# **EXECUTIVE SUMMARY**

The South Jersey Transportation Planning Organization (SJTPO), in conjunction with the South Jersey Traffic Safety Alliance (SJTSA), commissioned the performance of a seat belt usage study to be performed during April 2009 at selected sites in the SJTPO region. The SJTPO is the federally designated Metropolitan Planning Organization (MPO) for southern New Jersey; the region consists of Atlantic, Cape May, Cumberland and Salem Counties. The survey was based on the National Occupant Protection Use Survey (NOPUS) and is meant to be a "snapshot" of the seat belt usage in 2009 on the roadways of the MPO region. The results of the of the 2009 survey are compared to results generated in the 2006, 2007 and 2008 seat belt surveys.

The 2009 data collection effort was focused on seat belt use by drivers and front seat passengers including gender as well as cell phone use by the drivers. It consisted of observational surveys of approximately 39,732 motorists, comprised of 32,768 drivers and 6,964 front-right passengers. The motorists were observed at 78 sites in the SJTPO region. The data collection process began on April 1, 2009 and concluded on April 23, 2009.

The survey revealed that 90% of all motorists in the SJTPO region wore seat belts in 2009, down from 91% in 2008. This is the first time since the beginning of the seat belt survey for the SJTPO region that seat belt use declined on an annual basis, although the reduction for seat belt use by all motorists - at 1% - was minimal. Seat belt use surveys in the future will help indicate whether this reduction was the result of normal variations in statistical sampling, or whether seat belt use actually did decline for the population as a whole.

SEAT BELT USE RATE IN THE SJTPO REGION IS

The 2009 data indicated that passengers wear seat belts at a higher rate than drivers, at 92% to 89%. Since both drivers and passengers began to be surveyed in 2007, passengers have had a higher seat belt use rate than drivers. Seat belt use by drivers is highest in Atlantic County and Cumberland County, at 90%. For three of the four years that the survey has been conducted, Atlantic County has had the highest rate of use, or been tied for the highest rate.

Continuing the trend established in the previous three years, female seat belt use was higher than males; female drivers had a use rate of 91%, versus 88% for males.

In at least one respect, the SJTPO region diverts from national trends. In all three years that both drivers and passengers have been surveyed in the SJTPO region, passenger use of seat belts has been higher than driver use. In the last



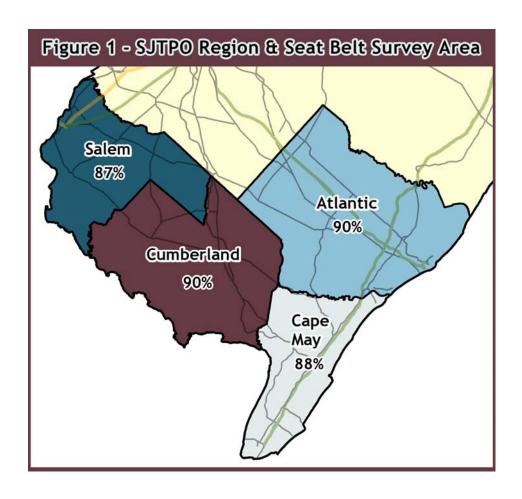


two years available nationally (2007 and 2008), driver use has been higher than passenger use.

Hand-held cell phone use by the drivers of the vehicles was also documented in the survey. Use increased from 3% in 2008 to 4% in 2009.

In a special project, observations were made of seat belt use in commercial motor vehicles at 17 sites in the region. The total use rate of drivers of commercial motor vehicles was 72%, well below the rate for motorists in the larger population.

HAND HELD CELL PHONE USE







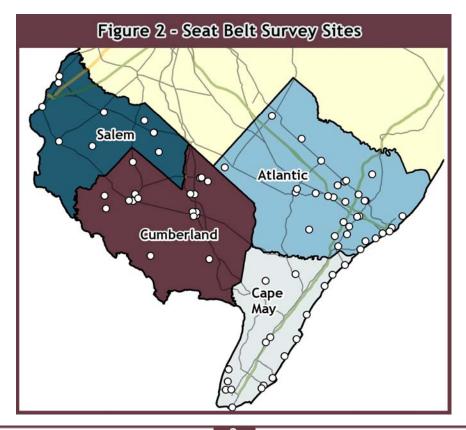
#### REPORT

The South Jersey Transportation Planning Organization (SJTPO), in conjunction with the South Jersey Traffic Safety Alliance (SJTSA) commissioned the performance of a seat belt usage study direct at drivers and front seat passengers at selected sites in the SJTPO region during April 2009. Hand-held cell phone use by the drivers of the vehicles was also documented in the survey. SJTPO is the federally designated Metropolitan Planning Organization (MPO)

NUMBER OF SURVEY SITES Atlantic County – 32

for southern New Jersey and its region consists of Atlantic, Cape May, Cumberland and Salem Counties. **Figure 2** provides a thematic map of the locations of the selected data collection sites throughout the SJTPO region.

This effort falls under one of the SJTPO major areas of emphasis, Traffic Safety, particularly as it relates to vehicle occupant protection. The contract was executed through the South Jersey Transportation Authority (SJTA), the administrative host of the SJTPO. The project was funded by the Federal Highway Administration and the Federal Transit Administration of the United States Department of Transportation.







The effectiveness of seat belts in preventing fatality and injury is well-established. According to the National Highway Traffic Safety Administration, lap/shoulder belts reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light-truck occupants, the use of seat belts reduces the fatality risk by 60 percent and the moderate-to-serious injury risk by 65 percent.

The 2009 survey was based on the National Occupant Protection Use Survey (NOPUS) and is meant to be a "snapshot" of the seat belt usage on the roadways of the entire MPO region. The results of the 2009 survey are compared to survey results for the SJTPO region collected in 2006, 2007 and 2008. These databases serve as references for evaluating recent and future progress in encouraging motorists to use seat belts.

The 2009 SJTPO Seat Belt Survey consisted of observational surveys of approximately 39,732 motorists, comprised of 32,768 drivers and 6,964 front-right passengers (Table 1). The observations took place at 78 sites broken down as follows; 32 sites in Atlantic County, 18 sites in Cape May County, 18 sites in Cumberland County, and 10 sites in Salem County. The field observations started on April 1, 2009 and concluded on April 23, 2008. The counts were completed before May so as not to be overly influenced by the behavior of seasonal visitors. This was considered to be particularly important in Atlantic and Cape May Counties, both of which have large tourist industries.

The majority of the data collection observations were conducted between 8 a.m. and 4 p.m. Typically, crews of two counters sat in high vehicles (either a van or a 4 x 4 truck) within the immediate proximity of the designated sites. At certain sites, it was necessary for the counters to stand at the intersection to get a clear view of passing motorists. Counts were conducted at both stop-sign and signal-controlled intersections. The counters typically observed traffic on both streets at the intersections, and thus were able to determine seat belt and cell phone usage of both stopped and moving vehicles.

Table 1 — 2009 SJTPO Seat Belt Survey Sample Sizes							
Atlantic Cape May Cumberland Salem TOTAL							
All Motorists	22,857	7,237	6,695	2,943	39,732		
Drivers - Total	18,916	5,935	5,475	2,442	32,768		
Passengers - Total	3,941	1,302	1,220	501	6,964		

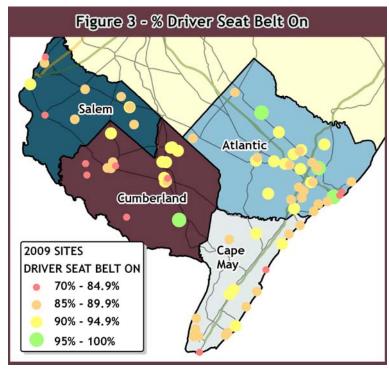


#### **SEAT BELT USE**

**Figure 3** provides a summary of the seat belt data collected at the 78 sites. The individual data from which this Figure was generated can be found in Appendix A. As indicated in **Table 2**, 90% of all motorists in the SJTPO region wore seat belts in 2009, down from 91% in 2008. The survey further indicates that 89% of drivers

and 92% of passengers used seat belts. This is the first time since the beginning of the seat belt survey for the SJTPO region that seat belt use declined on an annual although basis, the reduction for seat belt use by all motorists - at 1% was minimal. From 2008 to 2009, seat belt use among drivers decreased by two percentage points, and by one percentage point for passengers.

The continued higher rate of seat belt use for passengers in the SJTPO



region is one of the few areas of divergence with national trends. Nationally, the seat belt use rate is typically higher for drivers than for right-front passengers.

Table 2 Total Seat Belt Use for SJTPO Region					
2006 2007 2008 2009					
All Motorists	77%	88%	91%	90%	
Drivers	77%	88%	91%	89%	
Passengers	NA	91%	93%	92%	

The 2009 use rate for all motorists (both drivers and front seat passengers) of 90% is slightly less than the rate of 92% reported for the State of New Jersey in 2008, but well above the national average of 83% for the same year (National Highway Traffic Safety Administration, Traffic Safety Facts, September 2008).

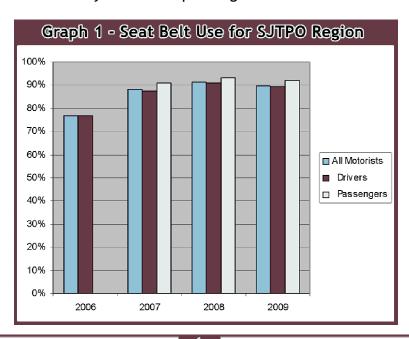




In evaluating whether seat belt use has actually decreased in the South Jersey region since 2008, the factor of statistical sampling must be considered. However large, any sample for a statistical study is only an estimation of that characteristic for the entire population. The example of NOPUS, which uses complex estimation procedures in analyzing seat belt use, is instructive. NOPUS noted that while the national rate of seat belt use in its surveys increased from 82% in 2007 to 83% in 2008, there was only a 49% confidence that seat belt use had actually changed in the population as a whole. Given the minimal decrease in seat belt use recorded in the South Jersey region, patterns of seat belt use should be interpreted only as part of a larger record.

Seat belt use has increased in New Jersey every year between 2001 and 2008, going from 77.6% to 91.8% in that time span. The increase from 2007 to 2008 was relatively small, at only .4%. It should be noted that New Jersey is a "primary enforcement law" state and motorists can be pulled over by the police and ticketed simply for not using their seat belts. In "secondary enforcement" states, a motorist can be ticketed for not using seat belts only if stopped for another violation. Seat belt use in primary enforcement states as of 2008 was 88%, versus 75% in secondary enforcement states. Primary enforcement states in the Mid-Atlantic region include New Jersey, New York and Delaware.

Since seat belt use in the SJTPO region in 2006 was only characterized for drivers, this 2009 report first examines seat belt use for drivers only and then addresses seat belt use by front seat passengers.



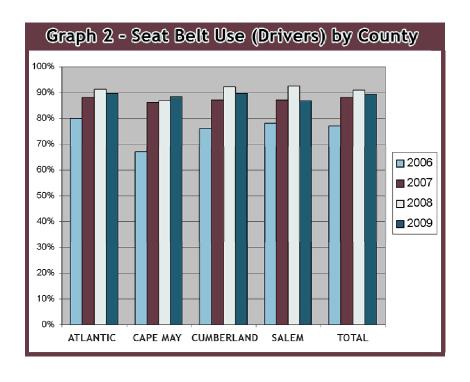




#### SEAT BELT USE BY DRIVERS

Driver seat belt use was greatest in Atlantic and Cumberland Counties at 90%, followed by Cape May County at 88%, and Salem County at 87% (**Table 3 and Graph 2**). This is the third time in the four-year count history that Atlantic County has had the highest rate, or been tied for the highest rate of use. The rate of use in Cape May County was 88%, the first time it has not had the lowest rate, although the difference between it and Salem County - at 87% - was minor.

Table 3—Seat Belt Use (Drivers) by County					
County	2006	2007	2008	2009	
Atlantic	80%	88%	91%	90%	
Cape May	67%	86%	87%	88%	
Cumberland	76%	87%	92%	90%	
Salem	78%	87%	93%	87%	
Total	77%	88%	91%	89%	







# SEAT BELT USE BY DRIVERS - Area Type

**Table 4** breaks down seat belt use within each county by area type: urban, suburban, or rural. Following the methodology established by NOPUS, area type was determined subjectively, and not by objective criteria, such as population density or Census classification for the municipality. As stated in Safety Belt Use in 2003: Demographic Characteristics (NHTSA), "NOPUS urbanization categories tend to reflect the characteristics of the immediate area surrounding a site, as opposed to the population density of the city or town in which the site is located. For instance, a developed downtown area of a sparsely-populated town might well be classified as suburban or rural (although not likely 'urban')." The same approach was used on this survey.

As indicated in **Table 4**, seat belt use by drivers in both suburban and rural areas in the SJTPO region is 90%, followed by urban areas at 88%. Suburban areas have had the highest seat belt use rate for every year surveyed. Rural areas had a seat belt use rate of 90% for the last two years. For the second year in a row, suburban areas of Cumberland County had the highest rate, or tied for the highest rate.

Table 4					
Seat Belt U	lse by Are	ea Type an	d County -	Drivers	
County	2006	2007	2008	2009	
Atlantic	80%	88%	91%	90%	
Urban	<b>77</b> %	90%	91%	89%	
Suburban	81%	88%	91%	90%	
Rural	81%	86%	91%	90%	
Cape May	<b>67</b> %	86%	87%	88%	
Urban	64%	81%	84%	87%	
Suburban	<b>75</b> %	89%	90%	89%	
Rural	65%	88%	85%	90%	
Cumber- land	76%	87%	92%	90%	
Urban	<b>76</b> %	84%	90%	88%	
Suburban	<b>74</b> %	<b>89</b> %	95%	91%	
Rural	83%	<b>92</b> %	91%	89%	
Salem	<b>78</b> %	87%	93%	87%	
Urban	<b>72</b> %	88%	89%	<b>79</b> %	
Suburban	81%	93%	95%	90%	
Rural	<b>78</b> %	81%	<b>92</b> %	89%	
Total	77%	88%	91%	89%	
Urban	<b>74</b> %	87%	90%	88%	
Suburban	<b>79</b> %	89%	<b>92</b> %	90%	
Rural	77%	86%	90%	90%	



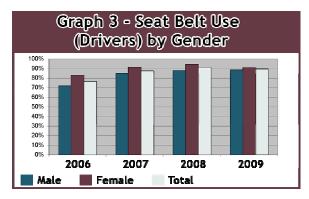
### SEAT BELT USE BY DRIVERS - Gender

**Table 5** provides seat belt use for drivers by gender. Reflecting established trends in the SJTPO region, seat belt use is higher for females than for males, at 91% versus 88%. This difference of 7% is identical to the difference between the genders last year.

In comparison, seat belt usage in the SJTPO region exceeds the 2007 national averages which were 86% for females and 79% for males according to the National Occupant Protection Use Survey, NHTSA's National Center for Statistics and Analysis.



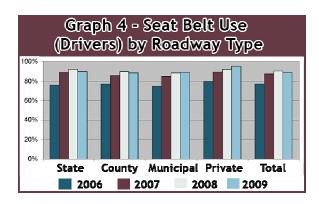
Table 5						
Seat Belt Use by Gender - Drivers						
2006 2007 2008 2009						
Male	<b>72</b> %	85%	88%	88%		
Female	83%	92%	95%	<b>9</b> 1%		
Total 77% 88% 91% 89%						



# SEAT BELT USE BY DRIVERS - Road Type

**Table 6** indicates seat belt use for drivers by road type. Although seat belt use appears to be highest for private roadways, that rate of use is based on an extremely low sample size and is of little significance. Of greater importance, for the third year in a row, seat belt use on public roadways is highest for state roadways, at 90%. Speed limits in the SJTPO region are typically highest on state roadways, and the trip length is typically longer; both circumstances might induce a slightly greater percentage of motorists to use seat belts.

Table 6							
Seat Belt l	Seat Belt Use by Roadway Type - Drivers						
2006 2007 2008 2009							
State	76%	89%	92%	90%			
County	77%	86%	90%	89%			
Municipal	75%	85%	89%	89%			
Private	80%	90%	92%	96%			
Total	77%	88%	91%	89%			







# **SEAT BELT USE BY PASSENGERS - County**

Table 7 indicates that seat belt use by passengers was highest in Cape May County at 95%, followed by Salem County at 91%. Declines for passenger seat belt use were seen in three of the four counties.

Table 7							
Seat Belt Use by County - Passengers							
2007 2008 2009							
Atlantic	92%	94%	92%				
Cape May	91%	87%	95%				
Cumberland	91%	95%	88%				
Salem	82%	95%	91%				
Total	91%	93%	92%				

Table 8

# SEAT BELT USE BY PASSENGERS - Area Type

Table 8 provides seat belt use for passengers among area types. Seat belt use was slightly higher in rural areas, 93%, versus 92% for suburban areas. Use was highest in suburban and rural areas of Cape May County at 98% each.





	2007	2008	2009
Atlantic	92%	94%	92%
Urban	93%	95%	92%
Suburban	92%	94%	92%
Rural	92%	91%	93%
Cape May	91%	87%	95%
Urban	88%	80%	92%
Suburban	92%	<b>9</b> 1%	98%
Rural	94%	<b>92</b> %	98%
Cumberland	91%	95%	88%
Urban	87%	96%	89%
Suburban	96%	97%	88%
Rural	74%	84%	83%
Salem	82%	95%	91%
Urban	<b>75</b> %	<b>92</b> %	82%
Suburban	73%	<b>97</b> %	88%
Rural	93%	96%	92%
Total	91%	93%	92%
Urban	90%	93%	91%
Suburban	91%	94%	92%
Rural	91%	<b>92</b> %	93%

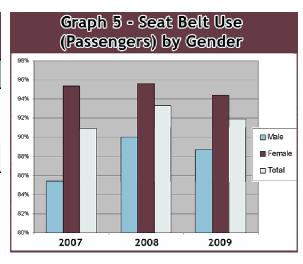




## SEAT BELT USE BY PASSENGERS - Gender

Consistent with driver trends, female passengers wear seat belts at a greater rate, 94%, than male passengers at 89% (Table 9). This is the third year in a row that female passengers have had higher use rates.

Table 9						
Seat Belt Use by Gender - Passengers						
2007 2008 2009						
Male	85%	90%	89%			
Female	95%	96%	94%			
Total	91%	93%	92%			

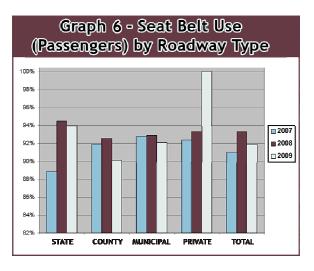


# SEAT BELT USE BY PASSENGERS - Road Type

On public roadways, seat belt use by passengers was highest for state roadways (**Table 10**). Use was 94% on state roadways, compared with 92% for municipal roadways. The sample size on private roadways was extremely small, and the use rate on these roadways should be discounted.

Seat Belt Use by Roadway Type Passengers						
2007 2008 2009						
State	89%	94%	94%			
County	92%	93%	90%			
Municipal	93%	93%	92%			
Private 92% 93% 100%						
Total	91%	93%	92%			

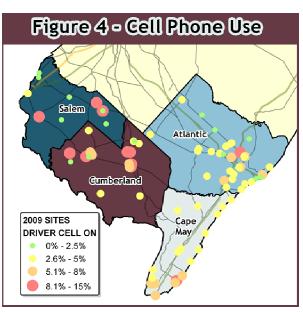
Table 10





### **CELL PHONE USE**

**Table 11** indicates the number of motorists using hand-held cell phones while driving and talking on their cell phone. **Figure 4** presents a schematic of their distribution within the SJTPO region. Cell phone use by drivers increased from 3% in 2008 to 4% in 2009. The previous year (from 2007 to 2008), cell phone use had been cut in half. A law took effect on March 1, 2008, making use of a hand-held cell phone a primary offense. Drivers caught talking or texting on a hand-held



cell phone can be fined \$100 fine, along with a \$250 surcharge. It can be speculated that immediately in the aftermath of the passage of this law and associated publicity, New Jersey motorists were more vigilant about not talking on their cell phone. With the passage of time, there may have been some relaxation.

Table 11					
Hand-Held Cell Phone Use by Gender					
2006 2007 2008 2009					
Males	4%	5%	3%	4%	
Females	5%	7%	4%	5%	
Total	4%	6%	3%	4%	

For all four years of this survey, the rate of cell phone use has been higher for females than for males. As indicated in Table 11, in 2009, female use of cell phones was 5%, versus 4% for males.

As of March 2008 three states in addition to New Jersey - Connecticut, New York and Utah -- plus the District of Columbia had laws on the books banning the use of hand-held cell phones while driving.

As seen in **Table 12**, cell phone use was highest in Cumberland County, at 6%. The other three counties had cell phone use rates of 4%.

Table 12							
Hand-Held Cell Phone Use by County							
2006 2007 2008 2009							
Atlantic	5%	8%	3%	4%			
Cape May	4%	5%	3%	4%			
Cumber- land	5%	4%	3%	6%			
Salem	3%	4%	3%	4%			
Total	4%	6%	3%	4%			



# 2009 SPECIAL PROJECT Commercial Motor Vehicle Seat Belt Observations

As part of this year's seat belt survey, observations were conducted of seat belt use in commercial motor vehicles (CMV) at 17 sites (See Appendix B for list of sites) in the SJTPO region. Five sites were in Atlantic County, and four each were in Cape May, Cumberland, and Salem counties. To be counted, the vehicle had to be at least a single-unit truck in size, and had to have a commercial logo. Observations were made of 1,892 motorists, comprising 1,753 males and 139 females. These are not included with the results analyzed elsewhere in this report.

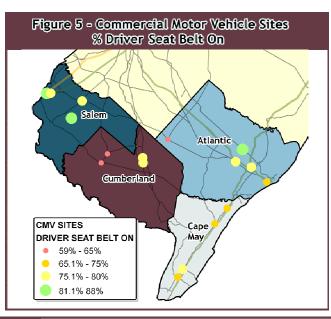
The results of the commercial motor vehicle observations are shown in **Table 13 and Figure 5**. Seat belt use by all drivers was 72%, far less than the regional average of 90%. This was exactly the same rate as seen nationally; the 2008 Seat Belt Usage by Commercial Motor Vehicle Drivers (SBUCMVD) Survey Final Report indicated a 72% use rate for drivers of

Table 13				
Seat Belt Use Commercial Motor Vehicles				
Male	70.7%			
Female	89.2%			
TOTAL	72.1%			

all medium and heavy duty trucks and buses. This same survey indicated that the use rate for drivers of commercial motor vehicles was higher in states with primary seat belt laws, at 80%. Since New Jersey is a primary seat belt law state, the seat belt use rate of commercial motor vehicle drivers does fall below the national average in this respect.

The relatively poor rate of seat belt use is almost entirely attributable to male drivers, as their rate of use was only 71%. The rate of female drivers is very close to the regional average for all vehicles, at 89%.

It should also be noted that the composition of commercial motor vehicles surveyed in the South Jersey region was different than the composition of commercial motor vehicles surveyed in the national study. SBUCMVD surveyed only drivers of medium and heavy-duty vehicles with at least six tires. Commercial motor vehicles surveyed for SJTPO included some vehicles, such as taxis and vans, which only had four tires.







**Table 14** indicates the cell phone use in commercial motor vehicles. As indicated, the rate of use by all motorists was approximately 6%, or two percentage points higher than the rate of use in the overall population. This rate is equal to the rate of electronic device use for drivers of commercial motor vehicles nationwide (2008 SBUCMVD Report). It is assumed that the large majority of these electronic devices were cell phones.

Table 14				
Cell Phone Use Commercial Motor Vehicles				
Male	5.8%			
Female	4.3%			
TOTAL	5.7%			

**Table 15** indicates the results of the CMV data collection by vehicle type. The lowest use of seat belts was found in tow trucks (54.5%), trash trucks (57.5), and tanker trucks (59.5%). Cell phone use in commercial motor vehicles was highest in tow trucks (9.1%), vans (9.1%), and cars (8.8%).

**Table 16** indicates the results of the CMV data collection by company. This table only lists companies that were counted three or more times over the course of the study. Some of the more notable results were for NJDOT (57.1% seat belt on), Comcast (57.1% seat belt on, 35.7% cell phone on), Verizon (66.7% seat belt on, 16.7% cell phone on), NJ Transit (76.7% seat belt on), Cifalogio (20% seat belt on), and New Jersey State Police (85.7% seat belt on, 28.6% cell phone on).

	Table '	15—CMV Sites b	y Vehicle Typ	pe	
Туре	Total	Seat OFF	Cell ON	% BELT ON	% CELL ON
Ambulance	12	2	1	83.3%	8.3%
Armored Truck	5	1	0	80.0%	0.0%
Box Truck	270	66	14	<b>75.6</b> %	5.2%
Bus	121	32	0	73.6%	0.0%
Cab	15	0	0	100.0%	0.0%
Car	114	19	10	83.3%	8.8%
Concrete Truck	25	17	1	32.0%	4.0%
Dump Truck	184	75	8	99.5%	4.3%
Flat Bed	113	38	4	66.4%	3.5%
Pick-up	243	70	20	71.2%	8.2%
School Bus	92	11	1	88.0%	1.1%
Semi Truck	209	61	8	70.8%	3.8%
Tanker	37	15	0	59.5%	0.0%
Tow Truck	11	5	1	54.5%	9.1%
Tractor Trailer	39	10	2	74.4%	5.1%
Trash Truck	40	17	2	57.5%	5.0%
Utility Truck	87	34	4	60.9%	4.6%
Van	276	54	25	80.4%	9.1%
TOTAL	1892	528	107	72.1%	5.7%





#### SUMMARY OF SEAT BELT USE

In summary, seat belt use by drivers in the SJTPO region decreased slightly (by 1 percentage point) from 2008 to 2009. Reductions in use were noted for both drivers and passengers. A longer time-view will be needed to determine whether this is due to normal variations in statistical sampling. The overall trend in rate of use has been positive, with the exception of this year.

SEAT BELT USE

The largest year-to-year variation seen to date was between 2006 and 2007, when the rate of use increased by 11 percentage points. Some of the reason for that difference may have been the different dates in which the surveys were conducted. Because the 2006 survey took place largely during the month of May unlike the 2007, 2008 and 2009 surveys, all of which took place in April - the 2006 survey may have observed larger numbers of seasonal visitors. Some of the states that send large numbers of visitors to the South Jersey area do not have primary seat belt laws, and, correspondingly, have lower seat belt use rates than New

Jersey. Pennsylvania is one example of a state without a primary seat belt law.

In general, there is greater awareness by the public of the importance of wearing seat belts, due to on-going educational campaigns that emphasize that motorists are more likely to be fatally or severely injured in an accident if they are not wearing their seat belt.







Although seat belt use is up in the region and around the state, occupant protection continues to be a focus for the Alliance. As confirmed by last years special project, teen drivers are buckling up at a significantly reduced rate, 85%. Thus,

drivers to the safety aspect of seat belts.

During 2009, the Alliance contacted all 31 area high schools requesting to do educational presentations to their students. The Alliance visited 8 high schools, addressing nearly 3,000 students, on seat belt safety and the law. Although the 85% usage is for teen drivers and there passengers leaving schools in the afternoon, the educational presentations were delivered to all students in the classroom whether driving to school in a vehicle or school bus. The participating high schools were: Hammonton, Mainland Regional, Ocean City, Sacred Heart, St Josephs, Salem, Schalick and Vineland.

during the 2009 school year, the Alliance focused its efforts on educating teen

As part of this effort, the Alliance worked with law enforcement to notify parents when they had issued their Graduated Drivers Licensed (GDL) teen with a violation. One of the requirements of the GDL Law is that all passengers in that vehicle must be buckled up no matter what age they are or where they sit in the vehicle. The goal of the notice home was to inform and seek their assistance on enforcing the restrictions. Participating police departments are:



Avalon, Absecon, Egg Harbor Twp, Hamilton Twp, Hammonton, Longport, Lower Twp, Linwood, Middle Twp, Mullica Twp, Ocean City, Salem City, Somers Point, Wildwood and North Wildwood, as well as the Atlantic and Cape May County Sheriff's Offices.

Another area of focus for the Alliance are backseat passengers and those ages 9 to 14. The Alliance worked with the Child Passenger Seat Coalition to push forward legislation that would backseat passengers to buckle up. This is currently a loophole in the law permitting adults over the age of 18 to ride around unbuckled in the

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backseat. Unbuckled backseat passengers become "backseat bullets" in a crash and can injure or even kill front seat passengers. The bills are \$18 and A870.





Since there are seat belts on school buses, the Alliance also addressed middle school students about the importance of wearing seat belts on school buses, as well as in vehicles. These were two separate presentations and in total the Alliance talked to nearly 5,000 students ages 9 to 14 about seat belts.

Lastly, the Alliance speaks to community organizations on various traffic safety topics and regarding seat belts and occupant protection. In 2009, the Alliance addressed 5 organizations with nearly 200 members in attendance.

Another facet of occupant protection is car seats and booster seats. A review of crash data indicates that usage among children birth to 4 is about 82% but booster seat use for children 5 to 8 is only 50%. This statistic has been confirmed by a booster seat survey done by the Alliance for the past two years. In addition to speaking with the kids the Alliance sends information home to mom and dad about booster seat safety.

And in 2009, the Alliance participated in the federally funded Seat Belt Sign Study that looked at the influence a seat belt sign might have on an unbuckled motorist. The Study included surveys with individuals at identified locations in Atlantic and Cape May Counties. The surveys were done both before and after the erection of the sign and asked question about seat belt use, if they



IT'S THE LAW

saw the sign would they buckle up, what would make them buckle up and the effect of enforcement on their behavior. The final study has not yet been completed.



Lastly, the Alliance used the creation of two new traffic safety programs (Cape May County and Salem County) to promote the BUCKLE UP STENCIL and elicit 21 new locations with 32 exit driveways. Established in 2001, this program includes painting the text BUCKLE UP with a picture of two hands and a seat belt buckle on exit driveways of businesses. The idea is to remind drivers to buckle up before they enter the roadway system. The program is free to

businesses and organizations through a cooperative agreement with the county sheriff's to use day reporting inmates to do the actual painting. To date there are over 500 exit driveways painted t 273 locations in the region.





# **APPENDIX A - LIST OF SURVEY SITES**

ROAD TYPE	LOCATION	MUNICIPALITY	COUNTY
1 C & C	CR601 NEW JERSEY AVE & CR 651 S MILL ST	ABSECON	ATLANTIC
2 PRIVATE	EXIT SHOPRITE ON NJ 30 WHP WEST OF US9 NEW RD	ABSECON	ATLANTIC
3 M & M	BALTIC AVE & NORTH CAROLINA AVE	ATLANTIC CITY	ATLANTIC
4 S & M	US 40/322 ARCTIC AVE & ALBANY AVE	ATLANTIC CITY	ATLANTIC
5	PACIFIC AVE & MICHIGAN AVE	ATLANTIC CITY	ATLANTIC
6 C & M	CR 638 BRIGANTINE AVE & 34TH ST OR CLOSEST TRAFFIC LIGHT	BRIGANTINE	ATLANTIC
7 C & C	CR 627 CENTRAL AVE & CR 619 WHEAT RD	BUENA	ATLANTIC
<b>8</b> S & S	NJ 50 PHILADELPHIA AVE AT NJ 30 WHP	EGG HARBOR CITY	ATLANTIC
9 C & C	CR 662 MILL RD & CR 651 FIRE RD	EHT	ATLANTIC
10 C & M	CR 615 ZION RD & OLD ZION DR	EHT	ATLANTIC
11 S & C	US 40/322 BHP AT CR 603 ENGLISH CREEK AVE	EHT	ATLANTIC
12 C & M	RT 559 SOMERS POINT RD AT CR 651 STEELMANVILLE RD	EHT	ATLANTIC
13 M & C	4TH ST AT CR 646 DELILAH RD	EHT	ATLANTIC
14 C & S	RT 575 POMONA RD AT US 30 WHP	GALLOWAY	ATLANTIC
15 C & C	CR 575 POMONA RD AT CR 633 JIM LEEDS RD	GALLOWAY	ATLANTIC
16 S & M	US 30 WHP AT 4TH AVE	GALLOWAY	ATLANTIC
17 C & C	CR 561 MOSS MILL RD AT CR 634 PITNEY RD	GALLOWAY	ATLANTIC
18 C & S	CR 772 3RD ST AT US 54 BELLEVUE RD	HAMMONTON	ATLANTIC
19 M & C	POLAR AVE & RT 585 SHORE RD	LINWOOD	ATLANTIC
<b>20</b> C & M	CR 629 VENTNOR AVE & 28TH ST	LONGPORT	ATLANTIC
21 C & M	RT 563 JEROME AVE & FULTON AVE	MARGATE CITY	ATLANTIC
<b>22</b> S & S	US 40 MAIN ST AT US 50 CAPE MAY AVE DOWNTOWN BY FLORIST	HAMILTON	ATLANTIC
23 M & S	NEW YORK AVE AT US 40 HARDING HWY	HAMILTON	ATLANTIC
24 M & S	MCKEE AVE AT US 40/322 BHP	HAMILTON	ATLANTIC
<b>25</b> C & C	RT 575 POMONA RD & RT 563 TILTON RD	HAMILTON	ATLANTIC
<b>26</b> C & M	CR 623 ELWOOD-PLEASANT MILLS RD & RT 561 MOSS MILL RD	MULLICA TWP	ATLANTIC
<b>27</b> C & S	CR 662 MILL RD & US 9 NEW RD	NORTHFIELD	ATLANTIC
<b>28</b> C & S	CR 608 WASHINGTON AVE & US 9 NEW ROAD	PLEASENTVILLE	ATLANTIC
<b>29</b> M & S	DOUGHTY RD AT US 40/322 BHP	PLEASENTVILLE	ATLANTIC
30 M & M	MARYLAND AVE & BETHEL ROAD	SOMERS POINT	ATLANTIC
31 C & C	CR 629 DORSET AVE & CR 629 VENTNOR AVE	VENTNOR	ATLANTIC
32 M & S	11TH ST AT US 50 CAPE MAY AVE	WEYMOUTH TWP	ATLANTIC
33 S & C	NJ 50 AT CR 610 DENNISVILLE/PETERSBURG RD	UPPER TWP	CAPE MAY
34 M & M	MOORE RD & CREST HAVEN RD	MIDDLE TWP/CMCH	CAPE MAY
<b>35</b> S & C	US 9 SHORE RD AT CR 657 CMCH/SOUTH DENNIS RD	MIDDLE TWP/CMCH	CAPE MAY
36 C & C	RT 550 WOODBINE-OCEAN VIEW RD & RT 557 WASHING- TON AVE	WOODBINE	CAPE MAY
37 C & C	CR 654 FULLING MILL RD AT CR 603 BAYSHORE RD	LOWER TWP	CAPE MAY
38 C & C	CR 613 BREAKWATER RD & CR 603 BAYSHORE RD	LOWER TWP	CAPE MAY
<b>39</b> S & C	US 9 LINCOLN BLVD AT CR 603 BAYSHORE RD	N CAPE MAY	CAPE MAY
<b>40</b> C & C	CR 648 TOWN BANK RD & CR 644 SHUNPIKE RD	LOWER TWP	CAPE MAY





# **APPENDIX A - LIST OF SURVEY SITES**

ROAD TYPE	LOCATION	MUNICIPALITY	COUNTY
41 M & C	JACKSON ST & CR 604 BEACH DR OR NEAREST LIGHT ON BEACH	CAPE MAY	CAPE MAY
<b>42</b> C & S	CR 621 NEW JERSEY AVE AT NJ 47 RIO GRANDE BLVD	WILDWOOD	CAPE MAY
43 C & M	RT 585 CENTRAL AVE AT 9TH AVE OR NEAREST TRAFFIC LIGHT	NORTH WILDWOOD	CAPE MAY
44 C & M	RT 585 PACIFIC AVE & CARDINAL RD	WILDWOOD CREST	CAPE MAY
45 M & C	WEST AVE & CR 623 34TH ST	OCEAN CITY	CAPE MAY
<b>46</b> C & C	CR 619 55TH ST & CR 619 WEST AVE	OCEAN CITY	CAPE MAY
47 M & M	9TH ST & ATLANTIC AVE	OCEAN CITY	CAPE MAY
48 C & C	CR 625 SEA ISLE BLVD & CR 619 LANDIS AVE	SEA ISLE CITY	CAPE MAY
49 M & M	CR 657 96TH ST & CR 619 3RD AVE	STONE HARBOR	CAPE MAY
50 M & M	30TH ST & DUNE DR	AVALON	CAPE MAY
<b>51</b> S & S	NJ 47 High St at NJ 49 Main ST	Millville	CUMBERLAND
<b>52</b> M & C	D St at RT 555 Wheaton Ave	Millville	CUMBERLAND
53 M & C	Sharp St at CR 667 Columbia Ave	Millville	CUMBERLAND
<b>54</b> C & C	CR 610 Cedar St at RT 555 Race St	Millville	CUMBERLAND
55 M & M	Laurel St at Commerce St	Bridgeton	CUMBERLAND
56 M & M	Bridgeton Ave at Old Deerfield Pike	Bridgeton	CUMBERLAND
<b>57</b> C & M	RT 552 Irving Ave at Mannhein Ave	Bridgeton	CUMBERLAND
<b>58</b> S & C	NJ 49 West Broad St at CR 607 West Ave	Bridgeton	CUMBERLAND
<b>59</b> M & C	Landis Ave at CR 615 the East/West Blvds	Vineland	CUMBERLAND
60 M & C	Chestnut Ave at RT 555 Main Rd	Vineland	CUMBERLAND
61 M & M	Wood St at 7th St	Vineland	CUMBERLAND
<b>62</b> S & C	NJ 47 Delsea Dr at RT 552 Sherman Ave	Vineland	CUMBERLAND
63 C & C	CR 628 Orchard Rd at RT 552 Sherman Ave	Vineland	CUMBERLAND
64 C & C	CR 626 Roadstown Rd & CR 620 Shiloh Rd	Hopewell/Stow Creek	CUMBERLAND
<b>65</b> C & C	CR 670 Buckshutem Rd & Mauricetown By Pass (flashing light)	Commercial/ Mauricetown	CUMBERLAND
66 C & M	CR 637 Fortescue Rd & CR 656 Newport Landing Rd/Main St	Downe Twp	CUMBERLAND
<b>67</b> C & C	CR 607 Maple St/Greenwich Rd & CR 650 Sheppard Mill Rd		CUMBERLAND
68 C & C	RT 540 Deefield Rd & NJ 77 (traffic on Deerfield Rd)	Upper Deerfield	CUMBERLAND
<b>69</b> C & C	RT 581 Main St at RT 540 Greenwich Rd	Alloway	SALEM
<b>70</b> C & S	CR 629 Georgetown Rd & US 130 Shell Rd	Carneys Point	SALEM
71 C & C	CR 607 Broad St & CR 675 Main St	Pennsgrove	SALEM
<b>72</b> M & S	Pittsfield Rd at NJ 49 Broadway	Pennsville	SALEM
<b>73</b> S & C	US 40 Chestnut St at CR 648 Main St	Elmer	SALEM
<b>74</b> C & S	CR 649 Front St at US 40 Chestnut St	Elmer	SALEM
<b>75</b> C & C	CR 690 Upper Neck Rd at RT 553 Buck Rd	Pittsgrove	SALEM
<b>76</b> C & C	CR 604 Monroeville Rd at CR 648 Pine Tavern Rd	Upper Pittsgrove	SALEM
<b>77</b> C & C	CR 678 Old Salem Rd at CR 672 S Main ST	Woodstown	SALEM
<b>78</b> S & S	NJ 45 Market St at NJ 49 Broadway, north of Broadway	Salem City	SALEM

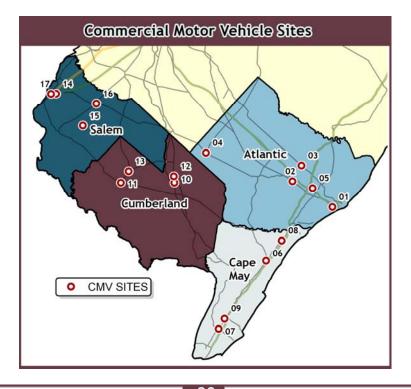




# APPENDIX B - LIST OF SURVEY SITES Commercial Motor Vehicle Seat Belt Observations

ID	COUNT TYPE	LOCATION	MUNICIPALITY	COUNTY
01	CMV-A	US 40/322 (Arctic Ave) & Albany Ave US 40/322 (BHP) & CR 603 (English Creek	Atlantic City	ATLANTIC
02	CMV-A	Ave)	EHT	ATLANTIC
03	CMV-A	RT 575 Pomona Road & US 30 (WHP)	Galloway	ATLANTIC
04	CMV-A	US 40 & RT 54	Buena	ATLANTIC
05	CMV-B	* Fire Road & Delilah Road	EHT	ATLANTIC
06	CMV-A	Rt 9 & NJ 50	Seaveille (Upper Twp)	CAPE MAY
07	CMV-A	Rt 9 & NJ 47	Middle Twp	CAPE MAY
80	CMV-A	RT 9 & Roosevelt Blvd	Marmora (Upper Twp)	CAPE MAY
09	CMV-B	*1523 US RT 9	CMCH	CAPE MAY
10	CMV-A	Delsea Drive & Rt 55	Vineland	CUMBERLAND
11	CMV-A	NJ 49 & Laurel St	Bridgeton	CUMBERLAND
12	CMV-B	*Sherman Ave at NJ 47 Delsea Dr	Vineland	CUMBERLAND
13	CMV-A	NJ 77 & NJ 59 (Carlls Corner)	Upper Deerfield	CUMBERLAND
14	CMV-A	CR 540 (Hawks Bridge Rd) & US 40	Pennsville	SALEM
15	CMV-B	* 52 McKillip Rd, Alloway	Salem City	SALEM
16	CMV-A	NJ 45 & US 40	Pilesgrove	SALEM
17	CMV-A	NJ 49 (Broadway) at Lippincott	Pennsville	SALEM
	$CMV-\Delta$	Standard Site		

CMV-A Standard Site
CMV-B Recycling Center







Driver Seat Belt Use by County						
County	Number	Percent	Total Sample			
Atlantic	16,993	89.8%	18,916			
Cape May	5,252	88.5%	5,935			
Cumberland	4,907	89.6%	5,475			
Salem	2,120	86.8%	2,442			
TOTAL	29,272	89.3%	32,768			

Driver Seat Belt Use by Gender						
Male					Female	
<u>County</u>	Number	Percent	Total Sample	Number	Percent	Total Sample
Atlantic	10,925	88.6%	12,325	6,068	92.1%	6,591
Cape May	3,318	87.6%	3,788	1,934	90.1%	2,147
Cumberland	3,023	89.0%	3,398	1,884	90.7%	2,077
Salem	1,401	87.1%	1,609	719	86.3%	833
TOTAL	18,667	88.4%	21,120	10,605	91.0%	11,648

Driver Seat Belt Use by Road Type							
Roadway Type	Number	Percent	Total Sample				
State	10,910	90.1%	12,109				
County	13,092	88.7%	14,760				
Municipal	5,248	89.3%	5,876				
Private	22	95.7%	23				
TOTAL	29,272	89.3%	32,768				

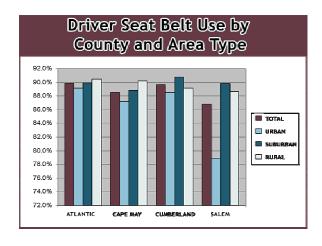
Driver Cell Phone Usage						
Male				Female		
<u>County</u>	Number	Percent	Total Sample	Number	Percent	Total Sample
Atlantic	396	3.2%	12,325	286	4.3%	6,591
Cape May	154	4.1%	3,788	98	4.6%	2,147
Cumberland	187	5.5%	3,398	141	6.8%	2,077
Salem	48	3.0%	1,609	39	4.7%	833
TOTAL	785	3.7%	21,120	564	4.8%	11,648



Driver Seat Belt Use by County and Area Type					
	Number	Percent	Total Sample		
Atlantic	16,993	89.8%	18,916		
Urban	4,926	89.1%	5,527		
Suburban	6,508	89.9%	7,241		
Rural	5,559	90.4%	6,148		
Cape May	5,252	88.5%	5,935		
Urban	2,241	87.2%	2,570		
Suburban	1,532	88.8%	1,725		
Rural	1,479	90.2%	1,640		
Cumberland	4,907	89.6%	5,475		
Urban	2,030	88.5%	2,294		
Suburban	2,344	90.7%	2,583		
Rural	533	89.1%	598		
Salem	2,120	86.8%	2,442		
Urban	411	<b>78.9</b> %	521		
Suburban	413	89.8%	460		
Rural	1,296	88.7%	1,461		
Total	29,272	89.3%	32,768		
Urban	9,608	88.0%	10,912		
Suburban	10,797	89.9%	12,009		
Rural	8,867	90.0%	9,847		

Undetermined

SB Usage 3,167





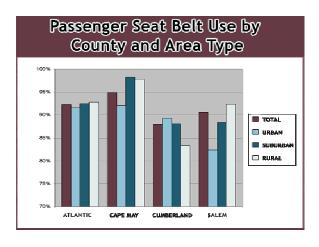
Passenger Seat Belt Use by County							
County	Number	Percent	Total Sample				
Atlantic	3,636	92.3%	3,941				
Cape May	1,235	94.9%	1,302				
Cumberland	1,074	88.0%	1,220				
Salem	454	90.6%	501				
TOTAL	6,399	91.9%	6,964				

Passenger Seat Belt Use by Gender							
Male					Female		
County	Number	Percent	Total Sample		Number	Percent	Total Sample
Atlantic	1,524	89.4%	1,705		2,112	94.5%	2,236
Cape May	526	92.3%	570		709	96.9%	732
Cumberland	512	83.8%	611		562	92.3%	609
Salem	172	88.2%	195		282	92.2%	306
TOTAL	2,734	88.7%	3,081		3,665	94.4%	3,883

Passenger Seat Belt Use by Road Type					
Roadway Type	Number	Percent	Total Sample		
State	2,361	93.9%	2,514		
County	2,728	90.1%	3,028		
Municipal	1,307	92.1%	1,419		
Private	3	100.0%	3		
TOTAL	6,399	91.9%	6,964		



Passenger Sea	nt Belt Use by	County and	Area Type
	Number	Percent	Total Sample
Atlantic	3,636	92%	3,941
Urban	1,151	92%	1,257
Suburban	1,509	92%	1,632
Rural	976	93%	1,052
Cape May	1,235	95%	1,302
Urban	636	92%	691
Suburban	286	98%	291
Rural	313	98%	320
Cumberland	1,074	88%	1,220
Urban	467	89%	523
Suburban	482	88%	547
Rural	125	83%	150
Salem	454	91%	501
Urban	56	82%	68
Suburban	38	88%	43
Rural	360	92%	390
Total	6,399	92%	6,964
Urban	2,310	91%	2,539
Suburban	2,315	92%	2,513
Rural	1,774	93%	1,912





Driver and Passenger Seat Belt Use by County						
County	Number	Percent	Total Sample			
Atlantic	20,629	90.3%	22,857			
Cape May	6,487	89.6%	7,237			
Cumberland	5,981	89.3%	6,695			
Salem	2,574	87.5%	2,943			
TOTAL	35,671	89.8%	39,732			

Driver and Passenger Seat Belt Use by Gender						
Male				Female		
County	Number	Percent	Total Sample	Number	Percent	Total Sample
Atlantic	12,449	88.7%	14,030	8,180	92.7%	8,827
Cape May	3,844	88.2%	4,358	2,643	91.8%	2,879
Cumberland	3,535	88.2%	4,009	2,446	91.1%	2,686
Salem	1,573	87.2%	1,804	1,001	87.9%	1,139
TOTAL	21,401	88.4%	24,201	14,270	91.9%	15,531

Driver and Passenger Seat Belt Use by Road Type					
Roadway Type	Number	Percent	Total Sample		
State	13,271	90.8%	14,623		
County	15,820	88.9%	17,788		
Municipal	6,555	89.9%	7,295		
Private	25	96.2%	26		
TOTAL	35,671	89.8%	39,732		



Driver and Pass	enger Seat Belt Use	e by County ar	nd Area Type
	Number	Percent	Total Sample
Atlantic	20,629	90.3%	22,857
Urban	6,077	89.6%	6,784
Suburban	8,017	90.4%	8,873
Rural	6,535	90.8%	7,200
		22 424	
Cape May	6,487	89.6%	7,237
Urban	2,877	88.2%	3,261
Suburban	1,818	90.2%	2,016
Rural	1,792	91.4%	1,960
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Cumberland	5,981	89.3%	6,695
Urban	2,497	88.6%	2,817
Suburban	2,826	90.3%	3,130
Rural	658	88.0%	748
Salem	2,574	87.5%	2,943
Urban	467	79.3%	589
Suburban	451	89.7%	503
Rural	1,656	89.5%	1,851
Ruial	1,030	07.J/ <sub>0</sub>	1,031
Total	35,671	89.8%	39,732
Urban	11,918	88.6%	13,451
Suburban	13,112	90.3%	14,522
Rural	10,641	90.5%	11,759
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# **CELL PHONE USE**

	В	Υ	GE	N	D	Ε	R	
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3.7%
4.8%
4.1%

BY COUNTY	
Atlantic	3.6%
Cape May	4.2%
Cumberland	6.0%
Salem	3.6%





