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SUBSTANCE ABUSE ASSESSMENT OF NORTH CAROLINA DRIVERS CONVICTED OF DWI SINCE JANUARY 1990

Final Report

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Final Report

University of North Carolina

Highway Safety Research Center

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I. INTRODUCTION

In recent years, a number of studies have begun to make it clear that a substantial proportion of the drinking driver problem results from the large number of individuals who both drink heavily and who have an alcohol addiction (Simpson & Mayhew, 1992). Accordingly, the prevailing belief is that if we are to make substantial progress in reducing drunken driving, and the resulting alcohol-related (A/R) crashes and fatalities, procedures must be developed both to detect and to effectively deal with problem drinkers.

In a continuing refinement of North Carolina's efforts to address the problem of impaired driving, in 1988, Senate Bill 508 mandated substance abuse assessment for a large proportion of drivers convicted of DWI in North Carolina. This bill required substance abuse assessment for persons who (1) refused a chemical test, (2) had a BAC in excess of 0.14%, or (3) who had both a BAC in excess of 0.09% and at least one prior DWI conviction during the preceding 5 years. Both community mental health centers and private practitioners were allowed to make substance abuse assessments.

SB 508 also provided for 10 counties to participate in a pilot program that made substance abuse assessment mandatory for all drivers convicted of DWI with a BAC greater than 0.09%. Beginning in January, 1990, drivers in all counties who were convicted with BACs greater than 0.09% were required to be assessed for substance abuse.

Form 508 is used by the Division of Motor Vehicles to indicate completion of court-mandated substance abuse assessment and treatment. Upon completion of the required screening and treatment process, this form is signed by a certified substance abuse counselor, and is sent to the Substance Abuse Section of the Department of Human Resources for review. This form is subsequently transmitted to the Department of Motor Vehicles. Receipt of this form by DMV indicates that the individual has completed assessment and the treatment recommended by the assessor. If DMV has not received a copy of the 508 form, this indicates that the mandated assessment and treatment process has not yet been completed.

A 1991 study by the HSRC (Popkin & Martell, 1991) indicated that a large number of individuals (24%) were not being required in 1988 to go through the assessment process by the courts. Moreover, a substantial proportion (55%) of those who were sentenced to assessment had not completed the process. Hence, only 36% of persons eligible for assessment due to a DWI conviction had a completed 508 form on file with DMV.

There are a number of possible reasons for the substance abuse screening and treatment process not to be completed. Some individuals may never be assessed for alcohol problems, while others may fail to obtain the recommended treatment. Still others may complete treatment, but for some reason their form does not make it completely through the required process to finally be recorded in DMV records. An earlier examination of a small sample of those cases where a 508 form was not on file indicated that in nearly half of the cases, the individuals in question were not eligible for relicensure because they had been charged with another DWI offense. Another group, which constituted about one-third of those eligible for assessment, had simply not completed the process, for unknown reasons (Popkin & Martell,

1991). One likely reason for a form not to have reached DMV for those who have been assessed and treated is the failure of an individual to pay for services received, since SB 508 allows providers to refrain from sending the 508 form to DHR until they have been paid for services provided to clients.

The present report examines a number of issues in order to obtain a better understanding of the assessment/treatment process as it has existed since January 1990. In particular, it looks at:

- Differences in the characteristics of those individuals who have and have not completed the assessment/treatment process.
- Whether there are differences in assessment findings between persons assessed by different providers, at different times, or in different counties.
- Whether recidivism rates differ between individuals assessed and treated at different types of facilities, in different counties, or those who have received different diagnoses during assessment.
- A special examination of the Surry/Yadkin county program, which has expressed an intense interest and high activity level in assessment and treatment.

II. Individual Characteristics and Compliance

Ideally, all individuals convicted of DWI in North Carolina are to be assessed to determine whether they require treatment for their drinking behavior, and if so, what treatment is most appropriate. If they do not require treatment, they are to attend Alcohol and Drug Education Traffic School (ADETS). Following the screening process they should then receive the recommended treatment or education and, subsequently be eligible to have their driving privileges reinstated.[1] As indicated above, however, not all those who are required to be assessed are complying fully with the requirement.

If certain groups of individuals who fail to complete the assessment/treatment process can be identified, they can be specially targeted by future efforts in order to ensure that they are in compliance with laws governing DWI in North Carolina. In order to determine whether there may be particular conditions or situations in which individuals are less likely to complete the assessment/treatment process, driver history files were examined for all

[1] This assumes there have been no other offenses that would restrict their eligibility for relicensure.

individuals convicted of a DWI offense for which they were arrested between January 1, 1990 and March 31, 1993.[2]

Figure 1 presents the proportions of various groups of individuals who had completed the process as of March 31, 1993. Females were notably more likely than males to have complied with the required process (40% vs. 31%), and whites were substantially more likely than individuals of other races to have completed the process. There is an interesting curvilinear relationship between age and completion, with both the youngest and oldest groups of drivers more likely to have complied with all steps of the assessment/treatment process.

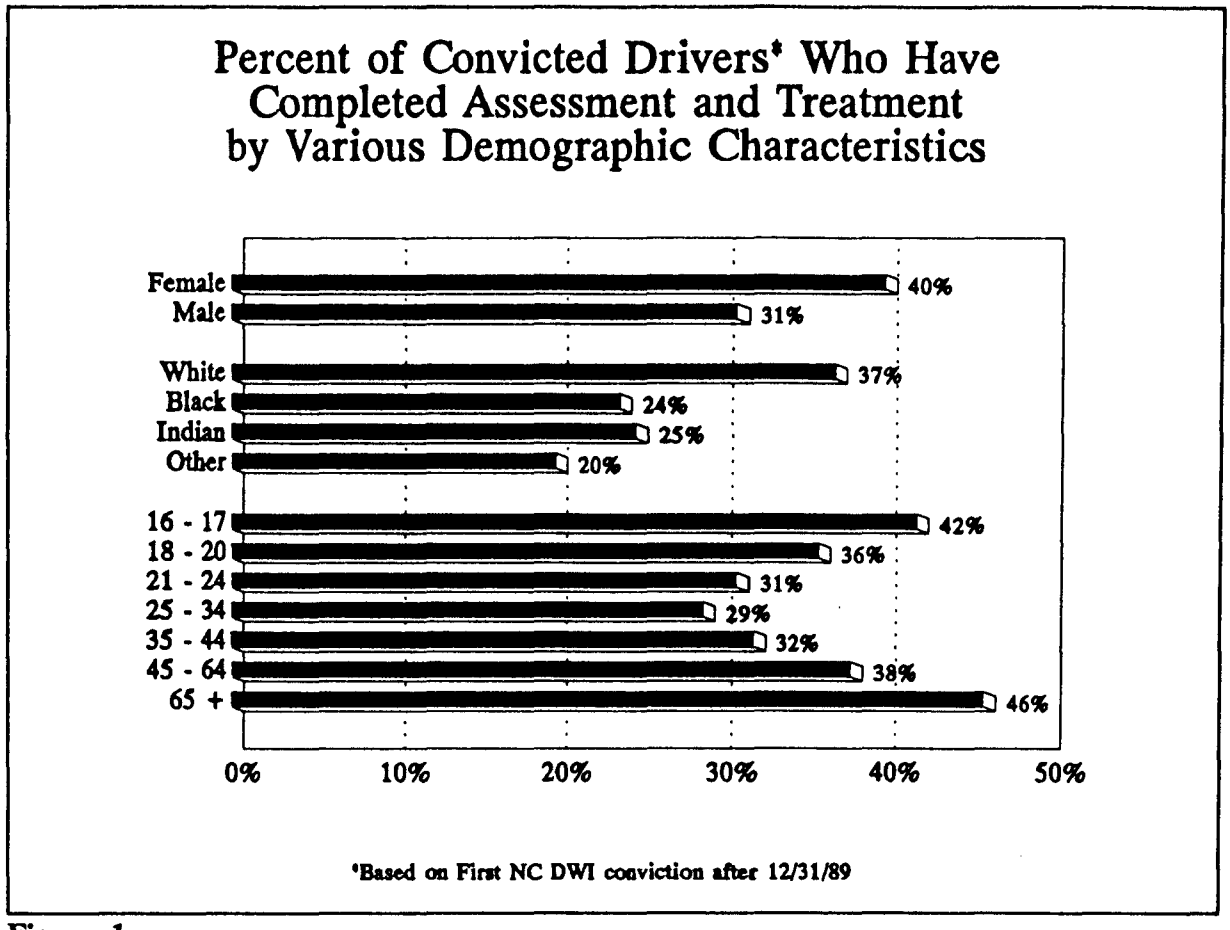

Figure 1

In general the pattern that emerges is one in which those groups for whom driving after drinking is less commonly a problem are the ones where compliance with the required assessment and treatment process is highest. This may be because a greater number of these

[2] The data file for the analyses included in this report was dated May 18, 1993. This should have largely complete information for January 1990 through December, 1992. Additional information based on activity between January 1, 1993 and about March 31, 1993 is included, but many arrests and convictions during that time may not have yet been entered. Because there is approximately a six week lag time for entry of information, very little data about events between April 1, 1993 and May 18, 1993 are included.

individuals are able to comply more quickly. That is, if a greater proportion of individuals within a group—for example, females—are assigned to ADETS rather than needing to go through treatment, they may be more likely to comply and to do so more quickly.[3]

Alternatively, as suggested by Problem Behavior Theory (Jessor, 1987; Jessor & Jessor, 1977; Wilson & Jonah, 1988) it may be that those individuals who are most likely to get into trouble in the first place by driving after excessive drinking (and thereby engaging in an illegal behavior) are simply less inclined to comply with other laws as well, such as a law requiring assessment and treatment and a law requiring a license when driving. Moreover, as noted above many of those individuals who have not completed the assessment process are ineligible for relicensure by virtue of having received another DWI citation. As a consequence they have little motivation to complete the assessment process.

One way to look more closely at this issue is to examine the rate of compliance among groups of individuals in terms of their prior alcohol-related driving record. This is an approximate method of controlling for drinking behavior, since heavy drinking is consistently related to DWI convictions. That is, persons with one or more previous DWI convictions can generally be considered to be heavier drinkers than persons with no previous convictions (Perrine, 1990). Table 1 presents the rate of compliance for individuals as a function of number of prior DWI arrests, DWI convictions, and convictions for unlicensed driving. From this table it is clear that those persons who are more prone to problematic drinking, as reflected by a history of alcohol-related driving citations and convictions, are less likely to have complied with all requirements.

Table 1

Percent of individuals in compliance with assessment and treatment requirements by number of previous alcohol-related offenses

	Number of Previous Arrests/Convictions				
Offense	**None**	**One**	**Two**	**3 or more**	**Overall**
DWI Arrests	36% (80,734)	29% (29,108)	20% (10,619)	11% (5,121)	32%
DWI Convictions	35% (95,389)	26% (25,475)	11% (5,368)	4% (1,350)	32%
Unlicensed Driving	39% (87,267)	19% (22,357)	14% (8,217)	8% (7,741)	32%

[3] An earlier study by HSRC lends some support to this explanation. The mean time between conviction and receipt of a 508 form by DMV was 271 days for first time offenders required to have treatment, compared to 140 days for those required to attend ADETS (Popkin & Martell, 1991).

Regardless of which of these offenses are taken as an indicator of the seriousness of an individual's drinking problem, there is a dramatic drop in the rate of compliance between individuals with no previous indication of an alcohol problem (in the driving record) and those with two or more previous arrests/convictions. The drop off between no previous convictions and any previous conviction is sharper for unlicensed driving than for either DWI arrests or DWI convictions. This is not unexpected, because in most instances the first unlicensed driving conviction is probably evidence of a previous alcohol-related offense (the one that resulted in loss of license to begin with) as well as some other offense which resulted in the discovery that the individual was driving without a valid license.

Unfortunately, it is not possible to disentangle the multiple causal factors that may be at work here. Whether an alcohol problem (or its seriousness) has caused the failure to comply or whether the alcohol problem is merely a covariate of other problems that have resulted in the convictions is not knowable from the type of data available in these records. Nonetheless, it is clear that individuals who evidence a greater number of drinking-related driving problems, as indicated by the existence of multiple citations and convictions, are less likely to comply with screening and treatment requirements.

It would appear that increased efforts are needed to identify, monitor, and provide treatment to these individuals. Since the primary motivation to comply with the assessment process is currently to become eligible for relicensing, and many of these individuals are neither deterred from driving without a license nor eligible for relicensure because of additional convictions, other methods of motivation should be considered. Mandatory plate impoundment is one promising method of addressing this group of drivers. Plate impoundment is more likely than driver license revocation to prevent driving by those individuals who the state deems to have forfeited their driving privilege, since lack of a vehicle plate is far more visible to law enforcement officers than lack of a valid driving license. Such an approach can both reduce driving by this high risk group and, with appropriately crafted legislation, also provide a much stronger incentive for these individuals to obtain needed treatment for a drinking problem. The state of Minnesota recently revised its plate impoundment law, which applies to multiple offenders, to allow the arresting officer to confiscate the vehicle plate at the time of arrest, as an administrative, rather than court, action. Preliminary evidence indicates that recidivism has been reduced by this approach.

Two variations on plate impoundment might also be considered. Rather than removing the vehicle plate, which can inconvenience other family members, persons convicted of DWI can be required to display special license plates that are readily identifiable. Police officers, if empowered to do so by the legislation, can stop drivers of these vehicles at any time to determine whether the unlicensed individual is driving. Another variation on this approach is vehicle impoundment, which serves to make driving quite difficult. However, vehicle impoundment entails substantial logistical complications that generally make it a less desirable approach than sanctions involving the vehicle registration.

III. Diagnosis of a Substance Abuse Handicap

To meet the goal of the legislature in enacting SB 508, it is important that the process of identifying those individuals who have a substance abuse handicap work well. Since initial enactment of this legislation, modifications have been made to improve its effectiveness. Now that assessment has been mandated for all persons convicted of DWI in North Carolina for several years, it is possible to empirically examine some aspects of this process to see if there are areas where additional changes might be needed. One question that arises is whether there are systematic differences in the extent to which individuals are identified as having a handicap across different groups or settings.

On a statewide basis, 45% of the 40,070 individuals assessed between January 1, 1990 and March, 1993 were designated as having a substance abuse handicap. If there are substantial variations from this proportion in particular counties, among particular types of providers, or within identifiable subsets of the population, it will be important to describe what these differences are, and to attempt to identify why they occur. To address this issue, we examined (1) variation in the proportion designated as handicapped across counties, (2) differences in designation of a handicap between public and private agencies, and (3) differences across identifiable subsets of the population of persons eligible for assessment and treatment.

■ Variation in Designation of a Handicap by County

A great deal of variation in identification of an alcohol handicap occurs across counties, ranging from a low of 15% in Perquimans county to a high of 76% in Macon county (see Appendix A). Table 2 presents those 10 counties with the smallest and largest proportion of drivers identified as having an alcohol handicap. Whereas the overall percent of individuals identified as having an alcohol handicap is 45%, the rate is only 19% in those five counties identifying the smallest proportion as handicapped. By contrast, 72% of individuals are diagnosed as experiencing an alcohol handicap in those five counties where a handicap is most likely to be indicated.

There are some obvious similarities between these groups of 'outlier' counties. Those diagnosing a small proportion of alcohol handicapped individuals generally did a small number of assessments, with the notable exception of Cumberland county. Also, again with the exception of Cumberland, all these counties are clustered in the extreme northeast portion of the state and are very rural. Three of these five counties (Chowan, Dare, and Perquimans) are in the Albemarle Area Program catchment area.

By contrast, those counties where a high proportion of drivers are identified as alcohol-handicapped are heavily concentrated in the western mountains. Two of the five—Macon and Swain—fall within the Smokey Mountain Area Program catchment area. These counties are also quite rural and generally also have screened a relatively small number of drivers. However, three other counties with nearly as great a rate of alcohol handicap also are in the western region and include Buncombe county, which assessed 1,424 drivers (and identified 66% as having an alcohol handicap). In fact, 10 of the 15 counties with the highest rates of handicap indicated are found in western North Carolina. Conversely, 11 of the 14 counties with the lowest handicap rates are clustered in the extreme eastern part of the state (see Appendix A). Hence, there are clear regional patterns, at least among the outlier counties, in the identification of drivers with an alcohol handicap.

Table 2

Counties with lowest and highest proportion of assessed drivers diagnosed as having alcohol handicap

County	Percent	Number Assessed
Lowest:		
Chowan	21%	33
Cumberland	17%	1247
Dare	25%	373
Gates	23%	30
Perquimans	15%	52
5 County average*	19%	1735
Highest:		
Haywood	72%	405
McDowell	69%	144
Macon	76%	93
Swain	70%	167
Yancey	74%	62
5 county average*	72%	871

* Weighted mean.

Looking at all counties, rather than merely the extremes, we find that 56 counties cluster within ± 10% of the overall 45% rate of handicap detection. Another 21 are more than 10% lower and 23 are more than 10% higher than the statewide average. Again this represents a large amount of variation across counties within the state.

Possible explanations for this variation across counties will be addressed below. However, before doing so we turn to the question of whether private facilities diagnose a greater or smaller proportion of those they assess as having a handicap that requires treatment.

■ Assessment by Private and Public Facilities

Because private and public facilities are fundamentally different kinds of organizations, a question arises as to whether they may also differ in the extent to which they judge that individuals should receive treatment or be required to attend ADETS. As Table 3 indicates, on a statewide basis, the proportion of DWI convictees found to have a substance abuse handicap differed only slightly between public and private facilities.

Table 3

Identification of Handicap by Type of Facility

Facility	Handicap		Total
	Yes	No	
Public	47.3% 13,008	52.7% 14,514	27,522
Private	48.6% 4,758	51.4% 5,031	9,789

To control for possible variations in the existence of alcohol handicap in different populations, we looked at the difference in proportion of individuals identified as having a handicap in private and public facilities within counties where at least 100 individuals had been assessed in each type of facility (see Appendix B).[4] Table 4 identifies those counties where there was a difference between private and public facilities of greater than 10% in the proportion of individuals diagnosed as having an alcohol handicap. Of the 20 counties that could be compared, only 7 evidenced large differences between private and public facilities. These are split evenly between counties where private facilities identify more handicaps and those where public facilities do so. Although it is clear that there is meaningful variation in this process, it is likely due to different operational characteristics of the individual facilities in these counties, rather than to any systematic tendencies characteristic of either private or public facilities.

It would appear that a careful examination of the facilities in the counties identified in Table 4 would be in order. Differences of 10%, although statistically significant are probably not worthy of great concern unless these differences are found to persist over time. On the other hand, the huge difference in diagnosis of a substance abuse handicaps in Gaston county merits further examination. It may be that there is something unique about the private and public facilities in Gaston county which leads those with alcohol problems to select a private facility. However, unless some such characteristic or set of characteristics can be identified,

[4] Twenty counties met this criterion: Alamance, Buncombe, Cabarrus, Craven, Cumberland, Davidson, Durham, Forsyth, Gaston, Guilford, Henderson, Iredell, Mecklenburg, New Hanover, Onslow, Orange, Rockingham, Rowan, Stokes, and Wake.

this large difference points to a breakdown in the process by which drivers with alcohol problems are to be identified and treated appropriately.

Table 4

Percent identified as having substance abuse handicap in counties where private and public facilities differ by more than 10% in the proportion of those identified as having a handicap

County	Type of facility		Difference
	Private	Public	
Private Higher:			
Alamance	57%	44%	13%
Gaston	69%	31%	38%
Guilford	61%	42%	19%
Public Higher:			
Davidson	36%	58%	- 22%
Forsyth	34%	52%	- 18%
Mecklenburg	36%	51%	- 15%
Stokes	29%	49%	- 20%
Overall*	47%	45%	2%

*Among the 20 counties with more than 100 individuals each assessed in private and public facilities. Unweighted means given.

- **Diagnosis of a Handicap in Identifiable Subgroups**

Several individual and case-specific factors were found to be related to diagnosis of an alcohol handicap, as can be seen in Table 5. The most noteworthy of these relate to driving history: Prior arrests and convictions for DWI. Individuals with one or more of either were highly likely to be identified as having an alcohol handicap. A previous DWI conviction is more strongly related (than a previous arrest) to this diagnosis. Whereas persons with one or more previous *arrests* are 5.2 times as likely as those with no previous arrest to be

identified as having a handicap, someone with a previous *conviction* is 30 times as likely to be diagnosed as having a handicap.[5]

Age is clearly related to a diagnosis of alcohol handicap. Whereas 39% of persons between the ages of 16 to 20 evidence a handicap, more than half (52.9%) those over age 35 have such a problem. Persons in between those ages, where alcohol-related driving convictions and crashes are most common, exhibit an intermediate degree of substance abuse problems (45.2%).

Table 5

Factors associated with diagnosis of alcohol handicap

Factor	Levels	Handicap Indicated		Total
		Yes (%)	No (%)	
Age	**16-20**	1,370 (39.0)	2,144 (61.0)	3,514
	21-34	8,686 (45.2)	10,543 (54.8)	19,229
	35-54	6,535 (52.7)	5,870 (47.3)	12,405
	55 & over	1,152 (54.1)	979 (45.9)	2,131
Sex	**Female**	2,504 (38.6)	3,981 (61.4)	6,485
	Male	15,275 (49.6)	15,505 (50.4)	30,780
Race	**Black**	3,592 (47.1)	4,037 (52.9)	7,629
	Indian	266 (50.1)	265 (49.9)	531
	Other	260 (30.0)	607 (70.0)	867
	White	13,661 (48.4)	14,577 (51.6)	28,238
Prior Alcohol Arrests	**None**	10,041 (37.0)	17,085 (63.0)	27,126
	1 or more	7,854 (75.3)	2,572 (24.7)	10,426
Prior Alcohol Convictions	**None**	11,972 (38.2)	19,338 (61.8)	31,310
	1 or more	5,923 (94.9)	319 (5.1)	6,242
Assessment Timing	**Pre-Trial**	4,956 (42.0)	6,832 (58.0)	11,788
	Post-Trial	12,877 (50.2)	12,791 (49.8)	25,668

Both sex of driver and timing of the assessment are related to diagnosis of a handicap. Males are more likely than females (49.6% vs. 38.6%) to be diagnosed as handicapped, as are persons who are assessed post-trial rather than prior to trial (50.2% vs. 42%). However, interpretation of these two findings differs somewhat. It can safely be assumed that sex is directly related to designation of a handicap. In all likelihood, males convicted of DWI are more likely to have an alcohol handicap than females convicted of the same offense.

[5] These ratios are based on the *odds-ratio* statistic, which is the ratio of the likelihood of persons in one category having an attribute to the likelihood of those in another category having that attribute.

However, because timing of assessment is chosen by the individual, the interpretation of the association between assessment timing and diagnosis of a handicap is somewhat different. The simple fact that an assessment occurs prior to the trial is probably not the crucial factor in whether a handicap diagnosis is reached. Rather, factors relating to the timing of the assessment are the likely causal agents. For example, individuals who are more likely to have an alcohol handicap may wait until after the trial to go through assessment, whereas those less likely to have a problem choose to go through assessment process prior to their trial. Another likely possibility, and one of substantial concern, is that pre-trial "assessment shopping" occurs. That is, individuals may either have multiple assessments, continuing until they obtain one with the desired recommendation, or they are referred by legal counsel to particular facilities thought to be likely to provide an assessment that will be useful during the trial.

Finally, race is weakly related to diagnosis of a substance abuse handicap. Overall, about 48% of individuals are identified as having a handicap, and only persons of a race other than black, Indian or white exhibit a marked departure from that, with only 30% receiving a diagnosis of handicap. These individuals account for only 2% of those assessed. As a residual category, it is difficult to draw any definitive conclusion about why this group differs from other races.

Because type of facility is also selected by the individual, it is important to recognize that differences in proportions diagnosed as having an alcohol handicap are confounded with factors that relate to selection of type of facility. Of the factors listed in Table 5 only two were very strongly associated with choice of facility type: assessment timing and race. Of those having pretrial assessments, 56 percent went to private facilities, while only 12 percent had post trial assessments at private facilities. Private facilities were chosen 29 percent of the time by whites and 19 percent by blacks.[6]

Table 6 shows the results of assessments by public and private facilities within levels of race and timing. For pretrial assessments handicap rates did not differ greatly between public and private facilities, though the private rate for blacks was somewhat higher than the public rate (47% vs. 42%), and slightly lower for whites (41% vs. 43%). On the other hand, handicap rates from private facilities greatly exceeded those from public facilities for post-trial assessments (12 percentage points for whites and 19 percentage points for blacks).

[6] Because of the relatively small number of cases, other races were not considered in this multi-way analysis.

Table 6

Public and private assessments of alcohol handicap by race and timing of assessment

Race	Assessment Timing	Facility Type	Handicap Indicated	
			Yes	No
Black	Pre-trial	Public	42%	58%
		Private	47%	53%
	Post-trial	Public	46%	54%
		Private	65%	35%
White	Pre-trial	Public	43%	57%
		Private	41%	59%
	Post-trial	Public	50%	50%
		Private	62%	38%

- **Explanation of Differences in Proportion with Handicap Across Counties**

There are a number of possible explanations for the divergence between counties in the number of persons diagnosed as having an alcohol handicap. First, the individuals in a given county may actually experience a greater amount of trouble with alcohol due to the nature of the county. It could be, for example, that by virtue of local customs, patterns of availability of alcohol, unique sets of economic and subcultural circumstances, that individuals in one county are more likely to have alcohol problems than in other counties. That the counties likely to identify high (and low) proportions of individuals as having a handicap are clustered together geographically lends some credence to this explanation.

A second possible explanation of variation across counties is that certain counties may have smaller or larger proportions of individuals likely to experience alcohol dependencies. For example, a county with a greater proportion of older males would have a higher proportion of individuals identified as having a handicap than one with a larger relative proportion of young females. Although this is likely the case to some extent, it could not account for the very large differences between counties in the proportion diagnosed as having an alcohol handicap.

A third possible explanation could be that the facilities responsible for conducting assessment in different counties may be more or less 'aggressive' in identifying individuals as having a substance abuse handicap. The evidence of wide variation in identification of a handicap across individual facilities within counties is consistent with this hypothesis (see Table 4 above). It is not clear, however, why tendencies toward identification would cluster geographically. Unfortunately, using the data presently available, it is not possible to confirm or reject any one of these possible explanations. Probably some combination of all these factors is responsible for the variation between counties.

IV. DIFFERENCES IN RECIDIVISM

For purposes of the present report, recidivism is defined as having any DWI arrest during a given time period following the conviction date of the qualifying conviction. Four recidivism variables were created to measure recidivism within (1) the first six months following conviction, (2) the first year following conviction, (3) the first 18 months, and (4) the first two years. The time intervals are measured from date of conviction rather than from completion of treatment, as the latter date cannot be determined from available data.

Two-way contingency table analyses indicate that one-year recidivism rates decrease steadily with increasing age category. For the four age categories of Table 5, the recidivism rates are 5.95%, 5.41%, 4.63%, and 3.46%, from youngest to oldest, respectively. These differences are statistically significant ($p < .001$). Recidivism rates also differ significantly between males and females, where the corresponding rates are 5.23% and 4.31%.

One year recidivism rates do not differ significantly at the .05 level between blacks and whites, nor between those who had had one or more prior alcohol *arrests* versus those with none. Interestingly, however, those with one or more prior alcohol *convictions* have significantly lower recidivism rates than those with no prior convictions (3.50% vs. 5.42%; $p < .001$).

Recidivism rates do not differ significantly between those who had pretrial assessments and those who had post-trial assessments, nor between those assessed as handicapped versus those not handicapped. One-year recidivism rates are significantly lower for those who were assessed at private facilities compared to those assessed at public facilities (4.41 vs. 5.30, $p < .005$).

Recidivism rates for the first two years following conviction more than double the one year rates: 11.87% compared with 5.07%. Relationships between two-year recidivism rates and the other variables are essentially identical to those for the one year rates. The one exception is that the two year rates no longer differ significantly between public and private facilities.

Due to the nature of the two-way relationships, no higher dimensional recidivism analyses seem warranted. In particular, recidivism rates over the first six months and first year are significantly lower for private facilities than public. Race and assessment timing were the only other factors associated with choice of public versus private facility and neither of these factors is significantly associated with recidivism, so it is unnecessary to take these factors into account. The treatment variable (handicap), on the other hand, is associated with many other factors but not with recidivism on a statewide basis. Although it is not clear that multi-way analyses concerning the relationship between treatment and recidivism would be informative, some such analyses may be of interest. As an illustration Table 7 shows a four-way table of recidivism for one year by treatment type within levels of sex and prior alcohol arrests.

Table 7

Recidivism rates by treatment type, sex, and prior alcohol arrests

Sex	Prior Arrests	Treatment Type	Recidivism 1 Year	
			No	Yes (Pct)
Female	No	Treatment	1267	57 (4.3)
		ADETS	2729	115 (4.0)
Female	Yes	Treatment	706	33 (4.5)
		ADETS	205	16 (7.2)
Male	No	Treatment	6361	396 (5.9)*
		ADETS	9845	482 (4.7)*
Male	Yes	Treatment	5501	264 (4.6)*
		ADETS	1589	144 (8.3)*

* Based on χ^2-tests, these rates are significantly different with $p < .001$. Summing across subtables the overall treatment type effect is not significant ($p = .851$).

The finding that males who have prior DWI arrests and are assigned to ADETS have a much higher one-year recidivism rate than those who receive treatment provides encouraging evidence that the treatment these multiple offenders are receiving is helping to reduce the traffic safety risk posed by this high-risk group of drivers. It also confirms the results of other studies that have found education to be an ineffective approach to amelioration of drinking driving problems for those with multiple DWI convictions.

V. The Surry/Yadkin Catchment Area

Surry and Yadkin counties are considered to have a particularly stringent program to ensure that individuals who are convicted of DWI are assessed for substance abuse problems and receive the recommended treatment. In order to determine whether this high level of effort and interest has resulted in the desired effect, we examined data for these counties separately and compared them with the rest of the state.

■ Compliance

Table 8 shows the rate of compliance with the assessment process in Surry and Yadkin counties, as well as for North Carolina as a whole. It is clear that in these two counties, compliance with the assessment/treatment process is notably higher than is found for the entire state. This is especially the case for Surry county, but both Surry and Yadkin counties have rates of compliance that are higher, at a statistically significant level, than the state.

Table 8

Comparison of substance abuse and treatment compliance between Surry/Yadkin counties and entire state

	County		
	Surry	Yadkin	North Carolina
Overall	45%	37%	32%
Males	45%	36%	31%
Females	53%	47%	40%
White	47%	40%	37%
Black	39%	38%	24%

The significantly higher rates of compliance hold across all demographic categories. This suggests that the Surry/Yadkin program is achieving higher rates by a general programmatic approach, rather than by making a special effort to target some subset of the population, such as younger drivers, or males. This of course is what one would hope to find, since it holds the promise of finding and treating problem drinkers with any demographic profile.

Comparing single counties with the entire state can be somewhat misleading, since the state contains a diverse population, including very rural and quite urban areas. To elaborate on this examination of the Surry/Yadkin county program, we also compared combined compliance rates from these two counties with two other rural, two-county catchment areas that have been identified as similar to the Surry/Yadkin area: Rutherford/Polk and Lee/Harnett. Table 9 presents the results of that comparison.

Table 9

Compliance in comparable rural 2-county catchment areas

Area	Convicted	Assessed and Treated	% Compliance
Surry/Yadkin	2,111	897	42%
Lee/Harnett	2,843	1,021	36%
Rutherford/Polk	1,329	334	25%
North Carolina	125,580	40,070	32%

The 42% overall rate of compliance in Surry/Yadkin counties is greater, to a statistically significant ($p < .002$) degree than that in either of the other two-county programs, and from the state as a whole. In Surry/Yadkin counties, convicted drivers are 58% more likely to be in compliance than drivers in the state as a whole. They are 32% and 120% more likely to be in compliance than drivers in Lee/Harnett and Rutherford/Polk counties, respectively.

It seems clear then that the program in Surry and Yadkin counties might be considered as a model. In fact, only three counties in the state had higher compliance rates than Surry county, and these were only marginally higher (ranging from 1% to 4% higher; see Appendix C).

■ Recidivism

In addition to compliance with assessment and treatment requirements, we examined recidivism rates for periods of 6 months, 1 year and 18 months (see Appendix D). Table 10 presents the one-year recidivism rates for Surry and Yadkin counties as well as for the entire state. The recidivism rates for those completing the assessment/treatment process in these two counties is not lower than for the state as a whole. Although the rates appear to be higher, especially in Yadkin county, caution must be exerted in interpreting these rates. For the individual counties the rates are based on a very small number of cases[7] and, as a consequence, are unstable. Very few of the county rates presented in Table 10 differ significantly from those for the state as a whole. Only the overall recidivism rate for Yadkin county, those diagnosed as handicapped, and those assessed after trial differed significantly ($p < .05$) from the corresponding rates for the state as a whole for those groups.

[7] For example, the 9.4% one-year recidivism rate for Yadkin county represents only 17 individuals of 181 followed for at least a year.

Table 10

Comparison of one-year recidivism rates* between Surry/Yadkin counties and entire state

	County		
	Surry	Yadkin	North Carolina
Overall	5.8	9.4	5.1
Handicap Diagnosed:			
Yes	5.2	10.5	5.2
No	6.4	8.1	5.0
Assessment timing:			
Pre-trial	7.8	8.8	4.9
Post-trial	5.5	9.9	5.2
Facility type:			
Private	7.7	9.8	4.4
Public	5.7	9.2	5.3

* Number recidivating per 100 cases followed for one year or more.

Table 11 presents recidivism rates for the combined two-county areas discussed above. The one-year recidivism rate in the Surry/Yadkin county area differs significantly ($p < .001$) only from the very low rate of 0.8% for Rutherford/Polk counties. The Surry/Yadkin rate is higher than that for the state as a whole at a marginal level of significance ($p < .06$).

Table 11

One-year recidivism rates in comparable rural 2-county catchment areas

Area	Followed for period (1 yr.)	Number Recidivating	Rate per 100
Surry/Yadkin	647	44	6.8
Lee/Harnett	775	61	7.9
Rutherford/Polk	265	2	0.8
North Carolina	29,916	1,525	5.1

At first glance this result would appear both surprising and disappointing. One would expect that a county that is more successful in seeing that convicted drivers are assessed and treated would in turn experience a lower rate of recidivism. However, to put this in perspective it is important to consider that recidivism rates correlate positively with rates of compliance ($r = .21$). That is, in those counties where a greater proportion of those convicted for DWI is in compliance with assessment and treatment requirements, a greater proportion tend to recidivate. Surry/Yadkin counties exemplify this, having a higher compliance rate than most other counties yet at the same time a higher recidivism rate than the state as a whole.

The most plausible explanation for why recidivism is higher in counties where compliance with assessment is higher probably has to do with the make-up of the population that is in compliance. As is shown above in Table 1, those individuals most likely to comply with assessment requirements are individuals who have had no previous offense. As the rate of compliance is pushed up, by whatever means, those individuals brought into compliance will increasingly be those with more serious problems, as evidenced by multiple alcohol-related driving offenses.[8] These individuals, in turn are both more likely to recidivate and to be a greater challenge to the treatment programs they are required to complete.

- **Relationship of Facility Client Load to Recidivism in Surry/Yadkin Counties**

A further examination of the data for Surry and Yadkin counties was conducted to examine how the client load is spread among available facilities and whether the client load of the treatment facility is related to resulting recidivism rates. Table 12 presents information about the 40 facilities found to have provided services in the Surry/Yadkin county catchment area. It is clear that in this locale, the majority of individuals who completed the assessment process were served by only two facilities. The other 38 facilities have had relatively little experience with assessing/treating individuals required to go through this process as a result of a DWI conviction since January 1, 1990.[9]

[8] This explanation is supported by the positive correlation ($r = .21$) between the proportion assessed within a county and the proportion found to have a handicap.

[9] Note that these data include only individuals who had completed the assessment/treatment process.

Table 12

Distribution of Assessment/Treatment Cases in Surry/Yadkin Counties

Facility Client Load*	Number of Facilities	Number Assessed/ Treated	Percent of all Assessed/ Treated	Mean Number Treated	Percent Designated Handicapped
Fewer than 100	38	244	35%	6.42	62%
100 or more	2	450	65%	225.0	49%

* Number of clients seen for Substance Abuse Assessment/Treatment during the period from 1/1/90 to 3/31/93 for whom a 508 form is on file.

To briefly pursue the question of whether client load was related to (1) designation of a handicap and (2) recidivism, we compared those two facilities in the Surry/Yadkin catchment area that had assessed/treated 100 or more clients with those that had served fewer than 100. The smaller facilities were less likely than the facilities with a heavier load to designate an individual as having a handicap (62% vs. 49%, $\chi^2 = 10.1$, $p < .001$). Unfortunately, it is not possible to tell from these data whether this was due to client self-selection, that is, that those persons with a substance abuse handicap were more likely to be assessed at one of the larger facilities.

Table 13

Recidivism rates for individuals assessed/treated at larger and smaller facilities.

One-Year Recidivism	Number Assessed/Treated	
	< 100	≥ 100
Yes	24	21
No	220	429
Rate/100	9.84	4.67

$\chi^2 = 6.97$, $p < .01$.

In addition to being more likely to receive a substance abuse handicap diagnosis, persons assessed/treated at the smaller facilities were more than twice as likely to have recidivated within one year (see Table 13). Whereas 4.67% of individuals seen at the larger facilities had been re-arrested during a one-year follow-up period, nearly twice that many among those treated/assessed at a smaller facility had recidivated (9.84%; $\chi^2 = 6.97$, $p < .01$). Appendix E provides additional information on the relationship between facility treatment load and recidivism in the Surry/Yadkin program catchment area.

It would be imprudent to draw strong conclusions from the above analyses, which are based on a relatively small number of cases (n=694) and a correspondingly small number of facilities (n=40) in only two of the 100 counties in North Carolina. Nonetheless, these differences between facilities are consistent with the situation depicted above, wherein there appears to be substantial variation across individual facilities within counties.

The findings indicating wide variation across individual facilities in both designation of a handicap and in recidivism rates suggest that there may be room for improvement of the assessment/treatment process by bringing the performance level of some facilities up to that achieved by many others. To facilitate the effort to do this, a more detailed understanding of which facilities are functioning at a lower level of effectiveness will be needed. The finding from Surry/Yadkin counties that client load is related both to designation of a handicap and to recidivism rates provides a promising avenue of inquiry. If it is determined that smaller facilities across the state are not performing up to the level of those that do the majority of assessment/treatment, methods and procedures to address this can be developed based on an examination of how these types of facilities differ.

In order to further improve the success of the assessment/treatment process, it would be useful to know what assessment and treatment approaches are used in those facilities that are achieving the best (lowest) recidivism rates. It might be, for example, that the most successful facilities are those that have a heavier client load (and therefore more experience) or are more likely to be using treatment approaches that are on the cutting edge, whereas those with a lower success rate (in terms of recidivism) are smaller and less experienced, or employ somewhat dated approaches to treatment. If a clear profile of particularly effective treatment facilities can be identified, it will be possible to use this information to develop guidelines that can benefit other facilities.

VI. Summary and Conclusions

There are substantial differences in completion of the mandatory assessment/treatment process in various segments of the driving population. In particular, females, whites, both younger and older drivers, and persons with no previous alcohol-related convictions are more likely to have completed the process. This points clearly to the fact that those subgroups of the driving population wherein driving after drinking is a greater problem are the same groups that most commonly fail to complete the assessment/treatment process. Among these findings, the one of greatest concern is that the rate of compliance with the assessment/treatment process declines sharply among those individuals with the most serious problem: Multiple offenders. If these drivers are not assessed, or do not complete treatment, it is not possible to reduce their risky behavior through treatment. It would appear that many of these individuals have little motivation to comply with the process, since they will continue to be ineligible for license reinstatement by virtue of having additional DWI convictions.

Because individuals who have not complied with the mandated assessment/treatment process often continue to drive, and to do so after drinking, it would appear that additional pressure is needed to bring them into compliance. One method of doing this would be to implement plate impoundment legislation. Another option would be the use of specially marked plates that enable law enforcement officers to readily identify multiple offenders' vehicles and, with the appropriate enabling legislation, to stop such vehicles at any time to determine whether an unlicensed individual is driving. This would both reduce driving by

this high risk group and provide an additional incentive for them to complete the assessment and treatment process, thereby bringing them into the health care system where the underlying problem of substance abuse can be addressed.

One of the central questions addressed in this report was the possibility that there are systematic biases in the diagnosis of a substance abuse handicap and, hence, in assignment of individuals to an appropriate treatment or education program. We found no evidence that private agencies are any more or less likely than public agencies to designate individuals as having a handicap and needing treatment. Although there are age and sex differences in designation of a handicap, these are probably due in large part to real differences in the prevalence of substance abuse problems within these groups, rather than to any bias in the assessment process. Similarly, differences in designation of a handicap as a function of timing of the assessment (pre- vs. post-trial) are likely due to the different prevalence of the problem among individuals assessed at different times, and to abuses of the option to obtain pre-trial assessments, rather than to any bias in the assessment process. The validity of assessment decisions is further supported by the finding that persons with prior alcohol-related arrests and convictions are a great deal more likely to be identified as having a substance abuse handicap than those with no previous alcohol-related incidents on their driving record, a finding consistent with those of many other studies of drinking drivers.

Despite the evidence of the general validity of the assessment process, there is one issue that appears to merit attention. The finding that designation of a substance abuse handicap varies widely between individual counties, along with the large variation across facilities within several counties, suggests that there is still some room for improvement in the accuracy of substance abuse diagnoses by some facilities. The data used in this report do not allow a thorough exploration of this issue. It appears that additional research, focused specifically on uncovering reasons for this variability, is needed.

Although conclusive research on this issue would require a true experimental design, with random assignment of individuals to facilities, it may be possible to execute a nonexperimental study using existing data to statistically control for a variety of confounding factors. For example, by statistically controlling for age, sex, race, timing of assessment, driving history, and region of the state—all of which are related to designation of a substance abuse handicap—it would be possible to determine whether different make-up of the populations assessed accounts for the variation across individual facilities and counties.

The examination of recidivism produced some findings that were expected. Males and younger drivers were more likely to recidivate within one year. Individuals designated as having a substance abuse handicap were no more likely to recidivate than those without a handicap. This latter finding can be taken as evidence that the treatment process is effective. In the absence of any intervention, persons with an alcohol problem would be expected to accumulate more additional DWI arrests than persons who do not have a problem with alcohol. That they did not suggests that the treatment they have completed reduced this risk to the level of other drivers who were convicted of DWI but who were judged not to have a substance abuse handicap.

Some other findings about recidivism were somewhat surprising. The number of previous alcohol-related arrests was unrelated to recidivism, and persons with one or more previous alcohol-related convictions were *less likely* to recidivate than those with no previous convictions. Since both first-time and multiple-offenders in this group had completed the

assessment/treatment process, this difference is probably not due to the treatment received. It may be that those individuals with previous convictions have begun to drive less, or more cautiously, as previous studies of the effects of administrative license revocation have found.

Finally, the finding that counties where compliance with the assessment/treatment process is relatively high tend also to have higher recidivism rates highlights the difficulty in addressing the complex issue of alcohol abuse and the associated problem of driving after excessive drinking. It appears that as an increasing proportion of individuals are assessed, the difficulties in delivering effective treatment increase because those with the most serious problems are being brought into the system. Nonetheless, this should be seen as a positive development. As those with the most serious substance abuse problems come to the attention of the treatment community, it becomes easier to learn how to succeed with them by closely monitoring and evaluating what types of treatments are most effective for this particular subgroup of the population.

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Appendix A

Percent Designated as Handicapped by County and Age

PROFILE OF ASSESSED/TREATED NC DWI CONVICTEES
FIRST NC DWI CONVICTION AFTER 12/31/89 FOR NC LICENSEES
TOTAL ASSESSED/TREATED AND PERCENT DESIGNATED AS HANDICAPPED
AGE AND COUNTY OF CONVICTION

COUNTY	OVERALL	UNKNOWN	16-17	18-20	21-24	25-34	35-44	45-64	65+
STATEWIDE	40,070 45%	21 29%	478 46%	3,206 36%	6,110 35%	14,400 45%	9,217 48%	5,928 52%	710 47%
ALAMANCE	1,017 47%	1 **%	5 0%	97 27%	154 26%	359 50%	237 56%	141 61%	23 52%
ALEXANDER	211 57%		5 **%	24 67%	41 49%	75 64%	37 51%	26 46%	3 33%
ALLEGHANY	91 27%		6 0%	10 0%	5 40%	34 26%	17 35%	17 47%	2 0%
ANSON	57 46%		1 **%	4 50%	5 20%	12 33%	10 50%	23 52%	2 50%
ASHE	115 46%		4 75%	14 36%	21 38%	42 40%	20 60%	13 54%	1 **%
AVERY	106 34%		1 0%	7 29%	22 18%	36 36%	26 42%	12 50%	2 0%
BEAUFORT	374 50%		3 0%	21 24%	42 36%	133 53%	103 55%	63 51%	9 67%
BERTIE	104 29%		1 0%	4 0%	8 13%	37 22%	22 45%	26 38%	6 17%
BLADEN	302 45%		6 33%	18 33%	27 33%	102 42%	80 53%	57 47%	12 50%
BRUNSWICK	315 59%		4 50%	24 25%	40 58%	98 62%	74 61%	62 65%	13 77%
BUNCOMBE	1,424 66%	1 0%	19 58%	98 60%	205 63%	538 65%	345 69%	199 68%	19 63%
BURKE	565 58%	1 0%	10 80%	46 41%	89 53%	181 64%	141 54%	88 64%	9 67%
CABARRUS	908 42%	1 0%	16 56%	76 36%	144 36%	335 43%	213 39%	110 55%	13 46%
CALDWELL	370 52%		8 63%	18 56%	49 55%	154 49%	91 47%	46 63%	4 50%
CAMDEN	52 40%			1 0%	3 0%	18 33%	11 45%	17 47%	2 **%
CARTERET	383 32%		4 50%	40 28%	64 28%	126 36%	78 36%	62 24%	9 33%
CASWELL	95 49%			8 13%	5 60%	41 51%	23 65%	15 47%	3 0%
CATAWBA	824 45%		7 71%	52 33%	127 36%	321 47%	198 51%	106 43%	13 38%
CHATHAM	277 50%		4 25%	18 39%	42 38%	92 52%	65 45%	52 71%	4 25%
CHEROKEE	130 67%		3 67%	15 53%	21 62%	43 67%	16 81%	26 73%	6 50%
CHOWAN	33 21%		2 0%	7 29%	4 0%	11 18%	5 20%	3 33%	1 **%
CLAY	65 66%	1 0%	2 50%	4 75%	6 67%	20 70%	18 83%	12 50%	2 0%
CLEVELAND	461 39%		6 50%	42 31%	71 30%	170 35%	93 46%	77 48%	2 50%
COLUMBUS	468 35%		4 25%	29 17%	56 29%	181 38%	121 36%	73 42%	4 0%
CRAVEN	400 34%		4 0%	24 25%	52 40%	136 31%	101 36%	74 38%	9 44%
CUMBERLAND	1,247 17%	3 0%	6 0%	66 11%	239 10%	460 17%	271 18%	185 25%	17 29%
CURRITUCK	78 36%				5 60%	34 26%	19 47%	16 38%	4 25%
DARE	373 25%		5 20%	25 16%	61 25%	144 26%	85 33%	47 17%	6 17%
DAVIDSON	565 46%		6 50%	44 45%	88 34%	207 41%	132 58%	78 51%	10 60%
DAVIE	190 41%		3 **%	16 50%	28 32%	60 40%	45 31%	37 49%	1 **%
DUPLIN	275 55%		8 50%	25 44%	30 57%	110 55%	55 62%	40 53%	7 43%
DURHAM	880 38%		7 29%	48 19%	102 19%	310 36%	234 40%	157 52%	22 55%
EDGECOMBE	147 57%		1 **%	9 22%	15 53%	56 50%	38 76%	25 52%	3 **%
FORSYTH	1,508 37%		14 36%	116 26%	220 22%	554 41%	369 40%	214 43%	21 38%
FRANKLIN	171 57%		3 33%	13 46%	17 29%	58 59%	39 69%	36 61%	5 60%
GASTON	553 47%		15 27%	49 45%	78 37%	197 46%	140 52%	64 59%	10 30%
GATES	30 23%			5 0%	4 25%	14 36%	3 33%	3 0%	1 0%
GRAHAM	47 57%	1 **%	2 **%	7 57%	9 56%	9 33%	11 55%	6 83%	2 50%
GRANVILLE	168 60%		1 **%	3 33%	15 40%	61 62%	40 65%	42 57%	6 83%
GREENE	84 44%			3 67%	7 14%	28 36%	25 56%	18 50%	3 33%
GUILFORD	2,388 47%	2 50%	19 37%	163 40%	342 38%	855 48%	588 48%	367 53%	52 46%
HALIFAX	279 35%		5 0%	18 22%	38 24%	91 38%	65 34%	55 45%	7 43%
HARNETT	645 34%		5 40%	46 13%	86 24%	250 31%	135 39%	108 49%	15 47%
HAYWOOD	405 72%		9 **%	36 75%	72 68%	151 76%	76 71%	58 66%	3 33%
HENDERSON	351 38%	1 0%	4 50%	30 50%	61 25%	124 41%	70 37%	49 35%	12 50%
HERTFORD	219 35%		3 67%	19 32%	25 16%	75 33%	45 38%	45 42%	7 43%

COUNTY	OVERALL	UNKNOWN	16-17	18-20	21-24	25-34	35-44	45-64	65+
HOKE	113 37%			3 0%	10 20%	44 36%	27 37%	28 46%	1 **%
HYDE	50 50%			1 0%	6 17%	15 53%	14 50%	13 62%	1 **%
IREDELL	907 56%	1 **%	14 79%	71 42%	127 42%	316 60%	211 61%	150 59%	17 47%
JACKSON	191 60%		3 67%	47 47%	38 50%	50 70%	30 73%	21 71%	2 0%
JOHNSTON	413 39%		6 67%	32 16%	66 26%	136 37%	87 48%	78 47%	8 63%
JONES	18 39%			1 0%	2 50%	4 0%	8 63%	2 0%	1 **%
LEE	376 31%	1 0%	2 0%	25 16%	58 19%	127 35%	98 34%	57 39%	8 38%
LENOIR	438 31%		1 **%	27 19%	76 20%	150 33%	99 35%	74 36%	11 27%
LINCOLN	265 42%		7 57%	27 30%	38 37%	87 38%	53 58%	47 38%	6 33%
MC DOWELL	144 69%		1 **%	14 71%	12 67%	51 80%	46 63%	14 64%	6 33%
MACON	93 76%	1 **%	4 75%	10 90%	16 75%	24 75%	16 88%	18 67%	4 50%
MADISON	184 57%		3 33%	7 29%	28 39%	70 57%	46 65%	28 71%	2 50%
MARTIN	230 30%		8 25%	28 11%	35 23%	70 36%	51 33%	35 37%	3 0%
MECKLENBURG	1,627 39%		7 57%	92 43%	232 36%	633 39%	404 41%	236 40%	23 26%
MITCHELL	97 61%		2 0%	6 33%	25 56%	27 70%	19 58%	15 73%	3 67%
MONTGOMERY	144 38%		3 33%	12 17%	25 32%	48 40%	27 37%	27 56%	2 0%
MOORE	287 44%		2 **%	15 33%	31 26%	113 40%	73 53%	47 53%	6 17%
NASH	256 57%		2 0%	18 61%	28 32%	91 48%	71 68%	44 73%	2 **%
NEW HANOVER	779 60%	1 0%	13 54%	75 52%	148 45%	267 58%	158 70%	106 77%	11 73%
NORTHAMPTON	127 30%			6 17%	21 33%	39 33%	35 29%	23 22%	3 67%
ONSLOW	769 29%	1 0%	1 0%	88 26%	246 28%	248 26%	120 36%	60 40%	5 40%
ORANGE	362 46%	1 0%	3 33%	35 37%	65 37%	125 47%	83 41%	40 70%	10 70%
PAMLICO	20 55%		2 **%	2 50%	1 **%	3 33%	6 67%	5 20%	1 **%
PASQUOTANK	146 36%		3 **%	8 25%	21 33%	53 32%	38 34%	19 53%	4 25%
PENDER	193 54%		1 0%	14 21%	30 50%	66 59%	43 49%	38 66%	1 **%
PERQUIMANS	52 15%		1 **%		3 33%	20 10%	17 24%	9 0%	2 0%
PERSON	201 48%		6 0%	19 21%	26 50%	61 39%	50 72%	34 44%	5 **%
PITT	790 28%		5 20%	138 17%	196 17%	231 37%	150 31%	64 41%	6 50%
POLK	43 49%	1 0%		6 50%	4 25%	15 53%	6 50%	9 56%	2 50%
RANDOLPH	553 60%		10 20%	49 53%	72 54%	211 64%	118 61%	84 62%	9 56%
RICHMOND	221 46%		5 60%	9 22%	29 34%	88 41%	55 58%	33 55%	2 50%
ROBESON	675 42%		15 33%	70 24%	84 27%	254 44%	141 52%	101 48%	10 40%
ROCKINGHAM	1,087 33%	1 0%	16 13%	89 18%	160 27%	366 31%	260 38%	172 45%	23 52%
ROWAN	648 61%		8 88%	46 63%	85 41%	260 64%	151 65%	84 58%	14 71%
RUTHERFORD	291 39%		1 0%	35 31%	37 24%	91 38%	72 44%	47 51%	8 38%
SAMPSON	330 46%		3 33%	29 28%	39 21%	110 49%	78 49%	62 63%	9 56%
SCOTLAND	279 38%		3 33%	20 20%	32 28%	99 33%	81 47%	37 54%	7 29%
STANLY	204 54%		5 40%	20 35%	34 32%	76 63%	44 61%	22 64%	3 33%
STOKES	344 42%		5 60%	37 41%	47 40%	129 37%	80 44%	43 56%	3 0%
SURRY	665 48%		12 33%	71 49%	117 36%	236 48%	136 50%	79 61%	14 43%
SWAIN	167 70%		2 **%	13 85%	14 86%	67 69%	42 57%	25 76%	4 75%
TRANSYLVANIA	148 40%		2 50%	21 24%	15 33%	50 38%	30 43%	29 52%	1 **%
TYRRELL	54 33%			3 0%	4 50%	22 32%	17 35%	7 43%	1 0%
UNION	425 54%		6 33%	37 49%	72 47%	149 50%	90 56%	67 72%	4 50%
VANCE	168 54%		1 **%	4 50%	22 45%	53 51%	52 54%	30 60%	6 67%
WAKE	2,782 48%		30 63%	200 47%	463 41%	1,147 48%	601 49%	321 51%	20 60%
WARREN	65 52%		1 0%	3 0%	11 36%	19 42%	13 69%	14 64%	4 **%
WASHINGTON	116 47%		2 0%	2 0%	14 43%	35 46%	38 45%	24 67%	1 0%
WATAUGA	277 36%		2 50%	47 28%	82 22%	76 49%	45 42%	23 48%	2 50%
WAYNE	533 52%		1 **%	34 50%	62 39%	200 57%	128 47%	101 55%	7 43%
WILKES	395 54%		6 67%	30 53%	69 41%	153 58%	83 53%	47 68%	7 29%
WILSON	284 42%	1 **%	1 0%	22 27%	40 38%	98 45%	77 42%	41 49%	4 50%
YADKIN	232 47%			34 26%	35 43%	68 49%	53 51%	39 62%	3 67%
YANCEY	62 74%			12 83%	12 75%	16 75%	16 75%	5 60%	1 0%

Appendix B

Percent Designated as Handicapped: Public and Private Facilities, by County

PROFILE OF ASSESSED/TREATED NC DWI CONVICTEES ASSESSED IN A ***PUBLIC FACILITY***
FIRST NC DWI CONVICTION AFTER 12/31/89 FOR NC LICENSEES
TOTAL ASSESSED/TREATED AND PERCENT DESIGNATED AS HANDICAPPED
BY AGE AND COUNTY OF CONVICTION

COUNTY	OVERALL	UNKNOWN	16-17	18-20	21-24	25-34	35-44	45-64	65+
STATEWIDE	27,595 47%	17 29%	359 49%	2,323 36%	4,255 37%	9,803 48%	6,257 51%	4,057 56%	524 49%
ALAMANCE	556 44%		4 .%	62 27%	87 21%	184 47%	129 53%	75 59%	15 47%
ALEXANDER	182 62%		5 **%	24 67%	38 50%	64 69%	29 59%	19 53%	3 33%
ALLEGHANY	84 30%		6 0%	10 0%	5 40%	33 27%	13 46%	15 53%	2 0%
ANSON	51 49%		1 **%	3 67%	5 20%	10 30%	10 50%	20 60%	2 50%
ASHE	110 48%		4 75%	12 42%	21 38%	42 40%	19 63%	11 64%	1 **%
AVERY	98 36%		1 0%	6 33%	21 14%	32 41%	24 46%	12 50%	2 0%
BEAUPORT	351 51%		3 0%	18 28%	41 37%	123 54%	96 57%	61 52%	9 67%
BERTIE	102 28%		1 0%	4 0%	8 13%	36 22%	22 45%	25 36%	6 17%
BLADEN	285 47%		6 33%	18 33%	27 33%	95 45%	77 55%	51 53%	11 55%
BRUNSWICK	290 61%		4 50%	21 24%	37 57%	83 65%	73 62%	59 66%	13 77%
BUNCOMBE	672 76%		10 70%	45 76%	86 78%	263 76%	162 75%	101 77%	5 **%
BURKE	496 63%	1 0%	9 89%	42 45%	79 58%	155 69%	129 57%	73 74%	8 75%
CABARRUS	422 46%	1 0%	9 67%	35 51%	72 33%	162 43%	98 49%	38 66%	7 43%
CALDWELL	328 56%		8 63%	16 63%	47 57%	133 53%	76 54%	44 61%	4 50%
CAMDEN	41 49%			1 0%	3 0%	14 43%	8 50%	13 62%	2 **%
CARTERET	316 32%		4 50%	29 34%	56 27%	106 35%	63 38%	50 24%	8 25%
CASWELL	71 45%			7 14%	3 67%	29 48%	18 61%	12 33%	2 0%
CATAWBA	710 48%		7 71%	47 32%	106 39%	274 51%	177 53%	87 45%	12 33%
CHATHAM	58 34%			5 20%	11 36%	17 29%	15 33%	10 50%	
CHEROKEE	123 71%		2 **%	14 57%	20 65%	41 71%	16 81%	26 73%	4 75%
CHOWAN	31 23%		2 0%	7 29%	4 0%	9 22%	5 20%	3 33%	1 **%
CLAY	62 69%	1 0%	2 50%	4 75%	5 80%	20 70%	18 83%	11 55%	1 0%
CLEVELAND	404 40%		5 60%	37 30%	64 31%	148 35%	79 49%	70 50%	1 0%
COLUMBUS	435 37%		4 25%	27 19%	48 33%	169 40%	114 37%	69 41%	4 0%
CRAVEN	251 33%		2 0%	19 32%	38 45%	79 25%	65 34%	41 34%	7 43%
CUMBERLAND	833 21%	3 0%	5 0%	52 12%	175 11%	315 21%	164 22%	110 36%	9 33%
CURRITUCK	59 37%				5 60%	28 29%	13 54%	11 36%	2 0%
DARE	337 27%		5 20%	23 17%	56 27%	131 27%	78 36%	38 18%	6 17%
DAVIDSON	291 58%		1 0%	19 63%	43 42%	105 50%	77 74%	40 65%	6 67%
DAVIE	120 50%		3 **%	11 45%	17 35%	39 49%	25 48%	24 58%	1 **%
DUPLIN	249 58%		8 50%	24 42%	29 59%	98 59%	50 68%	35 57%	5 40%
DURHAM	383 38%		4 25%	24 13%	51 20%	131 37%	97 35%	62 66%	14 57%
EDGECOMBE	141 60%		1 **%	9 22%	14 57%	53 53%	37 78%	24 54%	3 **%
FORSYTH	441 52%		5 60%	33 36%	64 44%	165 54%	105 56%	60 57%	9 44%
FRANKLIN	153 59%		3 33%	13 46%	15 33%	51 57%	36 72%	31 68%	4 75%
GASTON	283 31%		8 25%	23 26%	42 19%	102 29%	75 37%	28 50%	5 0%
GATES	28 21%			5 0%	4 25%	12 33%	3 33%	3 0%	1 0%
GRAHAM	39 69%	1 **%	2 **%	5 80%	8 63%	7 43%	9 67%	6 83%	1 **%
GRANVILLE	142 58%		1 **%	3 33%	15 40%	47 60%	38 66%	33 55%	5 80%
GREENE	78 46%			3 67%	7 14%	24 38%	24 58%	17 53%	3 33%
GUILFORD	1,284 42%	2 50%	11 27%	87 30%	174 24%	462 46%	311 44%	206 51%	31 42%
HALIFAX	261 37%		5 0%	15 27%	38 24%	84 39%	60 37%	52 48%	7 43%
HARNETT	585 35%		4 50%	40 10%	79 22%	233 31%	119 44%	96 51%	14 50%
HAYWOOD	358 75%		9 **%	33 79%	67 69%	135 79%	66 76%	47 68%	1 0%
HENDERSON	200 42%		3 67%	19 53%	36 17%	71 48%	37 46%	28 39%	6 67%
HERTFORD	184 35%		2 50%	17 24%	16 19%	62 37%	39 36%	41 41%	7 43%
HOKE	97 40%			2 0%	9 22%	39 36%	23 43%	23 52%	1 **%
HYDE	46 50%			1 0%	6 17%	12 50%	13 54%	13 62%	1 **%
IREDELL	478 58%	1 **%	8 **%	39 36%	74 46%	160 59%	100 62%	85 67%	11 45%

Public

COUNTY	OVERALL	UNKNOWN	16-17	18-20	21-24	25-34	35-44	45-64	65+
JACKSON	173 61%		3 67%	44 43%	35 54%	42 76%	28 71%	19 74%	2 0%
JOHNSTON	308 42%		5 60%	26 19%	49 31%	103 40%	64 52%	54 52%	7 57%
JONES	14 36%			1 0%	2 50%	4 0%	6 67%	1 0%	
LEE	352 31%	1 0%	2 0%	23 17%	54 17%	117 33%	92 35%	56 39%	7 43%
LENOIR	358 27%		1 **%	26 19%	61 16%	123 26%	79 32%	58 33%	10 30%
LINCOLN	183 40%		5 80%	19 21%	25 24%	59 36%	38 61%	32 44%	5 40%
MC DOWELL	134 74%		1 **%	14 71%	11 73%	49 84%	40 70%	14 64%	5 40%
MACON	83 80%	1 **%	4 75%	9 89%	13 85%	24 75%	14 93%	16 69%	2 50%
MADISON	174 59%		3 33%	7 29%	27 41%	67 58%	44 68%	24 75%	2 50%
MARTIN	123 27%		6 17%	17 18%	12 8%	39 31%	28 29%	20 40%	1 0%
MECKLENBURG	604 51%		4 75%	33 61%	85 49%	249 49%	149 52%	70 60%	14 21%
MITCHELL	88 64%		1 0%	6 33%	23 57%	24 79%	18 61%	14 71%	2 50%
MONTGOMERY	136 40%		3 33%	11 18%	23 35%	46 41%	25 40%	26 58%	2 0%
MOORE	261 46%		2 **%	14 36%	28 25%	102 42%	66 58%	44 57%	5 20%
NASH	248 57%		2 0%	18 61%	28 32%	86 49%	68 68%	44 73%	2 **%
NEW HANOVER	614 61%	1 0%	12 58%	60 52%	117 45%	207 60%	125 71%	84 77%	8 88%
NORTHAMPTON	116 28%			6 17%	21 33%	35 26%	30 30%	21 19%	3 67%
ONSLOW	486 31%	1 0%	1 0%	61 28%	161 29%	150 33%	69 35%	40 35%	3 33%
ORANGE	220 47%		3 33%	20 35%	41 39%	85 48%	42 40%	22 73%	7 71%
PAMLICO	12 50%		1 **%	1 0%		3 33%	4 75%	2 0%	1 **%
PASQUOTANK	127 39%		3 **%	6 17%	20 35%	49 35%	32 34%	14 64%	3 33%
PENDER	172 57%		1 0%	14 21%	24 58%	57 60%	40 53%	35 71%	1 **%
PERQUIMANS	43 14%				3 33%	16 13%	14 21%	9 0%	1 0%
PERSON	167 45%		5 0%	18 17%	22 45%	52 38%	34 71%	32 44%	4 **%
PITT	690 28%		3 0%	121 17%	172 17%	200 39%	129 30%	59 42%	6 50%
POLK	41 51%	1 0%		6 50%	4 25%	15 53%	5 60%	8 63%	2 50%
RANDOLPH	471 65%		7 29%	46 54%	61 57%	185 68%	99 67%	65 69%	8 63%
RICHMOND	192 50%		4 75%	8 25%	27 37%	73 41%	49 65%	30 60%	1 **%
ROBESON	608 42%		14 36%	65 23%	74 26%	227 46%	131 50%	88 47%	9 33%
ROCKINGHAM	774 36%	1 0%	12 17%	71 18%	115 33%	264 33%	173 40%	120 50%	18 56%
ROWAN	350 63%		4 **%	30 57%	48 38%	128 68%	87 69%	42 60%	11 73%
RUTHERFORD	253 43%			33 33%	34 26%	78 38%	59 53%	43 56%	6 50%
SAMPSON	317 47%		3 33%	27 30%	39 21%	104 50%	76 50%	59 64%	9 56%
SCOTLAND	269 39%		2 0%	18 22%	31 29%	97 34%	78 49%	36 56%	7 29%
STANLY	138 53%		2 50%	17 29%	27 33%	48 60%	29 69%	13 69%	2 0%
STOKES	229 49%		3 33%	25 40%	36 53%	80 51%	49 43%	33 64%	3 0%
SURRY	567 51%		12 33%	64 47%	104 38%	192 51%	115 56%	68 68%	12 50%
SWAIN	111 67%		1 **%	10 80%	9 89%	41 66%	28 46%	19 79%	3 67%
TRANSYLVANIA	82 48%		1 0%	10 20%	10 50%	31 52%	16 56%	14 50%	
TYRRELL	53 34%			3 0%	4 50%	22 32%	16 38%	7 43%	1 0%
UNION	334 62%		5 40%	31 55%	52 54%	113 60%	72 63%	57 77%	4 50%
VANCE	151 56%		1 **%	3 33%	19 47%	48 54%	48 58%	27 63%	5 60%
WAKE	1,445 53%		17 76%	104 54%	255 48%	589 56%	315 51%	153 52%	12 50%
WARREN	57 58%		1 0%	3 0%	10 40%	18 44%	11 82%	10 80%	4 **%
WASHINGTON	106 51%		2 0%	2 0%	14 43%	31 52%	34 50%	22 68%	1 0%
WATAUGA	242 40%		2 50%	41 32%	67 27%	71 51%	39 46%	21 52%	1 **%
WAYNE	460 59%		1 **%	31 55%	52 46%	176 64%	107 56%	88 63%	5 60%
WILKES	358 55%		6 67%	29 55%	58 41%	135 57%	79 53%	44 73%	7 29%
WILSON	274 43%	1 **%	1 0%	22 27%	37 38%	96 46%	75 43%	39 51%	3 67%
YADKIN	169 48%			24 29%	25 44%	51 49%	39 44%	27 70%	3 67%
YANCEY	59 75%			12 83%	10 70%	15 80%	16 75%	5 60%	1 0%

PROFILE OF ASSESSED/TREATED NC DWI CONVICTEES ASSESSED IN A ***PRIVATE FACILITY***
FIRST NC DWI CONVICTION AFTER 12/31/89 FOR NC LICENSEES
TOTAL ASSESSED/TREATED AND PERCENT DESIGNATED AS HANDICAPPED
BY AGE AND COUNTY OF CONVICTION

COUNTY	OVERALL	UNKNOWN	16-17	18-20	21-24	25-34	35-44	45-64	65+
STATEWIDE	9,811 48%	2 50%	91 48%	728 41%	1,487 38%	3,611 49%	2,315 52%	1,439 54%	138 58%
ALAMANCE	412 57%	1 **%	1 0%	28 29%	61 36%	157 58%	98 65%	59 71%	7 71%
ALEXANDER	13 69%				1 **%	7 57%	2 **%	3 67%	
ANSON	1 0%					1 0%			
AVERY	3 33%				1 **%	1 0%	1 0%		
BEAUFORT	9 78%			1 0%		6 83%	2 **%		
BERTIE	1 **%							1 **%	
BRUNSWICK	16 50%			2 50%	3 67%	8 50%		3 33%	
BUNCOMBE	625 67%		8 50%	46 54%	99 64%	224 66%	157 73%	80 71%	11 64%
BURKE	24 58%		1 0%		2 50%	14 64%	4 50%	3 67%	
CABARRUS	433 43%		6 50%	38 24%	65 43%	159 47%	97 37%	62 56%	6 50%
CALDWELL	11 73%					6 67%	3 67%	2 **%	
CAMDEN	3 33%					1 0%	1 **%	1 0%	
CARTERET	54 37%			10 10%	8 38%	17 47%	11 36%	7 43%	1 **%
CASWELL	19 79%			1 0%	1 **%	9 78%	4 **%	3 **%	1 0%
CATAWBA	47 66%			2 **%	8 50%	20 50%	9 78%	7 **%	1 **%
CHATHAM	203 59%		3 33%	12 50%	27 44%	70 61%	45 53%	42 76%	4 25%
CLEVELAND	37 41%			4 50%	6 17%	17 41%	5 40%	4 50%	1 **%
COLUMBUS	7 86%					1 **%	3 67%	3 **%	
CRAVEN	128 43%		2 0%	5 0%	12 33%	51 43%	31 45%	25 56%	2 50%
CUMBERLAND	367 11%		1 0%	11 9%	58 7%	128 9%	95 15%	67 9%	7 29%
CURRITUCK	13 46%					4 25%	4 50%	3 67%	2 50%
DARE	10 30%			1 0%	2 0%	3 67%	2 0%	2 50%	
DAVIDSON	249 36%		5 60%	25 32%	40 30%	92 34%	49 41%	34 41%	4 50%
DAVIE	52 31%			4 75%	10 30%	18 28%	12 17%	8 38%	
DUPLIN	17 29%			1 **%	1 0%	8 25%	3 0%	3 33%	1 **%
DURHAM	431 42%		3 33%	21 29%	43 21%	158 40%	114 52%	86 47%	6 67%
FORSYTH	971 34%		8 25%	72 24%	140 15%	357 38%	244 36%	139 41%	11 36%
FRANKLIN	9 67%				1 0%	4 **%	1 **%	3 33%	
GASTON	249 69%		7 29%	26 62%	32 66%	87 70%	61 74%	33 73%	3 **%
GATES	1 **%					1 **%			
GRANVILLE	20 80%					10 80%	2 50%	7 86%	1 **%
GREENE	1 **%					1 **%			
GUILFORD	940 61%		6 67%	64 63%	146 60%	329 60%	244 59%	134 64%	17 65%
HALIFAX	3 67%					2 **%	1 0%		
HARNETT	35 40%			4 50%	5 80%	11 27%	7 14%	8 50%	
HAYWOOD	11 **%				2 **%	3 **%	2 **%	3 **%	1 **%
HENDERSON	113 40%		1 0%	10 50%	17 47%	43 40%	26 31%	11 45%	5 40%
HERTFORD	28 39%		1 **%	2 **%	6 17%	10 20%	5 60%	4 50%	
HOKE	5 60%			1 0%		3 67%		1 **%	
HYDE	2 **%					2 **%			
IREDELL	388 60%		6 50%	31 52%	49 39%	141 67%	97 68%	58 53%	6 50%

Private

COUNTY	OVERALL	UNKNOWN	16-17	18-20	21-24	25-34	35-44	45-64	65+
JACKSON	1 0%				1 0%				
JOHNSTON	89 35%		1 **%	6 0%	12 17%	25 36%	22 41%	22 41%	1 **%
JONES	3 67%						1 **%	1 0%	1 **%
LEE	13 69%				2 **%	8 75%	2 50%		1 0%
LENOIR	65 60%			1 0%	8 63%	26 65%	17 53%	12 67%	1 0%
LINCOLN	71 51%		2 0%	8 50%	11 73%	24 50%	14 57%	11 36%	1 0%
MC DOWELL	2 50%					1 0%	1 **%		
MACON	5 **%			1 **%	1 **%		1 **%	1 **%	1 **%
MADISON	2 **%					1 **%		1 **%	
MARTIN	89 38%		1 **%	10 0%	19 37%	25 52%	20 40%	12 42%	2 0%
MECKLENBURG	912 36%		3 33%	50 40%	134 31%	343 37%	227 38%	148 35%	7 43%
MITCHELL	3 67%				1 0%			1 **%	1 **%
MOORE	9 44%			1 0%	1 **%	2 **%	4 25%	1 0%	
NASH	4 **%					2 **%	2 **%		
NEW HANOVER	123 71%			12 67%	21 62%	45 67%	26 73%	18 89%	1 **%
NORTHAMPTON	5 80%					3 **%		2 50%	
ONSLOW	234 30%			23 26%	71 28%	78 19%	44 43%	16 63%	2 50%
ORANGE	119 52%	1 0%		14 43%	20 40%	34 50%	32 53%	16 75%	2 **%
PAMLICO	7 71%		1 **%	1 **%	1 **%		2 50%	2 50%	
PASQUOTANK	8 50%			2 50%			4 50%	2 50%	
PENDER	11 45%				2 0%	5 **%	3 0%	1 0%	
PERQUIMANS	3 67%		1 **%			1 0%	1 **%		
PERSON	26 81%			1 **%	3 **%	5 60%	15 80%	1 **%	1 **%
PITT	59 42%		1 **%	14 29%	17 24%	17 47%	9 78%	1 **%	
POLK	2 0%						1 0%	1 0%	
RANDOLPH	45 53%		2 0%	2 50%	8 50%	14 57%	11 55%	8 63%	
RICHMOND	9 56%				2 0%	6 83%	1 0%		
ROBESON	48 63%			4 50%	8 50%	18 50%	8 88%	9 78%	1 **%
ROCKINGHAM	256 32%		2 0%	14 21%	40 13%	90 30%	64 42%	42 43%	4 50%
ROWAN	271 65%		3 **%	15 80%	35 49%	123 64%	58 66%	34 71%	3 67%
RUTHERFORD	12 50%					7 71%	5 20%		
SAMPSON	4 25%			2 0%			1 0%	1 **%	
SCOTLAND	1 **%		1 **%						
STANLY	47 79%		2 50%	2 **%	5 40%	23 83%	8 88%	6 83%	1 **%
STOKES	107 29%		2 **%	12 42%	10 0%	44 16%	30 47%	9 33%	
SURRY	42 69%			7 71%	4 75%	17 88%	9 44%	5 40%	
SWAIN	2 **%					1 **%	1 **%		
TRANSYLVANIA	48 35%		1 **%	8 25%	3 0%	14 21%	11 27%	10 70%	1 **%
UNION	61 36%		1 0%	5 20%	15 40%	23 26%	12 42%	5 80%	
VANCE	7 57%			1 **%	1 **%	3 33%	1 0%	1 **%	
WAKE	921 60%		8 75%	76 49%	161 43%	367 60%	186 70%	116 71%	7 86%
WATAUGA	13 15%			4 0%	5 0%	2 50%	2 50%		
WAYNE	3 67%					2 **%			1 0%
WILKES	26 65%			1 0%	7 57%	14 79%	3 67%	1 0%	
WILSON	5 20%				1 **%	1 0%	1 0%	2 0%	
YADKIN	55 53%			9 22%	9 44%	13 62%	13 77%	11 45%	
YANCEY	2 **%				2 **%				

Appendix C

Percent Compliance with Assessment & Treatment Process by County and Age

PROFILE OF SAA&TE COMPLIANCE FOR NC DWI CONVICTEES
FIRST NC DWI CONVICTION AFTER 12/31/89 FOR NC LICENSEES
TOTAL CONVICTED AND PERCENT COMPLETING ASSESSMENT/TREATMENT
BY AGE AND COUNTY OF CONVICTION

COUNTY	OVERALL	UNKNOWN	16-17	18-20	21-24	25-34	35-44	45-64	65+
STATEWIDE	125,582 32%	304 7%	1,135 42%	8,891 36%	19,720 31%	49,496 29%	28,735 32%	15,770 38%	1,531 46%
ALAMANCE	2,737 37%	5 20%	14 36%	217 45%	456 34%	1,088 33%	608 39%	306 46%	43 53%
ALEXANDER	477 44%	1 0%	7 71%	48 50%	100 41%	175 43%	83 45%	55 47%	8 38%
ALLEGHANY	241 38%	1 0%	7 86%	22 45%	26 19%	84 40%	55 31%	40 43%	6 33%
ANSON	442 13%	2 0%	3 33%	26 15%	59 8%	169 7%	103 10%	66 35%	14 14%
ASHE	298 39%	1 0%	5 80%	33 42%	52 40%	124 34%	50 40%	29 45%	4 25%
AVERY	344 31%	2 0%	6 17%	37 19%	61 36%	121 30%	79 33%	36 33%	2 **%
BEAUFORT	1,062 35%	2 0%	6 50%	62 34%	169 25%	387 34%	266 39%	148 43%	22 41%
BERTIE	403 26%		1 **%	16 25%	40 20%	160 23%	97 23%	74 35%	15 40%
BLADEN	687 44%		10 60%	40 45%	83 33%	268 38%	171 47%	102 56%	13 92%
BRUNSWICK	1,206 26%	1 0%	23 17%	94 26%	141 28%	454 22%	294 25%	176 35%	23 57%
BUNCOMBE	3,780 38%	6 17%	46 41%	237 41%	585 35%	1,497 36%	892 39%	479 42%	38 50%
BURKE	1,434 39%	2 50%	20 50%	109 42%	248 36%	535 34%	323 44%	180 49%	17 53%
CABARRUS	2,725 33%	4 25%	34 47%	193 39%	410 35%	1,164 29%	598 36%	296 37%	26 50%
CALDWELL	1,138 33%	1 0%	20 40%	71 25%	185 26%	484 32%	246 37%	122 38%	9 44%
CAMDEN	175 30%	1 0%		11 9%	18 17%	75 24%	32 34%	34 50%	4 50%
CARTERET	1,323 29%	5 0%	10 40%	125 32%	249 26%	508 25%	270 29%	142 44%	14 64%
CASWELL	420 23%	1 0%	3 0%	26 31%	49 10%	171 24%	97 24%	66 23%	7 43%
CATAWBA	2,156 38%	2 0%	19 37%	142 37%	357 36%	896 36%	503 39%	218 49%	19 68%
CHATHAM	753 37%	5 0%	7 57%	44 41%	114 37%	289 32%	185 35%	99 53%	10 40%
CHEROKEE	453 29%		6 50%	51 29%	82 26%	167 26%	80 20%	58 45%	9 67%
CHOWAN	147 22%		3 67%	12 58%	21 19%	51 22%	33 15%	23 13%	4 25%
CLAY	139 47%	1 **%	3 67%	9 44%	13 46%	44 45%	40 45%	25 48%	4 50%
CLEVELAND	1,644 28%	2 0%	22 27%	124 34%	265 27%	626 27%	382 24%	209 37%	14 14%
COLUMBUS	1,059 44%	6 0%	10 40%	64 45%	140 40%	420 43%	253 48%	153 48%	13 31%
CRAVEN	1,677 24%	7 0%	10 40%	123 20%	316 16%	657 21%	349 29%	189 39%	26 35%
CUMBERLAND	3,886 32%	11 27%	15 40%	217 30%	795 30%	1,521 30%	821 33%	471 39%	35 49%
CURRITUCK	333 23%		3 0%	16 0%	36 14%	149 23%	74 26%	47 34%	8 50%
DARE	1,301 29%	4 0%	18 28%	99 25%	238 26%	544 26%	269 32%	120 39%	9 67%
DAVIDSON	1,443 39%	2 0%	17 35%	110 40%	212 42%	558 37%	327 40%	201 39%	16 63%
DAVIE	503 38%		7 43%	46 35%	78 36%	174 34%	115 39%	79 47%	4 25%
DUPLIN	1,194 23%	7 0%	13 62%	92 27%	178 17%	468 24%	275 20%	145 28%	16 44%
DURHAM	3,564 25%	9 0%	21 33%	175 27%	482 21%	1,454 21%	904 26%	475 33%	44 50%
EDGECOMBE	840 18%	2 0%	6 17%	35 26%	94 16%	337 17%	247 15%	112 22%	7 43%
FORSYTH	4,435 34%	5 0%	35 40%	286 41%	645 34%	1,808 31%	1,047 35%	562 38%	47 45%
FRANKLIN	752 23%	2 0%	5 60%	42 31%	83 20%	311 19%	194 20%	108 33%	7 71%
GASTON	2,233 25%	5 0%	29 52%	168 29%	329 24%	887 22%	520 27%	275 23%	20 50%
GATES	130 23%		3 0%	9 56%	8 50%	55 25%	32 9%	21 14%	2 50%
GRAHAM	127 37%	2 50%	4 50%	9 78%	25 36%	37 24%	30 37%	16 38%	4 50%
GRANVILLE	734 23%	4 0%	3 33%	31 10%	78 19%	287 21%	191 21%	127 33%	13 46%
GREENE	256 33%	1 0%		8 38%	26 27%	104 27%	74 34%	39 46%	4 75%
GUILFORD	6,080 39%	14 14%	41 46%	378 43%	936 37%	2,366 36%	1,452 40%	811 45%	82 63%
HALIFAX	1,364 20%	4 0%	11 45%	68 26%	167 23%	537 17%	356 18%	199 28%	22 32%
HARNETT	1,655 39%	3 0%	9 56%	101 46%	263 33%	687 36%	358 38%	209 52%	25 60%
HAYWOOD	1,037 39%	3 0%	11 82%	79 46%	198 36%	399 38%	211 36%	128 45%	8 38%
HENDERSON	1,223 29%	7 14%	13 31%	93 32%	196 31%	476 26%	256 27%	158 31%	24 50%
HERTFORD	817 27%	1 0%	3 **%	48 40%	77 32%	319 24%	223 20%	130 35%	16 44%

COUNTY	OVERALL	UNKNOWN	16-17	18-20	21-24	25-34	35-44	45-64	65+
HOKE	671 17%	1 0%	3 0%	34 9%	88 11%	278 16%	170 16%	93 30%	4 25%
HYDE	132 38%			3 33%	16 38%	56 27%	31 45%	25 52%	1 **%
IREDELL	2,616 35%	1 **%	29 48%	199 36%	337 38%	1,059 30%	591 36%	362 41%	38 45%
JACKSON	416 46%		7 43%	63 75%	85 45%	133 38%	79 38%	43 49%	6 33%
JOHNSTON	1,627 25%	15 0%	10 60%	100 32%	245 27%	641 21%	358 24%	238 33%	20 40%
JONES	93 19%			8 13%	9 22%	34 12%	25 32%	9 22%	8 13%
LEE	1,188 32%	7 14%	11 18%	80 31%	206 28%	462 27%	271 36%	137 42%	14 57%
LENOIR	1,319 33%	7 0%	4 25%	80 34%	202 38%	500 30%	310 32%	192 39%	24 46%
LINCOLN	768 35%	1 0%	16 44%	80 34%	140 27%	256 34%	154 34%	109 43%	12 50%
MC DOWELL	295 49%		3 33%	27 52%	33 36%	103 50%	87 53%	35 40%	7 86%
MACON	256 36%	1 **%	8 50%	25 40%	51 31%	75 32%	49 33%	40 45%	7 57%
MADISON	524 35%	1 0%	7 43%	26 27%	58 48%	217 32%	133 35%	78 36%	4 50%
MARTIN	546 42%	1 0%	13 62%	59 47%	82 43%	186 38%	113 45%	83 42%	9 33%
MECKLENBURG	6,119 27%	7 0%	29 24%	290 32%	832 28%	2,470 26%	1,594 25%	840 28%	57 40%
MITCHELL	182 53%		4 50%	14 43%	43 58%	49 55%	41 46%	27 56%	4 75%
MONTGOMERY	553 26%	1 0%	6 50%	37 32%	87 29%	220 22%	119 23%	77 35%	6 33%
MOORE	1,114 26%	2 0%	10 20%	73 21%	138 22%	460 25%	268 27%	144 33%	19 32%
NASH	1,442 18%	6 0%	9 22%	78 23%	171 16%	583 16%	393 18%	191 23%	11 18%
NEW HANOVER	2,664 29%	5 20%	32 41%	241 31%	489 30%	998 27%	560 28%	311 34%	28 39%
NORTHAMPTON	633 20%	1 0%	1 0%	20 30%	77 27%	245 16%	157 22%	117 20%	15 20%
ONSLOW	2,367 32%	12 8%	5 20%	245 36%	779 32%	794 31%	363 33%	159 38%	10 50%
ORANGE	1,048 35%	3 33%	5 60%	79 44%	167 39%	420 30%	228 36%	125 32%	21 48%
PAMLICO	125 16%	1 0%	2 **%	10 20%	12 8%	48 6%	32 19%	18 28%	2 50%
PASQUOTANK	640 23%		4 75%	34 24%	80 26%	272 19%	171 22%	72 26%	7 57%
PENDER	711 27%	3 0%	5 20%	48 29%	117 26%	248 27%	172 25%	105 36%	13 8%
PERQUIMANS	170 31%		1 **%	5 0%	15 20%	69 29%	51 33%	23 39%	6 33%
PERSON	610 33%	4 0%	9 67%	39 49%	81 32%	236 26%	145 34%	87 39%	9 56%
PITT	2,128 37%	7 0%	13 38%	289 48%	446 44%	768 30%	406 37%	183 35%	16 38%
POLK	276 16%	3 33%	2 0%	21 29%	25 16%	105 14%	60 10%	53 17%	7 29%
RANDOLPH	1,475 37%	4 0%	22 45%	131 37%	210 34%	608 35%	301 39%	182 46%	17 53%
RICHMOND	1,037 21%	2 0%	13 38%	72 13%	160 18%	421 21%	240 23%	119 28%	10 20%
ROBESON	3,000 23%	5 0%	34 44%	259 27%	392 21%	1,156 22%	750 19%	364 28%	40 25%
ROCKINGHAM	2,979 36%	11 9%	41 39%	224 40%	416 38%	1,157 32%	690 38%	401 43%	39 59%
ROWAN	2,006 32%	3 0%	16 50%	131 35%	315 27%	836 31%	453 33%	227 37%	25 56%
RUTHERFORD	1,053 28%	2 0%	6 17%	84 42%	154 24%	394 23%	255 28%	140 34%	18 44%
SAMPSON	1,214 27%	2 0%	10 30%	82 35%	160 24%	476 23%	282 28%	182 34%	20 45%
SCOTLAND	876 32%	3 0%	8 38%	60 33%	100 32%	351 28%	214 38%	124 30%	16 44%
STANLY	670 30%	1 0%	8 63%	51 39%	116 29%	281 27%	136 32%	74 30%	3 **%
STOKES	820 42%		14 36%	73 51%	134 35%	310 42%	181 44%	101 43%	7 43%
SURRY	1,479 45%	2 0%	24 50%	143 50%	265 44%	564 42%	285 48%	173 46%	23 61%
SWAIN	539 31%	5 0%	6 33%	40 33%	56 25%	206 33%	149 28%	71 35%	6 67%
TRANSYLVANIA	401 37%	1 0%	10 20%	50 42%	49 31%	144 35%	76 39%	64 45%	7 14%
TYRRELL	146 37%		3 0%	5 60%	25 16%	49 45%	42 40%	21 33%	1 **%
UNION	1,771 24%	5 0%	20 30%	132 28%	294 24%	718 21%	396 23%	197 34%	9 44%
VANCE	912 18%	4 0%	5 20%	48 8%	135 16%	375 14%	237 22%	99 30%	9 67%
WAKE	7,163 39%	9 0%	54 56%	491 41%	1,252 37%	3,097 37%	1,512 40%	707 45%	41 49%
WARREN	300 22%		1 **%	17 18%	38 29%	118 16%	74 18%	44 32%	8 50%
WASHINGTON	244 48%		3 67%	4 50%	29 48%	78 45%	76 50%	52 46%	2 50%
WATAUGA	758 37%	1 0%	5 40%	110 43%	218 38%	226 34%	124 36%	69 33%	5 40%
WAYNE	1,585 34%	3 0%	5 20%	77 44%	221 28%	647 31%	363 35%	251 40%	18 39%
WILKES	1,142 35%		8 75%	79 38%	192 36%	472 32%	255 33%	121 39%	15 47%
WILSON	1,172 24%	3 33%	5 20%	80 28%	172 23%	476 21%	282 27%	134 31%	20 20%
YADKIN	632 37%	4 0%	3 0%	74 46%	106 33%	213 32%	129 41%	97 40%	6 50%
YANCEY	146 42%		1 0%	20 60%	17 71%	46 35%	37 43%	21 24%	4 25%

Appendix D

Recidivism Rates per Time of Exposure by Handicap Designation and County

PROFILE OF NC DWI CONVICTEES
FIRST NC DWI CONVICTION AFTER 12/31/89 FOR NC LICENSEES
RECIDIVISM RATES WITHIN VARIOUS TIME PERIODS FOR THOSE ASSESSED/TREATED

COUNTY	CONVICTED	ASSESSED TREATED	NUMBER OF FOLLOWED CASES IN SUBGROUP AND PERCENT RECIDIVATING WITHIN 6, 12, OR 18 MONTHS											
			HANDICAP INDICATED						NO HANDICAP INDICATED					
			6 MONTHS		12 MONTHS		18 MONTHS		6 MONTHS		12 MONTHS		18 MONTHS	
			N	%	N	%	N	%	N	%	N	%	N	%
STATEWIDE	125,580	40,070	17,101	2.7	14,671	5.2	10,352	8.9	18,178	2.4	15,245	5.0	10,589	8.4
ALAMANCE	2,737	1,017	439	3.6	365	6.6	280	7.5	434	1.6	349	2.9	255	7.1
ALEXANDER	477	211	109	4.6	85	8.2	53	9.4	63	0.0	49	2.0	27	3.7
ALLEGHANY	241	91	25	4.0	22	4.5	16	6.2	50	2.0	44	4.5	27	14.8
ANSON	442	57	26	7.7	24	8.3	17	11.8	27	0.0	23	0.0	18	5.6
ASHE	298	115	52	9.6	44	13.6	29	20.7	53	1.9	47	2.1	33	6.1
AVERY	344	106	36	8.3	31	12.9	17	5.9	56	1.8	46	4.3	29	0.0
BEAUFORT	1,062	374	184	3.8	170	7.1	128	8.6	163	2.5	150	4.7	112	10.7
BERTIE	403	104	30	3.3	29	3.4	20	5.0	70	0.0	56	0.0	38	2.6
BLADEN	687	302	133	6.0	115	10.4	78	14.1	137	4.4	118	8.5	81	12.3
BRUNSWICK	1,206	315	174	1.1	156	2.6	110	6.4	110	1.8	96	4.2	69	10.1
BUNCOMBE	3,780	1,424	887	1.5	762	4.9	516	8.7	314	1.6	251	2.4	168	4.8
BURKE	1,434	565	311	3.2	254	6.3	157	10.8	175	3.4	148	9.5	112	13.4
CABARRUS	2,725	908	368	2.2	329	3.0	257	5.8	446	1.1	345	4.1	230	8.3
CALDWELL	1,138	370	181	2.2	159	5.0	110	8.2	140	5.0	115	7.8	81	12.3
CAMDEN	175	52	21	4.8	19	10.5	13	23.1	21	0.0	20	0.0	14	0.0
CARTERET	1,323	383	116	0.9	103	3.9	69	5.8	227	2.6	192	4.2	123	8.9
CASWELL	420	95	42	0.0	42	0.0	33	3.0	42	7.1	40	5.0	30	13.3
CATAWBA	2,156	824	360	5.3	291	8.9	209	15.3	349	1.7	302	3.6	224	9.4
CHATHAM	753	277	134	0.7	115	7.0	83	14.5	111	1.8	96	3.1	60	5.0
CHEROKEE	453	130	85	0.0	69	4.3	45	6.7	37	2.7	30	3.3	21	0.0
CHOWAN	147	33	7	0.0	6	0.0	4	0.0	22	0.0	19	0.0	14	14.3
CLAY	139	65	37	5.4	29	6.9	22	9.1	20	0.0	19	0.0	15	0.0
CLEVELAND	1,644	461	174	2.3	153	4.6	107	11.2	244	2.5	198	4.0	142	4.9
COLUMBUS	1,059	468	160	2.5	132	4.5	95	10.5	263	1.1	211	8.5	143	12.6
CRAVEN	1,677	400	122	0.0	104	0.0	81	2.5	234	1.7	206	5.3	152	7.9
CUMBERLAND	3,886	1,247	204	2.5	166	4.8	102	4.9	874	3.9	684	7.2	380	9.5
CURRITUCK	333	78	28	0.0	23	4.3	19	5.3	40	2.5	33	6.1	23	8.7
DARE	1,301	373	92	2.2	77	2.6	62	6.5	236	2.1	204	3.4	144	3.5
DAVIDSON	1,443	565	245	2.9	209	7.2	170	14.7	240	3.7	190	8.9	140	16.4
DAVIE	503	190	76	0.0	66	0.0	46	4.3	85	0.0	72	4.2	47	8.5
DUPLIN	1,194	275	145	4.1	134	6.7	96	9.4	102	3.9	88	4.5	65	6.2
DURHAM	3,564	880	311	1.6	277	2.2	202	7.4	489	3.3	441	6.3	321	9.7
EDGECOMBE	840	147	84	0.0	76	6.6	56	8.9	47	2.1	40	7.5	29	3.4
FORSYTH	4,435	1,508	534	3.4	455	4.6	330	10.0	793	2.3	654	4.0	471	8.3
FRANKLIN	752	171	97	4.1	87	4.6	57	14.0	63	0.0	59	3.4	47	4.3
GASTON	2,233	553	244	2.0	196	4.1	111	8.1	247	2.8	201	6.0	130	10.8
GATES	130	30	7	0.0	7	0.0	6	0.0	20	0.0	17	0.0	12	8.3
GRAHAM	127	47	25	12.0	22	18.2	12	8.3	11	9.1	9	11.1	6	16.7
GRANVILLE	734	168	100	4.0	86	8.1	57	8.8	60	3.3	59	8.5	46	21.7
GREENE	256	84	37	0.0	36	2.8	30	13.3	38	2.6	28	10.7	20	20.0
GUILFORD	6,080	2,388	956	3.2	723	5.8	433	10.6	1,020	1.8	908	5.0	596	7.4
HALIFAX	1,364	279	94	7.4	84	8.3	63	9.5	163	1.8	146	2.1	111	8.1
HARNETT	1,655	645	209	2.4	181	6.6	128	8.6	368	4.1	302	9.6	185	13.5
HAYWOOD	1,037	405	281	5.0	227	8.4	156	11.5	85	1.2	75	4.0	54	9.3
HENDERSON	1,223	351	123	4.9	103	5.8	71	5.6	173	3.5	135	6.7	89	14.6
HERTFORD	817	219	75	2.7	69	5.8	57	8.8	128	2.3	120	3.3	89	6.7
HOKE	671	113	41	2.4	39	5.1	24	4.2	59	5.1	48	12.5	36	19.4
HYDE	132	50	25	0.0	24	0.0	23	4.3	21	0.0	16	0.0	12	0.0
IREDELL	2,616	907	493	1.6	420	2.6	284	6.3	320	1.9	262	2.7	181	6.1

COUNTY	CONVICTED	ASSESSED AND TREATED	NUMBER OF FOLLOWED CASES IN SUBGROUP AND PERCENT RECIDIVATING WITHIN 6, 12, OR 18 MONTHS											
			HANDICAP INDICATED						NO HANDICAP INDICATED					
			6 MONTHS		12 MONTHS		18 MONTHS		6 MONTHS		12 MONTHS		18 MONTHS	
			N	%	N	%	N	%	N	%	N	%	N	%
JACKSON	416	191	112	0.0	92	3.3	66	6.1	63	3.2	55	3.6	37	5.4
JOHNSTON	1,627	413	160	2.5	146	4.1	109	11.0	223	3.6	190	5.3	137	5.8
JONES	93	18	7	0.0	5	0.0	3	0.0	10	0.0	9	0.0	6	0.0
LEE	1,188	376	116	0.9	106	5.7	75	14.7	235	3.4	186	7.5	117	13.7
LENOIR	1,319	438	131	0.8	119	2.5	95	6.3	279	2.9	229	5.7	163	8.6
LINCOLN	768	265	107	1.9	96	2.1	76	6.6	137	2.9	119	2.5	82	4.9
MC DOWELL	295	144	99	2.0	86	2.3	59	6.8	32	0.0	29	10.3	18	11.1
MACON	256	93	70	2.9	62	3.2	46	4.3	15	0.0	12	0.0	12	16.7
MADISON	524	184	104	1.0	95	3.2	68	5.9	69	0.0	60	0.0	39	0.0
MARTIN	546	230	62	3.2	47	4.3	30	3.3	127	1.6	107	7.5	84	11.9
MECKLENBURG	6,119	1,627	610	1.3	523	3.4	334	5.4	796	0.8	631	2.9	399	5.3
MITCHELL	182	97	55	7.3	44	15.9	30	16.7	30	3.3	25	4.0	16	12.5
MONTGOMERY	553	144	55	1.8	48	2.1	34	5.9	79	1.3	65	1.5	45	2.2
MOORE	1,114	287	123	0.8	112	2.7	88	8.0	142	3.5	121	4.1	94	8.5
NASH	1,442	256	143	2.8	131	3.8	96	8.3	94	7.4	84	9.5	57	8.8
NEW HANOVER	2,664	779	464	2.8	408	3.9	262	8.0	259	1.9	204	4.9	123	7.3
NORTHAMPTON	633	127	35	0.0	28	0.0	19	0.0	79	3.8	71	4.2	56	8.9
ONSLOW	2,367	769	201	2.5	159	4.4	98	7.1	432	3.0	365	5.8	247	7.3
ORANGE	1,048	362	159	3.1	141	4.3	101	9.9	165	3.0	143	4.9	105	8.6
PAMLICO	125	20	8	0.0	8	12.5	6	0.0	7	0.0	6	0.0	5	20.0
PASQUOTANK	640	146	53	0.0	52	5.8	42	7.1	80	5.0	68	7.4	59	8.5
PENDER	711	193	102	2.9	90	8.9	68	14.7	77	0.0	67	9.0	52	7.7
PERQUIMANS	170	52	7	0.0	7	0.0	7	0.0	34	0.0	31	0.0	25	4.0
PERSON	610	201	91	3.3	78	3.8	56	5.4	86	3.5	74	8.1	43	14.0
PITT	2,128	790	216	1.9	195	2.6	147	6.1	484	2.7	397	5.3	301	8.6
POLK	276	43	21	0.0	20	0.0	15	0.0	22	0.0	20	0.0	16	6.2
RANDOLPH	1,475	553	323	1.5	286	5.9	194	10.3	180	1.7	150	4.7	106	6.6
RICHMOND	1,037	221	101	2.0	91	4.4	73	9.6	99	1.0	92	4.3	72	4.2
ROBESON	3,000	675	278	2.2	245	3.7	179	8.4	352	2.8	307	4.9	228	8.3
ROCKINGHAM	2,979	1,087	340	2.1	286	4.5	205	7.3	608	3.3	522	6.3	376	11.2
ROWAN	2,006	648	385	2.1	337	3.3	252	9.1	214	1.4	179	2.8	128	5.5
RUTHERFORD	1,053	291	112	0.9	100	1.0	72	6.9	145	0.0	125	0.8	94	2.1
SAMPSON	1,214	330	149	3.4	133	4.5	94	8.5	161	2.5	144	8.3	98	12.2
SCOTLAND	876	279	106	0.0	94	1.1	76	6.6	156	3.2	129	6.2	81	9.9
STANLY	670	204	107	0.0	90	2.2	69	2.9	69	1.4	61	1.6	45	11.1
STOKES	820	344	135	2.2	109	3.7	67	4.5	177	0.6	136	1.5	90	3.3
SURRY	1,479	665	304	3.3	248	5.2	175	8.6	273	4.4	218	6.4	157	14.6
SWAIN	539	167	114	7.0	103	9.7	81	8.6	38	0.0	33	0.0	25	0.0
TRANSYLVANIA	401	148	57	0.0	48	6.2	36	5.6	79	2.5	67	4.5	47	4.3
TYRRELL	146	54	18	0.0	14	14.3	9	22.2	33	0.0	25	0.0	17	5.9
UNION	1,771	425	226	3.1	197	8.1	143	9.8	160	0.6	133	2.3	98	4.1
VANCE	912	168	90	4.4	86	4.7	68	7.4	71	5.6	67	7.5	49	6.1
WAKE	7,163	2,782	1,288	4.0	1,120	6.7	848	11.0	996	1.5	833	3.4	610	6.1
WARREN	300	65	34	0.0	33	9.1	25	12.0	27	0.0	27	3.7	20	10.0
WASHINGTON	244	116	55	0.0	51	5.9	30	16.7	49	0.0	46	2.2	36	2.8
WATAUGA	758	277	94	0.0	80	3.7	59	5.1	150	2.7	130	5.4	104	6.7
WAYNE	1,585	533	260	3.8	212	8.0	122	10.7	166	2.4	123	6.5	67	9.0
WILKES	1,142	395	208	1.9	181	5.5	131	10.7	153	7.2	131	12.2	91	14.3
WILSON	1,172	284	117	6.0	103	9.7	73	17.8	159	2.5	141	7.1	96	11.5
YADKIN	632	232	107	7.5	95	10.5	72	13.9	104	4.8	86	8.1	54	13.0
YANCEY	146	62	43	2.3	36	2.8	25	4.0	13	7.7	11	9.1	10	10.0

Appendix E

Recidivism in Surry and Yadkin Counties by Facility Size

Recidivism rates for persons assessed/treated, and followed 1+ years in Surry/Yadkin counties by number seen by facility (three breakdowns), handicap designation, screening time and type of facility (public or private)

	ALL		Number Seen < 10		Number Seen 10 +		Number Seen < 20		Number Seen 20 +		Number Seen < 100		Number Seen 100 +	
	N	RECID365 %	N	RECID365 %	N	RECID365 %	N	RECID365 %	N	RECID365 %	N	RECID365 %	N	RECID365 %
ALL	694	6.48	38	13.16	656	6.10	77	11.69	617	5.83	244	9.84	450	4.67
HANDICAP														
missing	46	2.17	.	.	46	2.17	.	.	46	2.17	46	2.17	.	.
handicap	343	6.71	23	8.70	320	6.56	39	7.69	304	6.58	123	12.20	220	3.64
no handicap	304	6.91	15	20.00	289	6.23	38	15.79	266	5.64	74	10.81	230	5.65
PREPOST														
missing	47	2.13	.	.	47	2.13	.	.	47	2.13	47	2.13	.	.
pre	131	8.40	8	12.50	123	8.13	21	9.52	110	8.18	72	11.11	59	5.08
post	516	6.40	30	13.33	486	5.97	56	12.50	460	5.65	125	12.00	391	4.60
PRIV_PUB														
missing	47	2.13	1	0.00	46	2.17	1	0.00	46	2.17	47	2.13	.	.
Public	580	6.55	27	14.81	553	6.15	56	12.50	524	5.92	130	13.08	450	4.67
Private	67	8.96	10	10.00	57	8.77	20	10.00	47	8.51	67	8.96	.	.

Note. RECID365 indicates percent rearrested for DWI within 365 days of qualifying conviction.