced spending within the

region, so that the total regional output impact of $1 spent by a NASCAR Race Team is $1.63. Each of the output multipliers in this table can be interpreted in a similar manner. Table 4.6 shows that in this region, for each direct job in a NASCAR Race Team, IMPLAN Industry Code

Table 4.5

Charlotte Regional Partnership Output Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.414679	0.214517	1.629196
Suppliers	139	Commercial printing	1	0.307854	0.277385	1.585239
	145	Petroleum lubricating oil and grease manufacturing	1	0.364018	0.157491	1.521509
	180	Rubber and plastics hose and belting manufacturing	1	0.245731	0.254426	1.500157
	205	Iron, steel pipe and tube from purchased steel	1	0.320033	0.188388	1.508422
	247	Electroplating, anodizing, and coloring metal	1	0.198613	0.422215	1.620828
	286	Other engine equipment manufacturing	1	0.384240	0.172558	1.556798
	347	Truck trailer manufacturing	1	0.275521	0.240461	1.515982
	350	Motor vehicle parts manufacturing	1	0.414679	0.214517	1.629196
	358	Boat building	1	0.301411	0.151385	1.452795
	359	Motorcycle, bicycle, and parts manufacturing	1	0.278143	0.224069	1.502211
	391	Air transportation	1	0.296563	0.309483	1.606046
	440	Specialized design services	1	0.241666	0.300887	1.542553
	446	Scientific research and development services	1	0.076564	0.602992	1.679556
NASCAR Testing	446	Scientific research and development services	1	0.076564	0.602992	1.679556
Marketing	450	All other miscellaneous professional and technical	1	0.108524	0.180009	1.288533
Retail	139	Commercial printing	1	0.307854	0.277385	1.585239
	350	Motor vehicle parts manufacturing	1	0.414679	0.214517	1.629196
	402	Furniture and home furnishings stores	1	0.265732	0.348943	1.614675
	408	Clothing and clothing accessories stores	1	0.250669	0.345914	1.596583
	411	Miscellaneous store retailers	1	0.390105	0.336446	1.726551
Major Track	472	Spectator sports	1	0.128698	0.575320	1.704018
Drag Track	472	Spectator sports	1	0.128698	0.575320	1.704018
Short Track	472	Spectator sports	1	0.128698	0.575320	1.704018
Museums	475	Museums, historical sites, zoos, and parks	1	0.435805	0.411066	1.846871
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.189106	0.333104	1.522210
Miscellaneous Firms	393	Water transportation	1	0.452959	0.222288	1.675247
	446	Scientific research and development services	1	0.076564	0.602992	1.679556
	447	Advertising and related services	1	0.179962	0.382626	1.562588
	456	Travel arrangement and reservation services	1	0.321342	0.351780	1.673122
	462	Colleges, universities, and junior colleges	1	0.331145	0.448270	1.779416
	463	Other educational services	1	0.232605	0.342577	1.575182
	474	Promoters of performing arts and sports and agents	1	0.189106	0.333104	1.522210
	493	Water transportation	1	0.460738	0.331490	1.792228
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.414679	0.214517	1.629196
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.414679	0.214517	1.629196
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.414679	0.214517	1.629196
Tourism	4XB	Blended Tourism	1	0.353035	0.337490	1.690526

350, there are 0.70 indirect (supplier chain) jobs, as well as 0.55 induced jobs, which (added to the direct job) sums to 2.25 total jobs. Each of the employment multipliers in Table 4.6 can be interpreted in a similar manner.

Table 4.6
Charlotte Regional Partnership Employment Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effect
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.700471	0.548276	2.248747
Suppliers	139	Commercial printing	1	0.292531	0.372911	1.665442
	145	Petroleum lubricating oil and grease manufacturing	1	1.149751	0.708086	2.857837
	180	Rubber and plastics hose and belting manufacturing	1	0.262111	0.377707	1.639818
	205	Iron, steel pipe and tube from purchased steel	1	0.510963	0.350153	1.961116
	247	Electroplating, anodizing, and coloring metal	1	0.093083	0.298397	1.391480
	286	Other engine equipment manufacturing	1	0.986578	0.667077	2.653655
	347	Truck trailer manufacturing	1	0.285229	0.379553	1.664782
	350	Motor vehicle parts manufacturing	1	0.700471	0.548276	2.248747
	358	Boat building	1	0.192338	0.141706	1.334044
	359	Motorcycle, bicycle, and parts manufacturing	1	0.394844	0.428504	1.823348
	391	Air transportation	1	0.679814	0.693283	2.373097
	440	Specialized design services	1	0.238381	0.299033	1.537414
	446	Scientific research and development services	1	0.046656	0.384608	1.431264
NASCAR Testing	446	Scientific research and development services	1	0.046656	0.384608	1.431264
Marketing	450	All other miscellaneous professional and technical	1	0.178888	0.291911	1.470799
Retail	139	Commercial printing	1	0.292531	0.372911	1.665442
	350	Motor vehicle parts manufacturing	1	0.700471	0.548276	2.248747
	402	Furniture and home furnishings stores	1	0.173577	0.250710	1.424287
	408	Clothing and clothing accessories stores	1	0.106827	0.162151	1.268978
	411	Miscellaneous store retailers	1	0.187409	0.177786	1.365195
Major Track	472	Spectator sports	1	0.102982	0.336435	1.439417
Drag Track	472	Spectator sports	1	0.102982	0.336435	1.439417
Short Track	472	Spectator sports	1	0.102982	0.336435	1.439417
Museums	475	Museums, historical sites, zoos, and parks	1	0.549803	0.376886	1.926689
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.113036	0.167656	1.280692
Miscellaneous Firms	393	Water transportation	1	2.375076	1.559842	4.934918
	446	Scientific research and development services	1	0.046656	0.384608	1.431264
	447	Advertising and related services	1	0.120279	0.251214	1.371493
	456	Travel arrangement and reservation services	1	0.248904	0.287824	1.536728
	462	Colleges, universities, and junior colleges	1	0.152386	0.180620	1.333006
	463	Other educational services	1	0.171765	0.206033	1.377798
	493	Civic, social, professional and similar organization	1	2.375076	1.559842	4.934918
	474	Promoters of performing arts and sports and agents	1	0.113036	0.167656	1.280692
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.700471	0.548276	2.248747
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.700471	0.548276	2.248747
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.700471	0.548276	2.248747
Tourism	4XB	Blended Tourism	1	0.327604	0.217953	1.545557

Table 4.7 contains the estimated annual output impact on the Charlotte Regional Partnership economy by the motorsports industry, organized by motorsports sector and IMPLAN Industry Code. In 2005, total direct spending by all motorsports related firms in the region was 2.88 billion dollars ($2,879,532,187). In addition to the direct output impacts there was 914 million dollars ($913,731,578) of indirect (supplier chain) output impacts and 761 million dollars ($760,593,561) of induced economic impacts. The total output impact of the motorsports industry on the Charlotte Regional Partnership economy in 2005 was just under 4.6 billion dollars ($4,553,857,317).

Table 4.7
Charlotte Regional Partnership Output Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	$1,136,388,607	$471,236,491	$243,774,675	$1,851,399,773
Suppliers	$423,289,249	$171,330,118	$88,897,985	$683,517,358
NASCAR Testing	ND	ND	ND	ND
Marketing	$358,544,467	$38,910,680	$64,541,231	$461,996,378
Retail	$207,829,738	$57,813,883	$68,720,804	$334,364,425
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	$14,757,745	$1,899,292	$8,490,426	$25,147,463
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	$303,963,622	$60,007,038	$102,513,730	$466,484,391
Non-NASCAR Teams	$40,221,366	$16,678,956	$8,628,167	$65,528,489
Short Track Teams	$32,016,000	$13,276,363	$6,867,976	$52,160,339
Drag Track Teams	$16,650,000	$6,904,405	$3,571,708	$27,126,113
Tourism	$142,699,946	$50,378,147	$48,159,826	$241,237,903
Totals	**$2,879,532,187**	**$913,731,578**	**$760,593,561**	**$4,553,857,317**

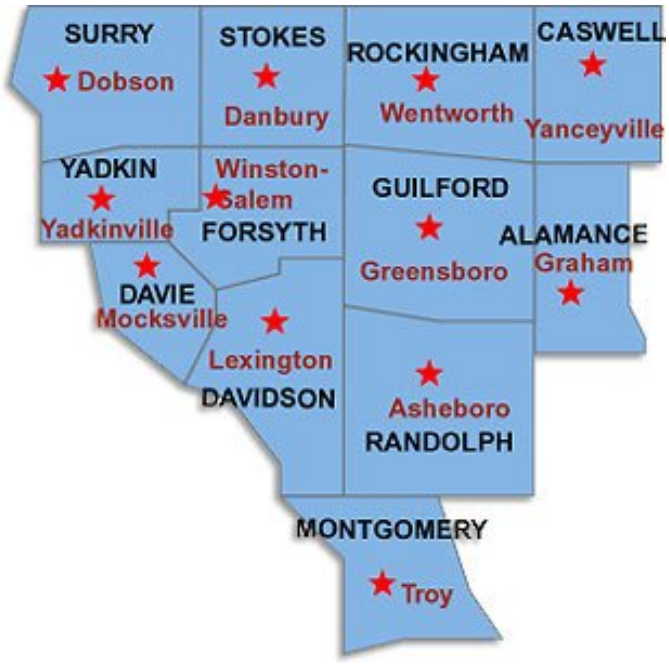
Table 4.8 presents the 2005 impact of the motorsports industry on Charlotte Regional Partnership employment. Overall, the motorsports industry generated a total of 19,799 jobs in 2005 for the region, consisting of 10,476 direct jobs, 4,971 indirect (supplier chain) jobs, and 4,352 induced jobs. This impact is again the largest of all the economic development regions and it represents 72.65 percent of the total motorsports industry employment impact on the state as a whole.

Table 4.8
Charlotte Regional Partnership Employment Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	3,667	2,569	2,011	8,246
Suppliers	1,237	899	692	2,827
NASCAR Testing	ND	ND	ND	ND
Marketing	1,616	289	472	2,377
Retail	861	189	201	1,250
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	136	14	46	196
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	567	173	177	916
Non-NASCAR Teams	297	208	163	668
Short Track Teams	124	87	68	278
Drag Track Teams	64	45	35	145
Tourism	1,302	427	284	2,013
Totals	**10,476**	**4,971**	**4,352**	**19,799**

Piedmont Triad Partnership Results: The Piedmont Triad Partnership economic development region is made up of the 12 counties located in the west central portion of the state (Figure 4.3). This region has almost twenty percent of the North Carolina's population and labor force.

Figure 4.3: Piedmont Triad Partnership Region



The largest employment sectors in this region are manufacturing and wholesale/retail trade while the fastest growing sectors in the region are agriculture, construction, and services.

Table 4.9

Piedmont Triad Partnership Output Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.386889	0.229396	1.616285
Suppliers	137	Commercial printing	1	0.325741	0.227431	1.553172
	145	Petroleum lubricating oil and grease manufacturing	1	0.383444	0.121002	1.504446
	180	Rubber and plastics hose and belting manufacturing	1	0.269161	0.249915	1.519076
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal	1	0.183083	0.456087	1.639169
	286	Other engine equipment manufacturing	1	0.378152	0.145681	1.523833
	347	Truck trailer manufacturing	1	0.313996	0.260706	1.574701
	350	Motor vehicle parts manufacturing	1	0.386889	0.229396	1.616285
	358	Boat building	1	0.244021	0.209031	1.453052
	359	Motorcycle, bicycle, and parts manufacturing				
	391	Air transportation	1	0.318635	0.289492	1.608126
	440	Specialized design services	1	0.219506	0.324192	1.543698
	446	Scientific research and development services	1	0.070896	0.651928	1.722824
NASCAR Testing	446	Scientific research and development services	1	0.070896	0.651928	1.722824
Marketing	450	All other miscellaneous professional and technical	1	0.096788	0.193488	1.290277
Retail	139	Commercial printing	1	0.291710	0.295745	1.587456
	350	Motor vehicle parts manufacturing	1	0.386889	0.229396	1.616285
	402	Furniture and home furnishings stores	1	0.247177	0.374330	1.621507
	408	Clothing and clothing accessories stores	1	0.245749	0.365904	1.611652
	411	Miscellaneous store retailers	1	0.364815	0.356529	1.721344
Major Track	472	Spectator sports	1	0.093101	0.610352	1.703453
Drag Track	472	Spectator sports	1	0.093101	0.610352	1.703453
Short Track	472	Spectator sports	1	0.093101	0.610352	1.703453
Museums	475	Museums, historical sites, zoos, and parks	1	0.501677	0.368007	1.869684
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.259353	0.309820	1.569173
Miscellaneous Firms	393	Water transportation	1	0.452228	0.226612	1.678840
	446	Scientific research and development services	1	0.070896	0.651928	1.722824
	447	Advertising and related services	1	0.173757	0.412779	1.586536
	456	Travel arrangement and reservation services	1	0.340294	0.345545	1.685839
	462	Colleges, universities, and junior colleges	1	0.191767	0.569194	1.760961
	463	Other educational services	1	0.209019	0.366416	1.575436
	493	Civic, social, professional and similar organizations	1	0.426386	0.359546	1.785932
	474	Promoters of performing arts and sports and agents	1	0.259353	0.309820	1.569173
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.386889	0.229396	1.616285
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.386889	0.229396	1.616285
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.386889	0.229396	1.616285
Tourism	4XB	Blended Tourism				

Table 4.10

Piedmont Triad Partnership Employment Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.755127	0.63822	2.393347
Suppliers	137	Commercial printing	1	0.369667	0.340672	1.710339
	145	Petroleum lubricating oil and grease manufacturing	1	1.259358	0.545184	2.804542
	180	Rubber and plastics hose and belting manufacturing	1	0.274183	0.345173	1.619356
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal	1	0.101576	0.348616	1.450192
	286	Other engine equipment manufacturing	1	0.987529	0.543782	2.531311
	347	Truck trailer manufacturing	1	0.349392	0.437204	1.786596
	350	Motor vehicle parts manufacturing	1	0.755127	0.63822	2.393347
	358	Boat building	1	0.228344	0.264806	1.493150
	359	Motorcycle, bicycle, and parts manufacturing				
	391	Air transportation	1	0.738966	0.601773	2.340739
	440	Specialized design services	1	0.305590	0.435091	1.740681
	446	Scientific research and development services	1	0.048893	0.443214	1.492107
NASCAR Testing	446	Scientific research and development services	1	0.048893	0.443214	1.492107
Marketing	450	All other miscellaneous professional and technical	1	0.178280	0.315048	1.493328
Retail	139	Commercial printing	1	0.316921	0.426712	1.743633
	350	Motor vehicle parts manufacturing	1	0.755127	0.63822	2.393347
	402	Furniture and home furnishings stores	1	0.189845	0.289157	1.479002
	408	Clothing and clothing accessories stores	1	0.107090	0.160365	1.267455
	411	Miscellaneous store retailers	1	0.205447	0.201934	1.407381
Major Track	472	Spectator sports	1	0.056916	0.129511	1.186427
Drag Track	472	Spectator sports	1	0.056916	0.129511	1.186427
Short Track	472	Spectator sports	1	0.056916	0.129511	1.186427
Museums	475	Museums, historical sites, zoos, and parks	1	0.526284	0.285543	1.811827
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.081219	0.072056	1.153275
Miscellaneous Firms	393	Water transportation	1	3.027538	1.72374	5.751278
	446	Scientific research and development services	1	0.048893	0.443214	1.492107
	447	Advertising and related services	1	0.147600	0.327270	1.474880
	456	Travel arrangement and reservation services	1	0.255992	0.250246	1.506238
	462	Colleges, universities, and junior colleges	1	0.150227	0.399839	1.550066
	463	Other educational services	1	0.170303	0.236716	1.407019
	493	Water transportation	1	3.027538	1.723740	5.751278
	474	Promoters of performing arts and sports and agents	1	0.081219	0.072056	1.153275
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.755127	0.63822	2.393347
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.755127	0.63822	2.393347
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.755127	0.63822	2.393347
Tourism	4XB	Blended Tourism				

Table 4.9 and Table 4.10 present the output and employment multipliers for the Piedmont Triad Partnership region by motorsports sector and IMPLAN Industry Code. These tables only present multipliers for the motorsports sectors and IMPLAN Industry Codes for firms in the Piedmont Triad Partnership region. Table 4.9 shows that for each dollar of direct expenditure by the NASCAR Teams (IMPLAN Industry Code 350) there are 38.69 cents spent in indirect

(supplier chain) industries within the region and 22.94 cents in induced spending within the region, so that the total regional output impact of $1 spent by a NASCAR Race Team increases regional output by $1.62. Each of the output multipliers in this table can be interpreted in a similar manner. Table 4.10 shows that in this region, for each direct job at a NASCAR Team (IMPLAN Industry Code 350) there are 0.76 indirect (supplier chain) jobs, as well as 0.64 induced jobs, which (added to the direct job) sums to 2.39 total jobs. Each of the employment multipliers in Table 4.10 can be interpreted in a similar manner.

Table 4.11 contains the estimated annual output impact on the Piedmont Triad Partnership economy by the motorsports industry, organized by motorsports sector and IMPLAN Industry Code. In 2005, total direct spending by all motorsports related firms in the region was 402 million dollars ($402,009,008). In addition to the direct output impacts, there were 144,517,846 million dollars of indirect (supplier chain) output impacts and 96 million ($96,053,496) dollars of induced economic impacts. The total output impact of the motorsports industry on the Piedmont Triad Partnership economy in 2005 was just under 643 million dollars ($642,580,379).

Table 4.12 presents the 2005 impact of the motorsports industry on Piedmont Triad Partnership employment. Overall the motorsports industry generated a total of 3,553 jobs in 2005 for the region, consisting of 1,550 direct jobs, 1,088 indirect (supplier chain) jobs, and 914 induced jobs.

Table 4.11
Piedmont Triad Partnership Output Impacts by Industry

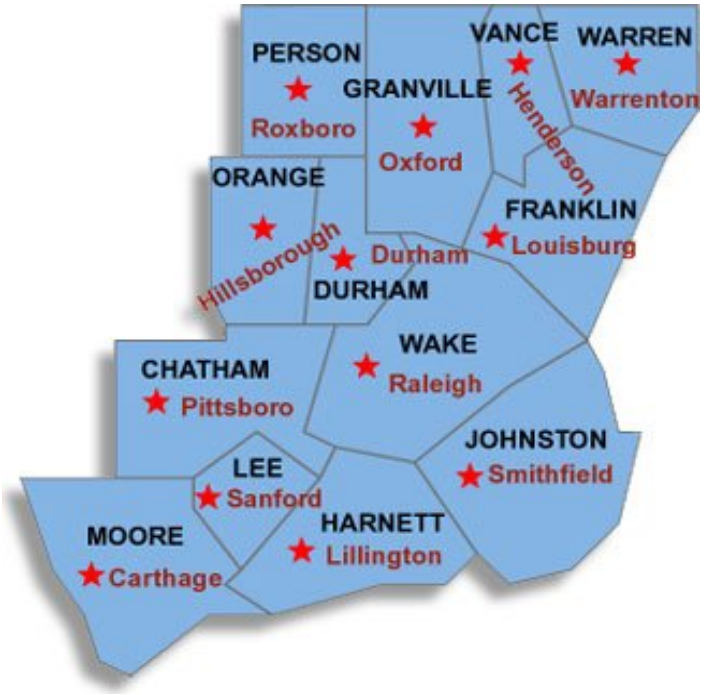
Industry	Direct	Indirect	Induced	Total
NASCAR Teams	$230,265,578	$89,087,219	$52,822,002	$372,174,799
Suppliers	$55,860,715	$21,529,769	$12,170,542	$89,561,026
NASCAR Testing	ND	ND	ND	ND
Marketing	$24,866,685	$2,406,797	$4,811,405	$32,084,912
Retail	$4,703,420	$1,503,874	$1,500,632	$7,707,929
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	$7,442,762	$692,929	$4,542,705	$12,678,395
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	$4,518,960	$1,543,812	$1,783,076	$7,845,849
Non-NASCAR Teams	$10,991,468	$4,252,478	$2,521,399	$17,765,345
Short Track Teams	$33,408,000	$12,925,188	$7,663,662	$53,996,849
Drag Track Teams	$25,012,000	$9,676,868	$5,737,653	$40,426,520
Tourism	ND	ND	ND	ND
Totals	**$402,009,008**	**$144,517,846**	**$96,053,496**	**$642,580,379**

Table 4.12
Piedmont Triad Partnership Employment Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	774	584	494	1,852
Suppliers	216	175	132	523
NASCAR Testing	ND	ND	ND	ND
Marketing	105	19	33	157
Retail	26	5	5	37
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	42	2	5	50
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	51	79	49	179
Non-NASCAR Teams	56	42	36	134
Short Track Teams	129	97	82	308
Drag Track Teams	96	73	61	230
Tourism	ND	ND	ND	ND
Totals	**1,550**	**1,088**	**914**	**3,553**

Research Triangle Regional Partnership Results: The Research Triangle Regional Partnership economic development region is comprised of the 13 counties located in the north central part of the state (Figure 4.4). This region has one fifth of the NC population and the

Figure 4.4: Research Triangle Regional Partnership Region



region's labor force is about 20 percent of the NC labor force. The largest employment sectors in this region are services, wholesale/retail trade, government, and manufacturing. The fastest growing sectors in the region are construction, agriculture, and services.

Table 4.13 and Table 4.14 present the output and employment multipliers for the Research Triangle Regional Partnership region by motorsports sector and IMPLAN Industry Code. These tables only present multipliers for the motorsports sectors and IMPLAN Industry Codes for firms in the Research Triangle Regional Partnership region. Table 4.13 shows that for each dollar of direct expenditure by NASCAR Teams (IMPLAN Industry Code 350) there are 32.81 cents spent in indirect (supplier chain) industries within the region and 21.80 cents in induced spending within the region, so that the total regional output impact of $1 spent by the NASCAR Race Team is $1.55. Each of the output multipliers in this table can be interpreted in a similar manner. Table 4.14 shows that in this region, for each direct job at a NASCAR Team (IMPLAN Industry Code 350) there are 0.62 indirect (supplier chain) jobs, as well as 0.61 induced jobs, which (added to the direct job) sums to 2.22 total jobs. Each of the employment multipliers in Table 4.14 can be interpreted in a similar manner.

Table 4.15 contains the estimated annual output impact on the Research Triangle Regional Partnership economy by the motorsports industry, organized by motorsports sector and IMPLAN Industry Code. In 2005 total direct spending by all motorsports related firms in the region was $73,102,287. In addition to the direct output impacts, there was $24,309,818 of indirect (supplier chain) output impact and $15,248,297 of induced economic impact. The total output impact of the motorsports industry on the Research Triangle Regional Partnership economy in 2005 was $112,660,406.

Table 4.13
Research Triad Regional Partnership Output Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.328091	0.217960	1.546051
Suppliers	139	Commercial printing	1	0.241302	0.275096	1.516398
	145	Petroleum lubricating oil and grease manufacturing	1	0.383444	0.121002	1.504446
	180	Rubber and plastics hose and belting manufacturing	1	0.231630	0.223762	1.455392
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal	1	0.194288	0.422255	1.616543
	286	Other engine equipment manufacturing	1	0.384240	0.172558	1.556798
	347	Truck trailer manufacturing	1	0.322551	0.254646	1.577196
	350	Motor vehicle parts manufacturing	1	0.328091	0.217960	1.546051
	358	Boat building	1	0.172541	0.242509	1.415050
	359	Motorcycle, bicycle, and parts manufacturing	1	0.279090	0.150272	1.429362
	391	Air transportation	1	0.406896	0.261111	1.668007
	440	Specialized design services	1	0.222183	0.305443	1.527626
	446	Scientific research and development services	1	0.070224	0.617730	1.687954
NASCAR Testing	446	Scientific research and development services	1	0.070224	0.617730	1.687954
Marketing	450	All other miscellaneous professional and technical	1	0.101027	0.183315	1.284342
Retail	139	Commercial printing	1	0.241302	0.275096	1.516398
	350	Motor vehicle parts manufacturing	1	0.328091	0.217960	1.546051
	402	Furniture and home furnishings stores	1	0.245604	0.355927	1.601531
	408	Clothing and clothing accessories stores	1	0.250644	0.345278	1.595922
	411	Miscellaneous store retailers	1	0.367306	0.338935	1.706241
Major Track	472	Spectator sports	1	0.114224	0.584543	1.698768
Drag Track	472	Spectator sports	1	0.114224	0.584543	1.698768
Short Track	472	Spectator sports	1	0.114224	0.584543	1.698768
Museums	475	Museums, historical sites, zoos, and parks	1	0.536955	0.391927	1.928882
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.212790	0.317189	1.529978
Miscellaneous Firms	393	Water transportation				
	446	Scientific research and development services	1	0.070224	0.617730	1.687954
	447	Advertising and related services	1	0.178113	0.390473	1.568585
	456	Travel arrangement and reservation services	1	0.316232	0.352321	1.668552
	462	Colleges, universities, and junior colleges	1	0.247567	0.513188	1.760755
	463	Other educational services	1	0.224623	0.355168	1.579792
	493	Civic, social, professional and similar organizations	1	0.400265	0.372744	1.773008
	474	Promoters of performing arts and sports and agents	1	0.212790	0.317189	1.529978
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.328091	0.217960	1.546051
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.328091	0.217960	1.546051
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.328091	0.217960	1.546051
Tourism	4XB	Blended Tourism				

Table 4.14

Research Triad Regional Partnership Employment Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effect
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.615187	0.605205	2.220392
Suppliers	139	Commercial printing	1	0.259221	0.392886	1.652107
	145	Petroleum lubricating oil and grease manufacturing	1	1.149751	0.708086	2.857837
	180	Rubber and plastics hose and belting manufacturing	1	0.218715	0.289642	1.508357
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal	1	0.087289	0.282479	1.369768
	286	Other engine equipment manufacturing	1	0.986578	0.667077	2.653655
	347	Truck trailer manufacturing	1	0.339202	0.420416	1.759618
	350	Motor vehicle parts manufacturing	1	0.615187	0.605205	2.220392
	358	Boat building	1	0.211088	0.414232	1.625320
	359	Motorcycle, bicycle, and parts manufacturing	1	0.371035	0.255327	1.626362
	391	Air transportation	1	0.797269	0.473750	2.271019
	440	Specialized design services	1	0.222870	0.306001	1.528871
	446	Scientific research and development services	1	0.044413	0.426460	1.470873
NASCAR Testing	446	Scientific research and development services	1	0.044413	0.426460	1.470873
Marketing	450	All other miscellaneous professional and technical	1	0.227517	0.391014	1.618531
Retail	139	Commercial printing	1	0.259221	0.392886	1.652107
	350	Motor vehicle parts manufacturing	1	0.615187	0.605205	2.220392
	402	Furniture and home furnishings stores	1	0.182073	0.279074	1.461147
	408	Clothing and clothing accessories stores	1	0.099074	0.144353	1.243427
	411	Miscellaneous store retailers	1	0.192394	0.187769	1.380163
Major Track	472	Spectator sports	1	0.073017	0.124630	1.197647
Drag Track	472	Spectator sports	1	0.073017	0.124630	1.197647
Short Track	472	Spectator sports	1	0.073017	0.124630	1.197647
Museums	475	Museums, historical sites, zoos, and parks	1	0.506403	0.318493	1.824896
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.091405	0.103698	1.195103
Miscellaneous Firms	393	Water transportation				
	446	Scientific research and development services	1	0.044413	0.426460	1.470873
	447	Advertising and related services	1	0.166529	0.351023	1.517552
	456	Travel arrangement and reservation services	1	0.253219	0.292086	1.545305
	462	Colleges, universities, and junior colleges	1	0.142295	0.289193	1.431488
	463	Other educational services	1	0.181937	0.262253	1.444190
	493	Civic, social, professional and similar organizations	1	0.131377	0.123644	1.255021
	474	Promoters of performing arts and sports and agents	1	0.091405	0.103698	1.195103
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.615187	0.605205	2.220392
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.615187	0.605205	2.220392
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.615187	0.605205	2.220392
Tourism	4XB	Blended Tourism				

Table 4.15
Research Triangle Regional Partnership Output Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	ND	ND	ND	ND
Suppliers	$34,361,578	$12,782,393	$4,871,239	$52,015,210
NASCAR Testing	ND	ND	ND	ND
Marketing	ND	ND	ND	ND
Retail	ND	ND	ND	ND
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	$4,060,650	$463,824	$2,373,625	$6,898,102
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	ND	ND	ND	ND
Non-NASCAR Teams	$13,984,544	$4,588,203	$3,048,071	$21,620,818
Short Track Teams	$12,528,000	$4,110,324	$2,730,603	$19,368,927
Drag Track Teams	$5,624,000	$1,845,184	$1,225,807	$8,694,991
Tourism	ND	ND	ND	ND
Totals	**$73,102,287**	**$24,309,818**	**$15,248,297**	**$112,660,406**

Table 4.16 presents the 2005 impact of the motorsports industry on Research Triangle Regional Partnership employment. Overall the motorsports industry generated a total of 375 jobs in 2005 for the region, consisting of 191 direct jobs, 93 indirect (supplier chain) jobs, and 91 induced jobs.

Table 4.16
Research Triangle Regional Partnership Employment Impacts by Industry

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	ND	ND	ND	ND
Suppliers	36	25	22	84
NASCAR Testing	ND	ND	ND	ND
Marketing	ND	ND	ND	ND
Retail	ND	ND	ND	ND
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	32	2	4	38
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	ND	ND	ND	ND
Non-NASCAR Teams	31	19	19	69
Short Track Teams	47	29	28	104
Drag Track Teams	21	13	13	47
Tourism	ND	ND	ND	ND
Totals	**191**	**93**	**91**	**375**

North Carolina's Southeast Results: The North Carolina's Southeast economic development region is made up of the 11 counties located in the southeast corner of the state (Figure 4.5). This region has 12 percent of the NC population and the region's labor force is about 11 percent of the NC labor force. The largest employment sectors in this region are manufacturing and wholesale/retail trade and, the fastest growing sectors in the region are agriculture, construction, and services.

Figure 4.5: North Carolina's Southeast Region

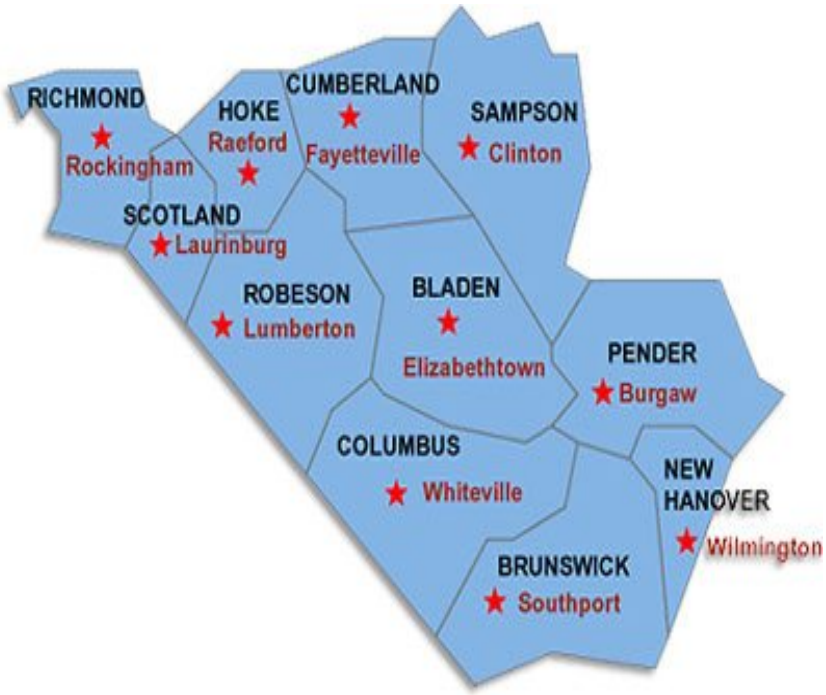


Table 4.17 and Table 4.18 present the output and employment multipliers for the North Carolina's Southeast region by motorsports sector and IMPLAN Industry Code. These tables only present multipliers for the motorsports sectors and IMPLAN Industry Codes for firms in the North Carolina's Southeast region. Table 4.17 shows that for each dollar of direct expenditure by a NASCAR Team (IMPLAN Industry Code 350) there are 26.78 cents spent in indirect (supplier chain) industries within the region and 17.18 cents in induced spending within the region, so that the total regional output impact of $1 spent by a NASCAR Race Team amounts to $1.44. Each of the output multipliers in this table can be interpreted in a similar manner. Table 4.18 shows that in this region, for each direct job at a NASCAR Race Team (IMPLAN Industry Code 350) there are 0.62 indirect (supplier chain) jobs, as well as 0.54 induced jobs, which

(added to the direct job) sums to 2.16 total jobs. Each of the employment multipliers in Table 4.18 can be interpreted in a similar manner.

Table 4.17
North Carolina's Northeast Partnership Output Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.267760	0.171795	1.439555
Suppliers	139	Commercial printing	1	0.227103	0.195051	1.422154
	145	Petroleum lubricating oil and grease manufacturing	1	0.329147	0.113623	1.442769
	180	Rubber and plastics hose and belting manufacturing				
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal	1	0.176432	0.351216	1.527647
	286	Other engine equipment manufacturing	1	0.232661	0.130318	1.362980
	347	Truck trailer manufacturing	1	0.249788	0.210891	1.460679
	350	Motor vehicle parts manufacturing	1	0.267760	0.171795	1.439555
	358	Boat building	1	0.193643	0.164782	1.358425
	359	Motorcycle, bicycle, and parts manufacturing				
	391	Air transportation	1	0.398903	0.245709	1.644613
	440	Specialized design services	1	0.197798	0.257698	1.455496
	446	Scientific research and development services	1	0.070141	0.541796	1.611937
NASCAR Testing	446	Scientific research and development services	1	0.070141	0.541796	1.611937
Marketing	450	All other miscellaneous professional and technical	1	0.090739	0.162902	1.253640
Retail	139	Commercial printing	1	0.227103	0.195051	1.422154
	350	Motor vehicle parts manufacturing	1	0.267760	0.171795	1.439555
	402	Furniture and home furnishings stores	1	0.249248	0.302220	1.551468
	408	Clothing and clothing accessories stores	1	0.232557	0.302244	1.534801
	411	Miscellaneous store retailers	1	0.356635	0.281988	1.638623
Major Track	472	Spectator sports	1	0.054018	0.502069	1.556087
Drag Track	472	Spectator sports	1	0.054018	0.502069	1.556087
Short Track	472	Spectator sports	1	0.054018	0.502069	1.556087
Museums	475	Museums, historical sites, zoos, and parks	1	0.400400	0.293422	1.693823
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.172877	0.252017	1.424894
Miscellaneous Firms	393	Water transportation	1	0.272982	0.233697	1.506680
	446	Scientific research and development services	1	0.070141	0.541796	1.611937
	447	Advertising and related services	1	0.154409	0.346438	1.500847
	456	Travel arrangement and reservation services	1	0.301759	0.289479	1.591239
	462	Colleges, universities, and junior colleges	1	0.276732	0.388881	1.665613
	463	Other educational services	1	0.197060	0.292302	1.489361
	474	Promoters of performing arts and sports and agents	1	0.172877	0.252017	1.424894
	493	Civic, social, professional and similar organizations	1	0.325872	0.319903	1.645775
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.267760	0.171795	1.439555
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.267760	0.171795	1.439555
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.267760	0.171795	1.439555
Tourism	4XB	Blended Tourism	1	0.317411	0.286379	1.603789

Table 4.18
North Carolina's Northeast Partnership Employment Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.617758	0.543571	2.161329
Suppliers	139	Commercial printing	1	0.259247	0.268111	1.527358
	145	Petroleum lubricating oil and grease manufacturing	1	1.180694	0.613317	2.794011
	180	Rubber and plastics hose and belting manufacturing				
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal	1	0.082573	0.215378	1.297951
	286	Other engine equipment manufacturing	1	0.790993	0.693717	2.48471
	347	Truck trailer manufacturing	1	0.312057	0.403085	1.715142
	350	Motor vehicle parts manufacturing	1	0.617758	0.543571	2.161329
	358	Boat building	1	0.204593	0.233319	1.437912
	359	Motorcycle, bicycle, and parts manufacturing				
	391	Air transportation	1	0.925877	0.520971	2.446848
	440	Specialized design services	1	0.155311	0.169628	1.324939
	446	Scientific research and development services	1	0.047996	0.359479	1.407475
NASCAR Testing	446	Scientific research and development services	1	0.047996	0.359479	1.407475
Marketing	450	All other miscellaneous professional and technical	1	0.178771	0.259294	1.438065
Retail	139	Commercial printing	1	0.259247	0.268111	1.527358
	350	Motor vehicle parts manufacturing	1	0.617758	0.543571	2.161329
	402	Furniture and home furnishings stores	1	0.185623	0.220676	1.406299
	408	Clothing and clothing accessories stores	1	0.112202	0.142976	1.255178
	411	Miscellaneous store retailers	1	0.219132	0.169874	1.389006
Major Track	472	Spectator sports	1	0.018723	0.074659	1.093382
Drag Track	472	Spectator sports	1	0.018723	0.074659	1.093382
Short Track	472	Spectator sports	1	0.018723	0.074659	1.093382
Museums	475	Museums, historical sites, zoos, and parks	1	0.639127	0.266517	1.905644
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.057098	0.067434	1.124532
Miscellaneous Firms	393	Water transportation	1	4.483822	4.30166	9.785482
	446	Scientific research and development services	1	0.047996	0.359479	1.407475
	447	Advertising and related services	1	0.113740	0.226185	1.339925
	456	Travel arrangement and reservation services	1	0.280092	0.249942	1.530034
	462	Colleges, universities, and junior colleges	1	0.172472	0.185763	1.358235
	463	Other educational services	1	0.139669	0.134003	1.273672
	474	Promoters of performing arts and sports and agents	1	0.057098	0.067434	1.124532
	493	Civic, social, professional and similar organizations	1	0.154221	0.126406	1.280627
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.617758	0.543571	2.161329
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.617758	0.543571	2.161329
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.617758	0.543571	2.161329
Tourism	4XB	Blended Tourism	1	0.174355	0.160986	1.335341

Table 4.19 contains the estimated annual output impact on the North Carolina's Southeast economy by the motorsports industry, organized by motorsports sector and IMPLAN Industry Code. In 2005, total direct spending by all motorsports related firms in the region was $79,924,833. In addition to the direct output impacts there was $19,164,017 of indirect (supplier chain) output impacts and $17,485,938 of induced economic impacts. The total output impact of the motorsports industry on the North Carolina's Southeast economy in 2005 was $116,574,788.

Table 4.19
North Carolina's Northeast Partnership Output Impacts by Sector

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	ND	ND	ND	ND
Suppliers	$15,796,285	$4,158,283	$2,629,431	$22,584,001
NASCAR Testing	ND	ND	ND	ND
Marketing	ND	ND	ND	ND
Retail	ND	ND	ND	ND
Major Track	ND	ND	ND	ND
Drag Track	$5,427,154	$293,164	$2,724,806	$8,445,124
Short Track	$4,024,590	$217,400	$2,020,622	$6,262,612
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	$1,144,234	$191,754	$400,765	$1,736,752
Non-NASCAR Teams	ND	ND	ND	ND
Short Track Teams	$16,704,000	$4,472,663	$2,869,664	$24,046,327
Drag Track Teams	$30,636,000	$8,203,095	$5,263,112	$44,102,207
Tourism	$2,000,000	$634,821	$572,758	$3,207,579
Totals	**$79,924,833**	**$19,164,017**	**$17,485,938**	**$116,574,788**

Table 4.20 presents the 2005 impact of the motorsports industry on North Carolina's Southeast employment. Overall the motorsports industry generated a total of 630 jobs in 2005 for the region, consisting of 339 direct jobs, 152 indirect (supplier chain) jobs, and 139 induced jobs.

Table 4.20
North Carolina's Northeast Partnership Employment Impacts by Sector

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	ND	ND	ND	ND
Suppliers	41	27	24	92
NASCAR Testing	ND	ND	ND	ND
Marketing	ND	ND	ND	ND
Retail	ND	ND	ND	ND
Major Track	ND	ND	ND	ND
Drag Track	25	0	2	27
Short Track	27	1	2	30
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	13	2	2	17
Non-NASCAR Teams	ND	ND	ND	ND
Short Track Teams	64	40	35	139
Drag Track Teams	118	73	64	255
Tourism	26	5	4	35
Totals	**339**	**152**	**139**	**630**

North Carolina's Eastern Region Results: The North Carolina's Eastern Region economic development area is comprised of the 13 counties located in the southeast corner of the state (Figure 4.6). This region has 11 percent of the NC population and the region's labor force is about 10 percent of the NC labor force. The largest employment sectors in this region are wholesale/retail trade, government, and manufacturing and the fastest growing sectors in the region are agriculture and services.

Figure 4.6: North Carolina's Eastern Region

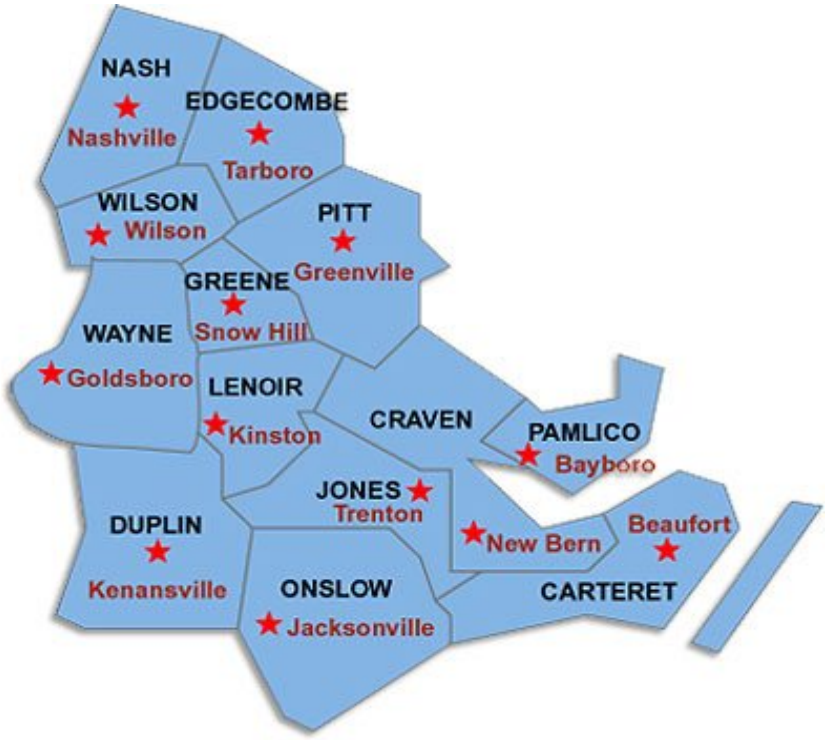


Table 4.21 and Table 4.22 present the output and employment multipliers for the North Carolina's Eastern Region by motorsports sector and IMPLAN Industry Code. These tables only present multipliers for the motorsports sectors and IMPLAN Industry Codes for firms in the North Carolina's Eastern Region. Table 4.21 shows that for each dollar of direct expenditure by a NASCAR Team (IMPLAN Industry Code 350) there are 23.96 cents spent in indirect (supplier chain) industries within the region and 16.48 cents in induced spending within the region, so that the total regional output impact of $1 spent by the NASCAR Teams are $1.40. Each of the output multipliers in this table can be interpreted in a similar manner. Table 4.22 shows that in this region, for each direct job at a NASCAR Team (IMPLAN Industry Code 350) there are 0.54

indirect (supplier chain) jobs, as well as 0.54 induced jobs, which (added to the direct job) adds up to 2.08 total jobs. Each of the employment multipliers in Table 4.22 can be interpreted in a similar manner.

Table 4.21

North Carolina's Eastern Partnership Output Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.239640	0.164814	1.404454
Suppliers	139	Commercial printing	1	0.214449	0.195055	1.409504
	145	Petroleum lubricating oil and grease manufacturing				
	180	Rubber and plastics hose and belting manufacturing				
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal	1	0.160286	0.359658	1.519944
	286	Other engine equipment manufacturing	1	0.232661	0.130318	1.362980
	347	Truck trailer manufacturing				
	350	Motor vehicle parts manufacturing	1	0.239640	0.164814	1.404454
	358	Boat building				
	359	Motorcycle, bicycle, and parts manufacturing				
	391	Air transportation	1	0.394821	0.193949	1.588770
	440	Specialized design services				
	446	Scientific research and development services	1	0.058411	0.513249	1.571660
NASCAR Testing	446	Scientific research and development services	1	0.058411	0.513249	1.571660
Marketing	450	All other miscellaneous professional and technical	1	0.082605	0.156695	1.239300
Retail	139	Commercial printing	1	0.214449	0.195055	1.409504
	350	Motor vehicle parts manufacturing	1	0.239640	0.164814	1.404454
	402	Furniture and home furnishings stores	1	0.216730	0.289507	1.506237
	408	Clothing and clothing accessories stores	1	0.208193	0.286814	1.495007
	411	Miscellaneous store retailers	1	0.319238	0.261723	1.580961
Major Track	472	Spectator sports	1	0.043641	0.483899	1.527540
Drag Track	472	Spectator sports	1	0.043641	0.483899	1.527540
Short Track	472	Spectator sports	1	0.043641	0.483899	1.527540
Museums	475	Museums, historical sites, zoos, and parks	1	0.482348	0.224788	1.707136
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.136667	0.234340	1.371006
Miscellaneous Firms	393	Water transportation				
	446	Scientific research and development services	1	0.058411	0.513249	1.571660
	447	Advertising and related services				
	456	Travel arrangement and reservation services				
	462	Colleges, universities, and junior colleges	1	0.206146	0.410357	1.616502
	463	Other educational services	1	0.182322	0.286385	1.468707
	474	Promoters of performing arts and sports and agents	1	0.136667	0.234340	1.371006
	493	Civic, social, professional and similar organizations				
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.239640	0.164814	1.404454
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.239640	0.164814	1.404454
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.239640	0.164814	1.404454
Tourism	4XB	Blended Tourism				

Table 4.22

North Carolina's Eastern Partnership Employment Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.543818	0.53689	2.080708
Suppliers	139	Commercial printing	1	0.243255	0.280202	1.523457
	145	Petroleum lubricating oil and grease manufacturing				
	180	Rubber and plastics hose and belting manufacturing				
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal	1	0.088732	0.272444	1.361176
	286	Other engine equipment manufacturing	1	0.790993	0.693717	2.484710
	347	Truck trailer manufacturing				
	350	Motor vehicle parts manufacturing	1	0.543818	0.536890	2.080708
	358	Boat building	1	0.245641	0.330227	1.575868
	359	Motorcycle, bicycle, and parts manufacturing				
	391	Air transportation	1	0.949068	0.391951	2.341019
	440	Specialized design services	1	0.202039	0.244982	1.447021
	446	Scientific research and development services	1	0.041421	0.308242	1.349663
NASCAR Testing	450	Scientific research and development services	1	0.132132	0.204245	1.336377
Marketing	139	All other miscellaneous professional and technical	1	0.243255	0.280202	1.523457
Retail	350	Motor vehicle parts manufacturing	1	0.543818	0.536890	2.080708
	402	Furniture and home furnishings stores	1	0.167683	0.214469	1.382152
	408	Clothing and clothing accessories stores	1	0.097266	0.128302	1.225568
	411	Miscellaneous store retailers	1	0.196988	0.154636	1.351624
	472	Spectator sports	1	0.008972	0.040217	1.049189
Major Track	472	Spectator sports	1	0.008972	0.040217	1.049189
Drag Track	472	Spectator sports	1	0.008972	0.040217	1.049189
Short Track	475	Museums, historical sites, zoos, and parks	1	0.609789	0.168972	1.778761
Museums	474	Promoters of performing arts and sports and agents	1	0.050140	0.065576	1.115716
Sanctioning Organizations	393	Water transportation	1	3.700486	1.413293	6.113779
Miscellaneous Firms	446	Scientific research and development services	1	0.041421	0.308242	1.349663
	446	Scientific research and development services	1	0.041421	0.308242	1.349663
	447	Advertising and related services	1	0.217216	0.452600	1.669816
	456	Travel arrangement and reservation services	1	0.247442	0.195201	1.442643
	462	Colleges, universities, and junior colleges	1	0.160643	0.237262	1.397905
	463	Other educational services	1	0.140433	0.147471	1.287904
	474	Promoters of performing arts and sports and agents	1	0.050140	0.065576	1.115716
	493	Civic, social, professional and similar organizations	1	0.148479	0.115551	1.264030
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.543818	0.536890	2.080708
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.543818	0.536890	2.080708
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.543818	0.536890	2.080708
Tourism	4XB	Blended Tourism				

Table 4.23 contains the estimated annual output impact on the North Carolina's Eastern Region economy by the motorsports industry, organized by motorsports sector and IMPLAN Industry Code. In 2005, total direct spending by all motorsports related firms in the region was $94,832,071. In addition to the direct output impacts there was $19,598,050 of indirect (supplier chain) output impacts and $20,712,631 of induced economic impacts. The total output impact of

the motorsports industry on the North Carolina's Eastern Region economy in 2005 was $135,142,754.

Table 4.23
North Carolina's Eastern Region Output Impacts by Sector

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	ND	ND	ND	ND
Suppliers	$12,067,039	$2,879,716	$1,929,358	$16,876,115
NASCAR Testing	ND	ND	ND	ND
Marketing	ND	ND	ND	ND
Retail	ND	ND	ND	ND
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	$15,126,840	$660,150	$7,319,863	$23,106,853
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	ND	ND	ND	ND
Non-NASCAR Teams	$33,143,728	$7,942,563	$5,462,550	$46,548,841
Short Track Teams	$16,704,000	$4,002,947	$2,753,053	$23,460,000
Drag Track Teams	$16,724,000	$4,007,739	$2,756,349	$23,488,089
Tourism	ND	ND	ND	ND
Totals	**$94,832,071**	**$19,598,050**	**$20,712,631**	**$135,142,754**

Table 4.24
North Carolina's Eastern Region Employment Impacts by Sector

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	ND	ND	ND	ND
Suppliers	37	22	21	81
NASCAR Testing	ND	ND	ND	ND
Marketing	ND	ND	ND	ND
Retail	ND	ND	ND	ND
Major Track	ND	ND	ND	ND
Drag Track	ND	ND	ND	ND
Short Track	146	89	25	260
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	ND	ND	ND	ND
Non-NASCAR Teams	99	54	53	206
Short Track Teams	64	35	34	133
Drag Track Teams	64	35	34	133
Tourism	ND	ND	ND	ND
Totals	425	235	169	829

Table 4.24 presents the 2005 impact of the motorsports industry on North Carolina's Eastern Region employment. Overall the motorsports industry generated a total of 829 jobs in

2005 for the region, consisting of 425 direct jobs, 235 indirect (supplier chain) jobs, and 169 induced jobs.

North Carolina's Northeast Partnership Results: The North Carolina's Northeast Partnership economic development region is comprised of the 16 counties located in the southeast corner of the state (Figure 4.7). This region has 4 percent of the NC population and the region's labor force is about 4 percent of the NC labor force. The largest employment sectors in this region are wholesale/retail trade and manufacturing and the fastest growing sectors in the region are agriculture, construction, and services.

Figure 4.7: North Carolina's Northeast Partnership Region

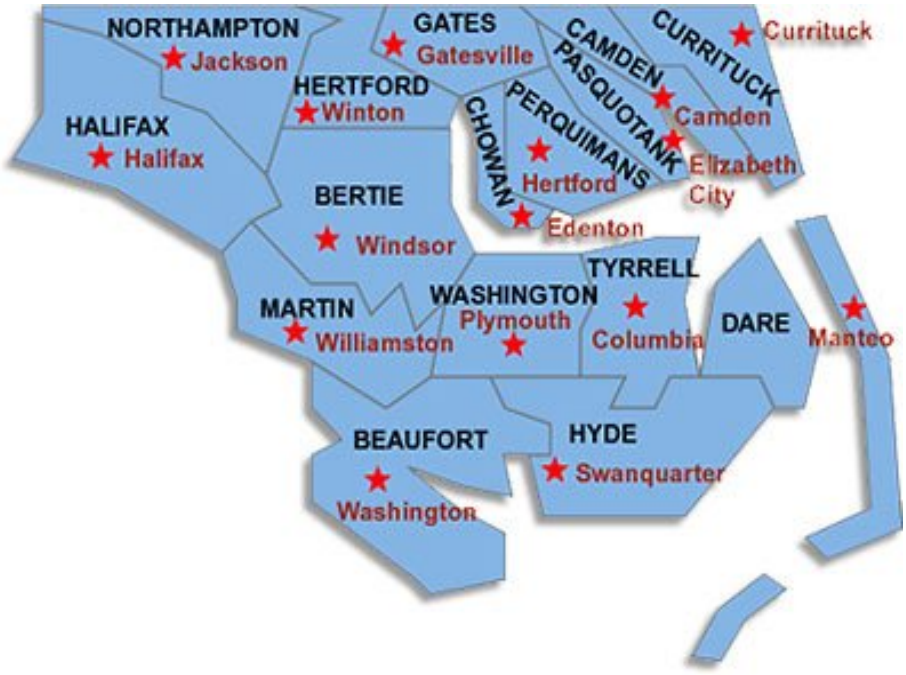


Table 4.25 and Table 4.26 present the output and employment multipliers for the North Carolina's Northeast Partnership region by motorsports sector and IMPLAN Industry Code. These tables only present multipliers for the motorsports sectors and IMPLAN Industry Codes for firms in the North Carolina's Northeast Partnership region. Table 4.25 shows that for each dollar of direct expenditure by NASCAR Team (IMPLAN Industry Code 350) there are 19.16 cents spent in indirect (supplier chain) industries within the region and 13.48 cents in induced spending within the region, so that the total regional output impact of $1 spent by a NASCAR Team increases regional output by $1.33. Each of the output multipliers in this table can be interpreted in a similar manner. Table 4.26 shows that in this region, for each direct job at a

NASCAR Team (IMPLAN Industry Code 350) there are 0.52 indirect (supplier chain) jobs, as well as 0.47 induced jobs, which (added to the direct job) sums to 1.99 total jobs. Each of the employment multipliers in Table 4.26 can be interpreted in a similar manner.

Table 4.25

North Carolina's Northeast Partnership Output Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.191616	0.134770	1.326386
Suppliers	139	Commercial printing	1	0.164775	0.182203	1.346978
	145	Petroleum lubricating oil and grease manufacturing				
	180	Rubber and plastics hose and belting manufacturing				
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal				
	286	Other engine equipment manufacturing	1	0.232661	0.130318	1.362980
	347	Truck trailer manufacturing				
	350	Motor vehicle parts manufacturing	1	0.191616	0.134770	1.326386
	358	Boat building	1	0.120104	0.178576	1.298679
	359	Motorcycle, bicycle, and parts manufacturing				
	391	Air transportation	1	0.109015	0.356016	1.465031
	440	Specialized design services	1	0.152204	0.216410	1.368614
	446	Scientific research and development services	1	0.097597	0.395118	1.492715
NASCAR Testing	446	Scientific research and development services	1	0.097597	0.395118	1.492715
Marketing	450	All other miscellaneous professional and technical	1	0.069867	0.138152	1.208019
Retail	139	Commercial printing	1	0.164775	0.182203	1.346978
	350	Motor vehicle parts manufacturing	1	0.191616	0.134770	1.326386
	402	Furniture and home furnishings stores	1	0.188916	0.258787	1.447704
	408	Clothing and clothing accessories stores	1	0.181623	0.256156	1.437780
	411	Miscellaneous store retailers	1	0.284608	0.229372	1.513980
Major Track	472	Spectator sports	1	0.042864	0.439671	1.482534
Drag Track	472	Spectator sports	1	0.042864	0.439671	1.482534
Short Track	472	Spectator sports	1	0.042864	0.439671	1.482534
Museums	475	Museums, historical sites, zoos, and parks	1	0.333456	0.161626	1.495082
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.202423	0.224594	1.427017
Miscellaneous Firms	393	Water transportation	1	0.335929	0.159026	1.494955
	446	Scientific research and development services	1	0.097597	0.395118	1.492715
	447	Advertising and related services	1	0.127594	0.298053	1.425647
	456	Travel arrangement and reservation services	1	0.267493	0.222645	1.490139
	462	Colleges, universities, and junior colleges	1	0.262821	0.293256	1.556077
	463	Other educational services	1	0.212800	0.196398	1.409198
	474	Promoters of performing arts and sports and agents	1	0.202423	0.224594	1.427017
	493	Civic, social, professional and similar organizations	1	0.288172	0.250892	1.539063
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.191616	0.134770	1.326386
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.191616	0.134770	1.326386
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.191616	0.134770	1.326386
Tourism	4XB	Blended Tourism	1	0.251256	0.239269	1.490526

Table 4.26

North Carolina's Norheast Partnership Employment Multipliers by Industry and by IMPLAN Sector

Industry	IMPLAN Code	IMPLAN Sector	Direct Effects	Indirect Effects	Induced Effects	Total Effects
NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.524303	0.466823	1.991126
Suppliers	139	Commercial printing	1	0.238588	0.307136	1.545724
	145	Petroleum lubricating oil and grease manufacturing				
	180	Rubber and plastics hose and belting manufacturing				
	205	Iron, steel pipe and tube from purchased steel				
	247	Electroplating, anodizing, and coloring metal				
	286	Other engine equipment manufacturing	1	0.790993	0.693717	2.484710
	347	Truck trailer manufacturing				
	350	Motor vehicle parts manufacturing	1	0.524303	0.466823	1.991126
	358	Boat building	1	0.203650	0.386421	1.590071
	391	Air transportation	1	1.158821	3.463841	5.622662
	359	Motorcycle, bicycle, and parts manufacturing				
	440	Specialized design services	1	0.130761	0.169779	1.300540
	446	Scientific research and development services	1	0.033028	0.140138	1.173166
NASCAR Testing	446	Scientific research and development services	1	0.033028	0.140138	1.173166
Marketing	450	All other miscellaneous professional and technical	1	0.115246	0.200426	1.315672
Retail	139	Commercial printing	1	0.238588	0.307136	1.545724
	350	Motor vehicle parts manufacturing	1	0.524303	0.466823	1.991126
	402	Furniture and home furnishings stores	1	0.184562	0.234139	1.418701
	408	Clothing and clothing accessories stores	1	0.108705	0.141986	1.250691
	411	Miscellaneous store retailers	1	0.204766	0.152830	1.357596
Major Track	472	Spectator sports	1	0.012042	0.055910	1.067952
Drag Track	472	Spectator sports	1	0.012042	0.055910	1.067952
Short Track	472	Spectator sports	1	0.012042	0.055910	1.067952
Museums	475	Museums, historical sites, zoos, and parks	1	0.871005	0.132906	2.003911
Sanctioning Organizations	474	Promoters of performing arts and sports and agents	1	0.079250	0.071050	1.150300
Miscellaneous Firms	393	Water transportation	1	3.323106	1.786167	6.109273
	446	Scientific research and development services	1	0.033028	0.140138	1.173166
	447	Advertising and related services	1	0.073931	0.162297	1.236228
	456	Travel arrangement and reservation services	1	0.238557	0.187512	1.426069
	462	Colleges, universities, and junior colleges	1	0.211011	0.132100	1.343111
	463	Other educational services	1	0.092998	0.037955	1.130953
	474	Promoters of performing arts and sports and agents	1	0.079250	0.071050	1.150300
	493	Civic, social, professional and similar organizations	1	0.167161	0.102170	1.269331
Non-NASCAR Teams	350	Motor vehicle parts manufacturing	1	0.524303	0.466823	1.991126
Short Track Teams	350	Motor vehicle parts manufacturing	1	0.524303	0.466823	1.991126
Drag Track Teams	350	Motor vehicle parts manufacturing	1	0.524303	0.466823	1.991126
Tourism	4XB	Blended Tourism	1	0.161775	0.148660	1.310435

Table 4.27 contains the estimated annual output impact on the North Carolina's Northeast Partnership economy by the motorsports industry, organized by motorsports sector and IMPLAN Industry Code. In 2005, total direct spending by all motorsports related firms in the region was $114,291,921. In addition to the direct output impacts, there was $16,356,355 of indirect (supplier chain) output impacts and $22,145,273 of induced economic impacts. The total output

impact of the motorsports industry on the North Carolina's Northeast Partnership economy in 2005 was $152,793,470.

Table 4.27
North Carolina's Southeast Output Impacts by Sector

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	ND	ND	ND	ND
Suppliers	$75,866,017	$9,271,850	$13,458,233	$98,596,026
NASCAR Testing	ND	ND	ND	ND
Marketing	ND	ND	ND	ND
Retail	ND	ND	ND	ND
Major Track	$4,000,000	$171,456	$1,758,684	$5,930,136
Drag Track	ND	ND	ND	ND
Short Track	$1,849,384	$79,272	$813,121	$2,741,775
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	ND	ND	ND	ND
Non-NASCAR Teams	$4,000,000	$766,464	$539,080	$5,305,544
Short Track Teams	$8,362,000	$1,602,293	$1,126,947	$11,091,240
Drag Track Teams	$8,362,000	$1,602,293	$1,126,947	$11,091,240
Tourism	$5,000,000	$1,256,281	$1,196,346	$7,452,629
Totals	**$114,291,921**	**$16,356,355**	**$22,145,273**	**$152,793,470**

Table 4.28
North Carolina's Southeast Employment Impacts by Sector

Industry	Direct	Indirect	Induced	Total
NASCAR Teams	ND	ND	ND	ND
Suppliers	423	90	165	677
NASCAR Testing	ND	ND	ND	ND
Marketing	ND	ND	ND	ND
Retail	ND	ND	ND	ND
Major Track	100	1	6	107
Drag Track	ND	ND	ND	ND
Short Track	31	0	2	33
Museums	ND	ND	ND	ND
Sanctioning Organizations	ND	ND	ND	ND
Miscellaneous Firms	ND	ND	ND	ND
Non-NASCAR Teams	16	8	7	32
Short Track Teams	32	17	15	65
Drag Track Teams	32	17	15	65
Tourism	65	11	10	86
Totals	**719**	**147**	**221**	**1,087**

Table 4.28 presents the 2005 impact of the motorsports industry on North Carolina's Eastern Region employment. Overall the motorsports industry generated a total of 1,087 jobs in 2005 for the region, consisting of 719 direct jobs, 147 indirect (supplier chain) jobs, and 221 induced jobs.

Section 5: 2003-2005 Motorsports Industry Growth

The 2005 impact levels show significant growth versus the results reported for 2003 in our earlier study. Table 5.1 presents the 2003 and 2005 motorsports output and employment impacts. This table also shows the changes in output and employment supported by the Motorsports industry over this two year period.

Table 5.1
2003 - 2005 Impact Changes

Impact	2003	2005	Change	Percent Change
Direct Output	$3,190,279,409	$3,765,722,321	$575,442,912	18.00%
Total Output	$5,075,067,394	$5,902,260,336	$827,192,942	16.30%
Direct Employment	12,942	14,298	1,356	11.70%
Total Employment	24,406	27,252	2,846	11.90%

The table shows an increase in the total motorsports output impact on the state economy of $827,192,942. This increase was made up of $575,442,912 direct impact by the fourteen motorsports related industries, while the remainder was indirect (supplier chain) and induced output impacts. This represents an eighteen percent two-year increase in the direct output impact and a 16.3% two-year increase in the total output impact. If the change in price levels between 2003 and 2005 of 4.6% is subtracted from the total growth of 16.3% the inflation adjusted growth rate in total output is 11.7% or real growth per year of 5.85%. This is significantly larger than the overall real rate of growth for the state economy (3.4%) over the same two-year period.

The table also shows that direct motorsports employment increased by 1,356 jobs (11.7% growth) and total employment increased by 2,846 jobs (11.9% growth) over the same two-year period. This increased motorsports related employment, along with the growth in real output, is consistent with a healthy and expanding North Carolina motorsports industry.

The continued growth in output and employment of the motorsports industry has been driven by a number of related factors. These factors include (1) the creation, in 1995, and growth of the NASCAR Craftsmen Truck Series, (2) the rapid growth and increasing popularity

of the NASCAR Busch Series, (3) the NASCAR television package signed in 2000 which has increased national exposure and built the NASCAR fan base, (4) the open wheel sanctioning split which has shifted many fans to NASCAR sanctioned racing, (5) the construction and promotion of new tracks across the country hosting NASCAR sanctioned races, and (6) the rapid increase in the cost of major sponsorships for companies wishing to identify with NASCAR teams. It should be clear from this list that the growth of the motorsports industry in North Carolina is driven by the significant presence of NASCAR related businesses located in the state.

Section 6: Sector Occupational and Educational Results

This section of the report presents the occupational and educational findings of the study. The survey instruments mailed to the firms in different sectors of the motorsports industry contained a section on the occupational make-up and educational levels of their work force. The occupational breakdown was limited to the U.S. Department of Labor, Bureau of Labor Statistics Major Occupational Groups (MOG) definitions. This limitation on occupational categories was done to maximize survey response and result quality. The nine MOG categories are listed below with some occupation descriptions.

1. Major Occupational Group (MOG) A: Professional And Technical Occupations

BLS sub-groups include:

Engineers, Architects, and Surveyors
Mathematical And Computer Scientists
Health Diagnosing Occupations
Lawyers And Judges
Health Technologists And Technicians
Engineering And Related Technologists And Technicians
Science Technicians
Miscellaneous Technicians

2. Major Occupational Group (MOG) B: Executive, Administrative, And Managerial Occupations

3. Major Occupational Group (MOG) C: Sales Occupations

4. Major Occupational Group (MOG) D: Administrative Support Occupations, Including Clerical

BLS sub-groups include:

Supervisors, Clerical And Administrative Support
Computer Equipment Operators
Secretaries, Stenographers, And Typists
Information Clerks
Records Processing Clerks, Except Financial
Financial Records Processing Clerks
Duplicating, Mail, And Other Office Machine Operators
Communications Equipment Operators

Mail And Message Distributing Occupations
Material Recording, Scheduling, And Distributing Clerks
Adjusters And Investigators
Miscellaneous Administrative Support Occupations

5. Major Occupational Group (MOG) E: Precision Production, Craft, And Repair Occupations

BLS sub-groups include:
Mechanics And Repairers
Precision Production Occupations
Precision Metalworking Occupations
Precision Woodworking Occupations
Precision Textile, Apparel, And Furnishings Machine Workers
Precision Workers, Assorted Materials
Precision Food Production Occupations
Precision Inspectors, Testers, And Related Workers
Plant And System Operators

6. Major Occupational Group (MOG) F: Machine Operators, Assemblers, And Inspectors

BLS sub-groups include:
Metalworking And Plastic Working Machine Operators
Woodworking Machine Operators
Printing Machine Operators
Textile, Apparel, And Furnishings Machine Operators
Machine Operators, Assorted Materials
Fabricators, Assemblers, And Hand Working Occupations
Production Inspectors, Testers, Samplers, And Weighers

7. Major Occupational Group (MOG) G: Transportation And Material Moving Occupations

BLS sub-groups include:
Motor Vehicle Operators
Material Moving Equipment Operators

8. Major Occupational Group (MOG) H: Handlers, Equipment Cleaners, Helpers, And Laborers

9. Major Occupational Group (MOG) K: Service Occupations, Except Private Household

BLS sub-groups include:
Protective Service Occupations
Food Service Occupations
Health Service Occupations
Cleaning And Building Service Occupations
Personal Service Occupations

The survey results of the occupational study were limited and only the larger industry sectors had sample sizes that were large enough to be judged reliable. As a result, only three sectors; NASCAR Teams, Suppliers, and Marketing have occupational data reported in this

section. However, these three sectors account for three-quarters of the total direct employment and are the critical sectors in the regional cluster.

Table 6.1 presents the number of employees in NASCAR Teams by MOG and by educational level. There are nine MOG categories each with 3 educational levels. This results in 27 total occupational/educational combinations. The two largest groups are MOG 5 with High School or Less employment of 1,812 and MOG 6 with High School or Less employment of 727. Together these two groups account for 57.1 percent of the sector's employment. The category High School or Less includes all employees that do not have at least a two-year college degree. Overall, 3,046 of the 4,445 total jobs in NASCAR Teams are currently filled by employees who have a high school education or less. These are striking results when compared to the average compensation level of $61,331. These are extremely well paying jobs that require a high level of skill. For the most part, these 3,046 jobs form the basis of the specialized labor core of the regional cluster. Table 6.2 presents similar information to Table 6.1, but in percentage terms.

Table 6.1
NASCAR Teams Major Occupational Groups: Employment and Educational Levels

Major Occupational Group	College	2-Year College	High School or Less	Total
MOG 1 Professional and Technical	399	9	13	422
MOG 2 Executive, Administrative, and Managerial	161	27	85	274
MOG 3 Sales	81	9	22	112
MOG 4 Administrative Support	81	58	63	202
MOG 5 Precision Production, Craft, and Repair	22	211	1,812	2,045
MOG 6 Machine Operators, and Assemblers	22	157	727	906
MOG 7 Transportation and Material Moving	112	36	229	377
MOG 8 Handlers, Equipment Cleaners, and Helpers	4	4	85	94
MOG 9 Service	0	4	9	13
MOG Total	**884**	**516**	**3,046**	**4,445**

Tables 6.3 and 6.4 present the same information for the Suppliers as Tables 6.1 and 6.2 do for NASCAR Teams. Overall, the employment total for Suppliers (4,716) is similar to that of NASCAR Teams (4,445). However, the MOG breakdown is quite different. The major difference is in MOG 2, MOG 3, and MOG 4 as Suppliers require a much larger number of administrators, sales, and support personnel. Over 45 percent of Supplier jobs are in these three

Table 6.2
NASCAR Teams Major Occupational Groups: Employment and Educational Levels

	MOG Percent of Total	Percent College	Percent 2-Year College	Percent High School or Less
MOG 1 Professional and Technical	9.49%	94.68%	2.13%	3.19%
MOG 2 Executive, Administrative, and Managerial	6.16%	59.02%	9.84%	31.15%
MOG 3 Sales	2.52%	72.00%	8.00%	20.00%
MOG 4 Administrative Support	4.54%	40.00%	28.89%	31.11%
MOG 5 Precision Production, Craft, and Repair	46.01%	1.10%	10.31%	88.60%
MOG 6 Machine Operators, and Assemblers	20.38%	2.48%	17.33%	80.20%
MOG 7 Transportation and Material Moving	8.48%	29.76%	9.52%	60.71%
MOG 8 Handlers, Equipment Cleaners, and Helpers	2.12%	4.76%	4.76%	90.48%
MOG 9 Service	0.30%	0.00%	33.33%	66.67%

categories compared to only 13 percent in NASCAR Teams. Again like NASCAR Teams the majority of Suppliers jobs are currently filled by employees who have a high school education or less. Overall, 3,373 of the 4,716 total jobs with Suppliers are currently filled by employees who have a high school education or less. This represents 71.5 percent of total Supplier jobs with a sector average compensation of $68,879.

Table 6.3
Suppliers Major Occupational Groups: Employment and Educational Levels

Major Occupational Group	College	2-Year College	High School of Less	Total
MOG 1 Professional and Technical	328	45	149	522
MOG 2 Executive, Administrative, and Managerial	313	0	358	672
MOG 3 Sales	149	134	492	776
MOG 4 Administrative Support	119	15	552	687
MOG 5 Precision Production, Craft, and Repair	45	15	537	597
MOG 6 Machine Operators, and Assemblers	119	45	776	940
MOG 7 Transportation and Material Moving	0	15	254	269
MOG 8 Handlers, Equipment Cleaners, and Helpers	0	0	194	194
MOG 9 Service	0	0	60	60
MOG Total	**1,075**	**269**	**3,373**	**4,716**

Tables 6.5 and 6.6 present the same information for the Marketing firms as Tables 6.1 and 6.2 do for NASCAR Teams. Overall, the employment total for Marketing (1,768) is smaller than either NASCAR Teams (4,445) or Suppliers (4,716). Also, the MOG breakdown is quite different from either NASCAR Teams or Suppliers. The major difference is in MOG 1, MOG 2, MOG 3, and MOG 4 as Marketing firms require a much larger number of technical professionals,

Table 6.4
Suppliers Major Occupational Groups: Employment and Educational Levels

	MOG Percent of Total	Percent College	Percent 2-Year College	Percent High School or Less
MOG 1 Professional and Technical	11.08%	62.86%	8.57%	28.57%
MOG 2 Executive, Administrative, and Managerial	14.24%	46.67%	0.00%	53.33%
MOG 3 Sales	16.46%	19.23%	17.31%	63.46%
MOG 4 Administrative Support	14.56%	17.39%	2.17%	80.43%
MOG 5 Precision Production, Craft, and Repair	12.66%	7.50%	2.50%	90.00%
MOG 6 Machine Operators, and Assemblers	19.94%	12.70%	4.76%	82.54%
MOG 7 Transportation and Material Moving	5.70%	0.00%	5.56%	94.44%
MOG 8 Handlers, Equipment Cleaners, and Helpers	4.11%	0.00%	0.00%	100.00%
MOG 9 Service	1.27%	0.00%	0.00%	100.00%

administrators, sales, and support personnel. Over 86 percent of the Marketing jobs are in these four categories compared to only 23 percent in NASCAR Teams and 56 percent in Suppliers. Also quite different from both NASCAR Teams and Suppliers is the percentage of total jobs that are currently filled by employees who have a college degree or more. Over 61 percent of the Marketing jobs are currently filled by employees who have a four-year college degree. Only 20 percent of NASCAR Team jobs and 23 percent of Supplier jobs require a college degree.

Table 6.5
Marketing Major Occupational Groups: Employment and Educational Levels

Major Occupational Group	College	2-Year College	High School of Less	Total
MOG 1 Professional and Technical	203	0	61	264
MOG 2 Executive, Administrative, and Managerial	234	20	142	396
MOG 3 Sales	335	10	0	345
MOG 4 Administrative Support	285	102	142	528
MOG 5 Precision Production, Craft, and Repair	0	20	30	51
MOG 6 Machine Operators, and Assemblers	0	0	0	0
MOG 7 Transportation and Material Moving	30	10	132	173
MOG 8 Handlers, Equipment Cleaners, and Helpers	0	0	0	0
MOG 9 Service	0	0	10	10
MOG Total	**1,087**	**163**	**518**	**1,768**

Tables 6.7, 6.8, and 6.9 present summary information on MOG categories and educational levels. Table 6.7 presents industry employment by educational level. Overall, 6,937 of the 10,929 jobs in these three industries require a high school education or less. As shown in Table 6.8, this is

Table 6.6
Marketing Major Occupational Groups: Employment and Educational Levels

	MOG Percent of Total	Percent College	Percent 2-Year College	Percent High School or Less
MOG 1 Professional and Technical	14.94%	76.92%	0.00%	23.08%
MOG 2 Executive, Administrative, and Managerial	22.41%	58.97%	5.13%	35.90%
MOG 3 Sales	19.54%	97.06%	2.94%	0.00%
MOG 4 Administrative Support	29.89%	53.85%	19.23%	26.92%
MOG 5 Precision Production, Craft, and Repair	2.87%	0.00%	40.00%	60.00%
MOG 6 Machine Operators, and Assemblers	0.00%	0.00%	0.00%	0.00%
MOG 7 Transportation and Material Moving	9.77%	17.65%	5.88%	76.47%
MOG 8 Handlers, Equipment Cleaners, and Helpers	0.00%	0.00%	0.00%	0.00%
MOG 9 Service	0.57%	0.00%	0.00%	100.00%

over 63 percent of the total jobs. Of the total of 10,929 jobs, 3,045 are currently filled by employees who have a college degree (27.9 percent of the total) and only 947 (8.7 percent) are currently filled by employees who have a two-year degree. Table 6.9 summarizes the percentage distribution of jobs by major sector and MOG.

Table 6.7
Industry Employment by Educational Level

Industry	College	2-Year College	High School or Less	Total
NASCAR	884	516	3,046	4,445
Suppliers	1,075	269	3,373	4,716
Marketing	1,087	163	518	1,768
Sub Total	3,045	947	6,937	10,929

Table 6.8
Industry Employment by Educational Level

Industry	Percent College	Percent 2-Year College	Percent High School or Less	Total
NASCAR	19.88%	11.60%	68.52%	100.00%
Suppliers	22.78%	5.70%	71.52%	100.00%
Marketing	61.49%	9.20%	29.31%	100.00%
Sub Total	27.87%	8.67%	63.47%	100.00%

Table 6.9
Major Occupational Group Percent of Employment by Industry

	NASCAR Teams	Suppliers	Marketing
Major Occupational Group			
MOG 1 Professional and Technical	9.49%	11.08%	14.94%
MOG 2 Executive, Administrative, and Managerial	6.16%	14.24%	22.41%
MOG 3 Sales	2.52%	16.46%	19.54%
MOG 4 Administrative Support	4.54%	14.56%	29.89%
MOG 5 Precision Production, Craft, and Repair	46.01%	12.66%	2.87%
MOG 6 Machine Operators, and Assemblers	20.38%	19.94%	0.00%
MOG 7 Transportation and Material Moving	8.48%	5.70%	9.77%
MOG 8 Handlers, Equipment Cleaners, and Helpers	2.12%	4.11%	0.00%
MOG 9 Service	0.30%	1.27%	0.57%

Section 7: Summary and Conclusions

This study is a follow-up of an earlier study on the economic impact of the motorsports industry in North Carolina. The former study was released in September of 2004 and was based on data that was collected during the 2003 calendar year. This study is based on data collected for the motorsports industry in North Carolina for the 2005 calendar year and provides an update on the economic impact and a two-year growth analysis. In addition to the two-year follow-up of the original study, this study also adds occupational breakdowns of the various sectors within the motorsports industry and also provides educational requirements within the occupations by motorsports sector.

Summary of State Impacts: At the state level four different types of economic impacts generated by the motorsports industry were estimated based on 2005 information. These impacts include: (1) output impacts; (2) employment impacts; (3) employee compensation impacts; and (4) value added impacts. These impacts were estimated for each of the seven regional economic development areas and the state results are the sum of these regional estimates.

The direct economic impacts of the motorsports industry on the North Carolina economy in 2005 were estimated to have:

- increased output by almost 3.8 billion dollars ($3,765,722,321);
- increased employment by 14,298 jobs;
- increased employee compensation by over 1.0 billion dollars ($1,034,295,670) with an average direct compensation per job of $72,337 per year; and
- increased value added by almost 1.6 billion dollars ($1,586,547,682).

Adding the indirect and induced impacts to these direct impacts, the economic impacts of the motorsports industry on the North Carolina economy in 2005 were estimated to have:

- increased total output by over 5.9 billion dollars ($5,902,260,336),
- increased total employment by 27,252 jobs,
- increased total employee compensation by almost 1.7 billion dollars ($1,680,446,205), and
- increased total value added by almost 2.8 billion dollars ($2,790,016,329).

Summary of Regional Impacts: The economic output and employment impacts of the motorsports industry on each of the economic development regions are summarized in Table 7.1. The largest regional economic impact of the motorsports industry is on the Charlotte Regional Partnership. This region had just under 2.9 billion dollars in direct output expenditures in 2005 and the total output impact on the region was over 4.5 billion dollars. Even in the economic development region with the smallest direct motorsports output impact, Research Triangle Partnership, the motorsports total 2005 output impact exceeded 73 million dollars.

Table 7.1
Aggregate Motorsports Output and Employment Impacts by Region

Region	Direct Output	Total Output	Direct Employment	Total Employment
Advantage West	$122,030,014	$188,651,222	598	979
Charlotte Regional Partnership	$2,879,532,187	$4,553,857,317	10,476	19,799
Piedmont Triad Partnership	$402,009,008	$642,580,379	1,550	3,553
Research Triangle Regional Partnership	$73,102,287	$112,660,406	191	375
North Carolina's Southeast	$79,924,833	$116,574,788	339	630
North Carolina’s Eastern Region	$94,832,071	$135,142,754	425	829
North Carolina’s Northeast Partnership	$114,291,921	$152,793,470	719	1,087
Total	$3,765,722,321	$5,902,260,336	14,298	27,252

The regional employment estimates indicate that in all seven regional economic development areas the motorsports industry employment impacts exceeded 300 total jobs in 2005. The table shows the largest employment impact of the motorsports industry is in the Charlotte Regional Partnership, with a direct employment impact of 10,476 jobs and a total employment impact of 19,799 jobs.

Summary of Sector Occupational and Educational Results: The survey results of the occupational study were limited and only the larger industry sectors provided sample sizes large

enough to be analyzed. As a result, only three sectors; NASCAR Teams, Suppliers, and Marketing have reported occupational results. However, these three sectors account for three quarters of total direct motorsports employment and are critical to the motorsports industry. The occupational breakdown was limited to the U.S. Department of Labor, Bureau of Labor Statistics Major Occupational Groups (MOG) definitions. This organization of occupational categories was done to maximize survey response and result quality.

Table 7.2 presents the overall results of the occupational employment findings. The most significant finding of the occupational study is the number of jobs classified in MOG 5 and MOG 6. Over 40 percent of the total jobs are classified as Precision Production, Craft, Repair, Machine Operators, Assemblers, and Inspectors. These are the occupations that build the cars and build the parts. Of the 4,539 jobs in these two categories, 3,883 or 85 percent are currently filled with employees with a high school degree or less. The importance of this is two fold. First, these jobs represent high quality, high paying jobs that would be difficult to replace with jobs in any other industry. Second, they represent an important localized skill labor pool that is essential to this industry and that would not be easily reproduced elsewhere.

Table 7.2

Major Occupational Group: Employment and Educational Levels

Major Occupational Group	College	2-Year College	High School or Less	Total
MOG 1 Professional and Technical	931	54	224	1,208
MOG 2 Executive, Administrative, and Managerial	709	47	586	1,341
MOG 3 Sales	565	153	515	1,234
MOG 4 Administrative Support	485	175	757	1,417
MOG 5 Precision Production, Craft, and Repair	67	246	2,380	2,693
MOG 6 Machine Operators, Assemblers, and Inspectors	142	202	1,503	1,846
MOG 7 Transportation and Material Moving	143	61	615	818
MOG 8 Handlers, Equipment Cleaners, Helpers, and Laborers	4	4	279	288
MOG 9 Service	0	4	79	83
MOG Total	**3,045**	**947**	**6,937**	**10,929**

A second significant occupational/educational finding is presented in Table 7.3. There is an important difference in the educational requirements between the three largest sectors of the motorsports industry. Table 7.3 presents educational levels by sector. Both NASCAR Teams and Suppliers have similar educational make-ups. Both sectors have around 70 percent of their jobs that are currently filled by employees who have a high school degree or less and around 20 percent are currently filled by employees who have a college degree. The Marketing sector is

quite different with over 60 percent of jobs that are currently filled by employees who have a college degree and around 30 percent are currently filled by employees who have a high school degree or less.

Table 7.3
Industry Employment by Educational Level

Industry	Percent College	Percent 2-Year College	Percent High School or Less	Total
NASCAR	19.88%	11.60%	68.52%	100.00%
Suppliers	22.78%	5.70%	71.52%	100.00%
Marketing	61.49%	9.20%	29.31%	100.00%
Sub Total	27.87%	8.67%	63.47%	100.00%

Summary of 2003-2005 Motorsports Industry Growth: The 2005 impact levels show significant growth versus the results reported for 2003 in our earlier study. The results show an increase in the total motorsports output impact on the state economy of $827,192,942. This increase was made up of $575,442,912 direct impact by the 14 motorsports related industries and the remainder was indirect (supplier chain) and induced output impacts. This represents an 18.0 percent two-year increase in the direct output impact and a 16.3 percent two-year increase in the total output impact. If the change in price levels between 2003 and 2005 of 4.6 percent is subtracted from the total growth of 16.3 percent the inflation adjusted growth rate in total output is 11.7 percent, which produces a real growth rate of 5.85 percent per year. This is significantly larger than the overall real rate of growth for the state economy (3.4%) over the same two-year period.

The results also show that direct motorsports employment increased by 1,356 jobs (11.7% growth) and total employment increased by 2,846 jobs (11.9% growth) over the same two-year period. This increased motorsports related employment, along with the growth in real output, gives a clear picture of the healthy and expanding impact that the motorsports industry has on the North Carolina economy.

The continued growth in output and employment of the motorsports industry has been driven by a number of related factors. These factors include (1) the creation, in 1995, and growth of the NASCAR Craftsmen Truck Series, (2) the rapid growth and increasing popularity of the NASCAR Busch Series, (3) the NASCAR television package signed in 2000 which has increased national exposure and built the NASCAR fan base, (4) the open wheel sanctioning split which has shifted many fans to NASCAR sanctioned racing, (5) the construction and

promotion of new tracks across the country hosting NASCAR sanctioned races, and (6) the rapid increase in the cost of major sponsorships for companies wishing to identify with NASCAR teams. It should be clear from this list that the growth of the motorsports industry in North Carolina is driven by the significant presence of NASCAR related businesses located in the state.

This growth is expected to continue into the foreseeable future. This expectation is based on interviews, the survey results, and other industry related information. We project that over the next five years the motorsports industry in North Carolina will show an average output growth rate of 5 to 6 percent per year, and an average employment growth rate of 3 to 4 percent per year. The major factors behind these growth rates include (1) the increasing professionalism of the management of race teams and suppliers, (2) the continuing growth of spectator interest in NASCAR sanctioned racing reflected in a new television package, new tracks, and an increase in the geographical footprint of NASCAR racing, (3) the expansion of the demographic base of NASCAR fans, (4) the continuing growth of marketing opportunities for NASCAR team sponsors, and (5) the continuing increase in the number of manufacturers and marketing firms choosing to locate in the state to be closer to the NASCAR teams.

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Appendix A

North Carolina Counties
By Regional Planning Area

Advantage West Region
Allegany
Ashe
Avery
Buncombe
Burke
Caldwell
Cherokee
Clay
Graham
Haywood
Henderson
Jackson
Macon
Madison
McDowell
Mitchell
Polk
Rutherford
Swain
Transylvania
Watauga
Wilkes
Yancey

Charlotte Regional Partnership
Alexander
Anson
Cabarrus
Catawba
Cleveland
Gaston
Iredell
Lincoln
Mecklenburg
Rowan
Stanly
Union

Piedmont Triad Partnership Region
Alamance
Caswell
Davidson
Davie
Forsyth
Guilford
Montgomery
Randolph
Rockingham
Stokes
Surry
Yadkin

Research Triangle Regional Partnership
Chatham
Durham
Franklin
Granville
Harnett
Johnston
Lee
Moore
Orange
Person
Vance
Wake
Warren

North Carolina's Southeast Region
Bladen
Brunswick
Columbus
Cumberland
Hoke
New Hanover
Pender
Richmond
Robeson
Sampson
Scotland

North Carolina's Eastern Region
Carteret
Craven
Duplin
Edgecombe
Greene
Jones
Lenoir
Nash
Onslow
Pamlico
Pitt
Wayne
Wilson

North Carolina's Northeast Partnership Region
Beaufort
Bertie
Camden
Camden
Chowan
Currituck
Dare
Gates
Halifax
Hertford
Hyde
Martin
Northampton
Pasquotank
Perquimans
Tyrrell
Washington

Appendix B
Survey Questionnaires

REPLACE ALL QUESTIONAIRES

INCLUDE 1 OCCUPATIONAL SURVEY

[redacted]

August 29, 2005

Dear Survey Recipient:

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. The enclosed survey questionnaire is part of this study.

This study is a follow-up project to the study conducted in 2004 that found that the North Carolina Motorsports industry generated five billion dollars of economic impact on the state's economy in 2003. In addition, the industry supported over 24,000 high quality jobs. The report is available on the Web at http://www.belkcollege.uncc.edu/news/motorsports.htm.

The new study will provide the comparable 2005 economic impacts, the ability to measure the annual growth in these impacts, and a detailed look at the occupational distribution of jobs supported by the Motorsports industry. This information will be vital for state and regional planners and legislators as they make recommendations/decisions about the future support of the motorsports industry in North Carolina.

The information received in this questionnaire will be held in strict confidence and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. The overall results of this study will be released to the public upon completion of the project. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by September 15, 2005 in the enclosed stamped envelope.

Sincerely,

John E. Connaughton

Enclosures

NORTH CAROLINA MOTORSPORTS IMPACT QUESTIONNAIRE
NASCAR TEAMS

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. This survey questionnaire is part of that study. The information received in this questionnaire will be held in strict confidence and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by September 5, 2005 in the enclosed stamped envelope.

1. Team Name _____

2. County _____

3. Contact Person _____

4. Telephone # _____ Fax # _____

5. Number of Nextel Series teams _____

6. Number of Busch Series teams _____

7. Number or Craftsman Truck Series teams _____

8. Number of other teams _____ Please specify other series _____

9. SIC or NAICS Code _____

10. Total number of employees in 2005 _____

11. Estimated annual employee turnover rate (%) 2005
(less than 5%) _____ 5-10% _____ 11-20% _____ More than 20 % _____

12. Annual operating budget in 2005 _____

13. Annual payroll in 2005 _____

14. Total number of employees in 2000 _____

15. Annual operating budget in 2000 _____

16. Estimated operating budget in 2010 _____

17. Estimated number of employees in 2010 _____

18. Building size (in square feet) _____

NORTH CAROLINA MOTORSPORTS IMPACT PROJECT
SUPPLIERS/MANUFACTURERS SURVEY

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. This survey questionnaire is part of that study. The information received in this questionnaire will be held in <u>strict confidence</u> and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by <u>September 5, 2005</u> in the enclosed stamped envelope.

1. Company Name _____

2. County _____

3. Contact Person _____

4. Telephone # _____ Fax # _____

5. NAICS Code _____ SIC Code _____

6. Please specify primary product _____

7. Please specify other major products _____

_____

8. Total number of employees in 2005 _____

9. Estimated annual employee turnover rate (%) 2005
(less than 5%) _____ 5-10% _____ 11-20% _____ More than 20 % _____

10. Annual operating budget in 2005 _____

11. Annual payroll in 2005 _____

12. Estimated percentage of 2005 revenue received from motorsports teams located in North Carolina _____

13. Total number of employees in 2000 _____

14. Annual operating budget in 2000 _____

15. Estimated operating budget in 2010 _____

16. Estimated number of employees in 2010 _____

17. Building size (in square feet) _____

NORTH CAROLINA MOTORSPORTS IMPACT PROJECT
RETAIL SURVEY

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. This survey questionnaire is part of that study. The information received in this questionnaire will be held in strict confidence and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by September 5, 2005 in the enclosed stamped envelope.

1. Company Name _____

2. County _____

3. Contact Person _____

4. Telephone # _____ Fax # _____

5. NAICS Code _____ SIC Code _____

6. Please specify primary nature of business _____

7. Please specify other types of business activities _____

_____

8. Total number of employees in 2005 _____

9. Estimated annual employee turnover rate (%) 2005
(less than 5%) _____ 5-10% _____ 11-20% _____ More than 20 % _____

10. Annual operating budget in 2005 _____

11. Annual payroll in 2005 _____

12. Estimated percentage of revenue paid in royalties to motorsports teams/suppliers/etc. located in North Carolina _____

13. Total number of employees in 2000 _____

14. Annual operating budget in 2000 _____

15. Estimated operating budget in 2010 _____

16. Estimated number of employees in 2010 _____

17. Building(s) size (in square feet) _____

NORTH CAROLINA MOTORSPORTS IMPACT PROJECT
MOTORSPORTS MUSEUMS SURVEY

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. This survey questionnaire is part of that study. The information received in this questionnaire will be held in strict confidence and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by September 5, 2005 in the enclosed stamped envelope.

1. Museum Name _____

2. County _____

3. Contact Person _____

4. Telephone # _____ Fax # _____

5. NAICS Code _____ SIC Code _____

6. Please specify primary focus of museum _____

7. Total number of employees in 2005 _____

8. Estimated annual employee turnover rate (%) 2005
(less than 5%) _____ 5-10% _____ 11-20% _____ More than 20 % _____

9. Annual operating budget in 2005 _____

10. Annual payroll in 2005 _____

11. Estimated percentage of revenue paid in royalties to motorsports teams/suppliers/etc. located in North Carolina _____

12. Total number of employees in 2000 _____

13. Annual operating budget in 2000 _____

14. Estimated operating budget in 2010 _____

15. Estimated number of employees in 2010 _____

16. Building(s) size (in square feet) _____

NORTH CAROLINA MOTORSPORTS IMPACT PROJECT
NASCAR TEST FACILITY SURVEY

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. This survey questionnaire is part of that study. The information received in this questionnaire will be held in <u>strict confidence</u> and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by <u>September 5, 2005</u> in the enclosed stamped envelope.

1. Sanctioning Organization Name _____

2. County _____

3. Contact Person _____

4. Telephone # _____ Fax # _____

5. NAICS Code _____ SIC Code _____

6. Please list the types of activities performed by this facility _____

_____ _____ _____ _____

7. Total number of employees in 2005 _____

8. Estimated annual employee turnover rate (%) 2005
(less than 5%) _____ 5-10% _____ 11-20% _____ More than 20 % _____

9. Annual operating budget in 2005 _____

10. Annual payroll in 2005 _____

11. Estimated percentage of revenue paid by motorsports teams/suppliers/etc. located in North Carolina _____

12. Total number of employees in 2000 _____

13. Annual operating budget in 2000 _____

14. Estimated operating budget in 2010 _____

15. Estimated number of employees in 2010 _____

16. Building(s) size (in square feet) _____

NORTH CAROLINA MOTORSPORTS IMPACT PROJECT
2005 SURVEY

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. This survey questionnaire is part of that study. The information received in this questionnaire will be held in strict confidence and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by September 5, 2005 in the enclosed stamped envelope.

1. Company Name _____

2. County _____

3. Contact Person _____

4. Telephone # _____ Fax # _____

5. NAICS Code _____ SIC Code _____

6. Please specify primary product/service _____

7. Please specify other major products/services _____

_____

8. Total number of employees in 2005 _____

9. Estimated annual employee turnover rate (%) 2005
(less than 5%) _____ 5-10% _____ 11-20% _____ More than 20 % _____

10. Annual operating budget in 2005 _____

11. Annual payroll in 2005 _____

12. Estimated percentage of 2005 revenue received from motorsports organizations located in North Carolina _____

13. Total number of employees in 2000 _____

14. Annual operating budget in 2000 _____

15. Estimated operating budget in 2010 _____

16. Estimated number of employees in 2010 _____

17. Building size (in square feet) _____

NORTH CAROLINA MOTORSPORTS IMPACT PROJECT
MAJOR TRACK SURVEY

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. This survey questionnaire is part of that study. The information received in this questionnaire will be held in strict confidence and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by September 5, 2005 in the enclosed stamped envelope.

1. Track Name _____

2. County _____

3. Contact Person _____

4. Telephone # _____ Fax # _____

5. NAICS Code _____ SIC Code _____

6. Number of racing events in 2005 (based on admission charge)_____

7. Total attendance for all racing events in 2005 _____

8. Total number of participating racing teams (cars) in 2005 _____

9. Number of other revenue events in 2005 _____

10. Total annual revenue from all activities in 2005 _____

11. Total number of full-time employees in 2005 _____

12. Total number of part-time employees 2005 _____

13. Estimated annual employee turnover rate (%) 2005
(less than 5%) _____ 5-10% _____ 11-20% _____ More than 20 % _____

14. Annual payroll in 2005 _____

15. Total annual revenue from all activities in 2000 _____

16. Total number of full-time employees in 2000 _____

17. Estimated annual revenue from all activities in 2010 _____

18. Estimated number of full-time employees in 2010 _____

NORTH CAROLINA MOTORSPORTS IMPACT PROJECT
DRAG RACING TRACK SURVEY

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. This survey questionnaire is part of that study. The information received in this questionnaire will be held in <u>strict confidence</u> and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by <u>September 5, 2005</u> in the enclosed stamped envelope.

1. Track Name _____

2. County _____

3. Contact Person _____

4. Telephone # _____ Fax # _____

5. NAICS Code _____ SIC Code _____

6. Number of racing events in 2005 (based on admission charge)_____

7. Total attendance for all racing events in 2005 _____

8. Total number of participating racing teams (cars) in 2005 _____

9. Number of other revenue events in 2005 _____

10. Total annual revenue from all activities in 2005 _____

11. Total number of full-time employees in 2005 _____

12. Total number of part-time employees 2005 _____

13. Estimated annual employee turnover rate (%) 2005
(less than 5%) _____ 5-10% _____ 11-20% _____ More than 20 % _____

14. Annual payroll in 2005 _____

15. Total annual revenue from all activities in 2000 _____

16. Total number of full-time employees in 2000 _____

17. Estimated annual revenue from all activities in 2010 _____

18. Estimated number of full-time employees in 2010 _____

NORTH CAROLINA MOTORSPORTS IMPACT PROJECT
SHORT-TRACK SURVEY

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. This survey questionnaire is part of that study. The information received in this questionnaire will be held in <u>strict confidence</u> and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by <u>September 5, 2005</u> in the enclosed stamped envelope.

1. Track Name _____

2. County _____

3. Contact Person _____

4. Telephone # _____ Fax # _____

5. NAICS Code _____ SIC Code _____

6. Number of racing events in 2005 (based on admission charge)_____

7. Total attendance for all racing events in 2005 _____

8. Total number of participating racing teams (cars) in 2005 _____

9. Number of other revenue events in 2005 _____

10. Total annual revenue from all activities in 2005 _____

11. Total number of full-time employees in 2005 _____

12. Total number of part-time employees 2005 _____

13. Estimated annual employee turnover rate (%) 2005
(less than 5%) _____ 5-10% _____ 11-20% _____ More than 20 % _____

14. Annual payroll in 2005 _____

15. Total annual revenue from all activities in 2000 _____

16. Total number of full-time employees in 2000 _____

17. Estimated annual revenue from all activities in 2010 _____

18. Estimated number of full-time employees in 2010 _____

NORTH CAROLINA MOTORSPORTS IMPACT PROJECT
SANCTIONING ORGANIZATION SURVEY

The North Carolina Motorsports Research Project (administered by UNC Charlotte) is conducting an economic impact and occupational study of the North Carolina Motorsports industry. This survey questionnaire is part of that study. The information received in this questionnaire will be held in strict confidence and no specific firm information will be released or published. In addition, all questionnaires and firm specific information will be destroyed once the study is completed. If you have any questions please contact John Connaughton at (704) 516-1359. Please return the survey by September 5, 2005 in the enclosed stamped envelope.

1. Sanctioning Organization Name _____

2. County _____

3. Contact Person _____

4. Telephone # _____ Fax # _____

5. NAICS Code _____ SIC Code _____

6. Please specify primary type of racing _____

7. Please specify sanctioned tracks in North Carolina _____
_____

8. Total number of employees in 2005 _____

9. Estimated annual employee turnover rate (%) 2005
(less than 5%) _____ 5-10% _____ 11-20% _____ More than 20 % _____

10. Annual operating budget in 2005 _____

11. Annual payroll in 2005 _____

12. Estimated percentage of revenue paid by motorsports teams/suppliers/etc. located in North Carolina _____

13. Total number of employees in 2000 _____

14. Annual operating budget in 2000 _____

15. Estimated operating budget in 2010 _____

16. Estimated number of employees in 2010 _____

17. Building(s) size (in square feet) _____

Allocation of Total Employment By Major Occupational Group (MOG)

Please allocate your Company's total full-time employment among the following BLS defined major occupational groups (MOG's). Indicate the number of employees in each group (best estimate) and the distribution of educational backgrounds. (Example: a company with 125 total employees reports for MOG C (Sales Occupations): **12** sales employees; **5** with College Degree or more, **3** with Associate or Technical Degree.)

1. Major Occupational Group (MOG) A: Professional And Technical Occupations

BLS sub-groups include:
Engineers, Architects, and Surveyors
Mathematical And Computer Scientists
Health Diagnosing Occupations
Lawyers And Judges
Health Technologists And Technicians
Engineering And Related Technologists And Technicians
Science Technicians
Miscellaneous Technicians

MOG A Employment _____ College + _____ 2 year Degree _____

2. Major Occupational Group (MOG) B:
Executive, Administrative, And Managerial Occupations

MOG B Employment _____ College + _____ 2 year Degree _____

3. Major Occupational Group (MOG) C: Sales Occupations

MOG C Employment _____ College + _____ 2 year Degree _____

4. Major Occupational Group (MOG) D:
Administrative Support Occupations, Including Clerical

BLS sub-groups include:
Supervisors, Clerical And Administrative Support
Computer Equipment Operators
Secretaries, Stenographers, And Typists
Information Clerks
Records Processing Clerks, Except Financial
Financial Records Processing Clerks
Duplicating, Mail, And Other Office Machine Operators
Communications Equipment Operators
Mail And Message Distributing Occupations
Material Recording, Scheduling, And Distributing Clerks
Adjusters And Investigators
Miscellaneous Administrative Support Occupations

MOG D Employment _____ College + _____ 2 year Degree _____

5. Major Occupational Group (MOG) E:
Precision Production, Craft, And Repair Occupations

BLS sub-groups include: **Mechanics And Repairers**
Precision Production Occupations
Precision Metalworking Occupations
Precision Woodworking Occupations
Precision Textile, Apparel, And Furnishings Machine Workers
Precision Workers, Assorted Materials
Precision Food Production Occupations
Precision Inspectors, Testers, And Related Workers
Plant And System Operators

MOG E Employment _____ College + _____ 2 year Degree _____

6. Major Occupational Group (MOG) F:
Machine Operators, Assemblers, And Inspectors

BLS sub-groups include: **Metalworking And Plastic Working Machine Operators**
Woodworking Machine Operators
Printing Machine Operators
Textile, Apparel, And Furnishings Machine Operators
Machine Operators, Assorted Materials
Fabricators, Assemblers, And Hand Working Occupations
Production Inspectors, Testers, Samplers, And Weighers

MOG F Employment _____ College + _____ 2 year Degree _____

7. Major Occupational Group (MOG) G:
Transportation And Material Moving Occupations

BLS sub-groups include: **Motor Vehicle Operators**
Material Moving Equipment Operators

MOG G Employment _____ College + _____ 2 year Degree _____

8. Major Occupational Group (MOG) H:
Handlers, Equipment Cleaners, Helpers, And Laborers

MOG H Employment _____ College + _____ 2 year Degree _____

9. Major Occupational Group (MOG) K:
Service Occupations, Except Private Household

BLS sub-groups include: **Protective Service Occupations**
Food Service Occupations
Health Service Occupations
Cleaning And Building Service Occupations
Personal Service Occupations

MOG K Employment _____ College + _____ 2 year Degree _____