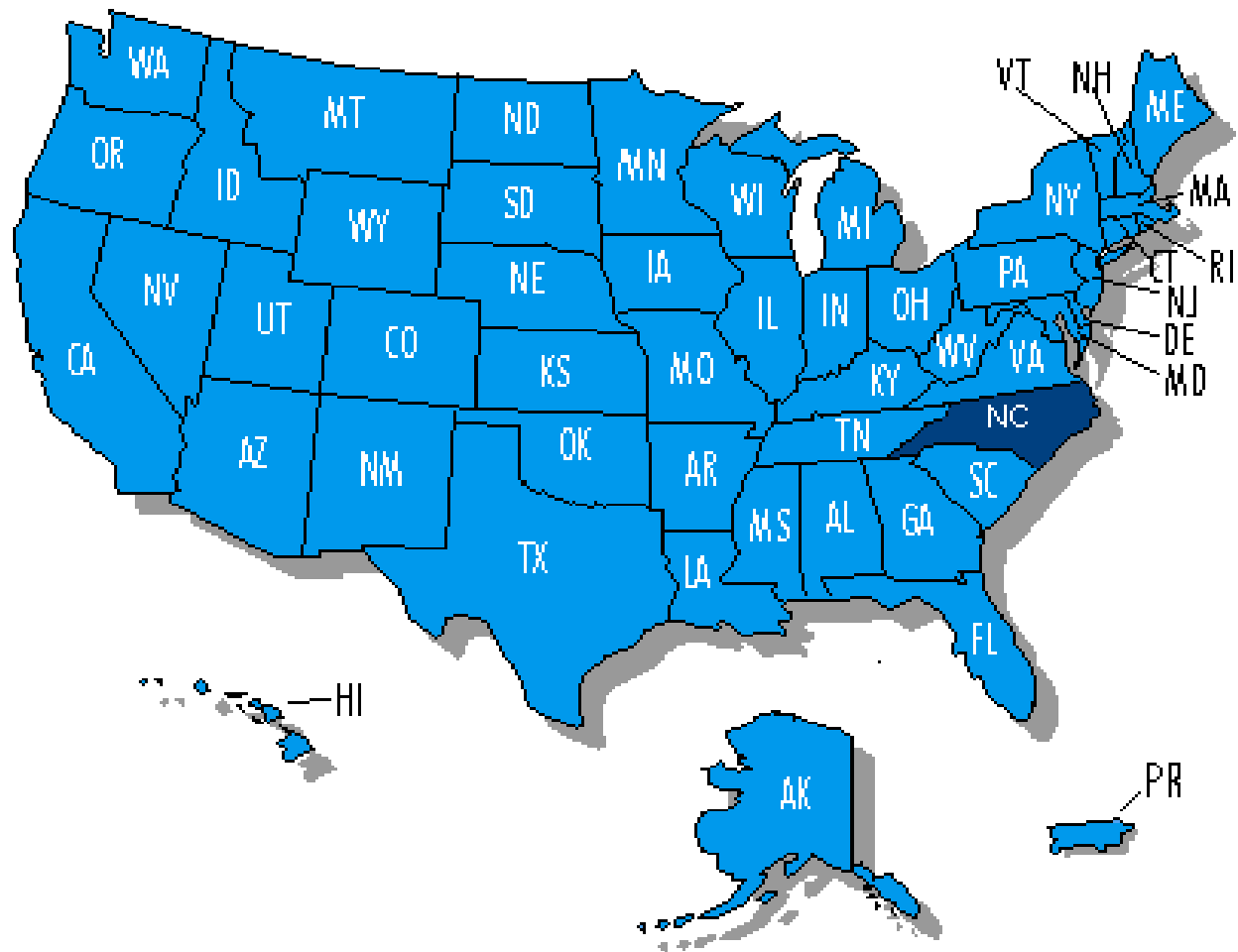


Light and Reflect for Farm Safety

Vanya Jones, MPH candidate University of
North Carolina at Chapel Hill

A photograph of a tractor driving on a paved road at dusk. The tractor's headlights are on, and its rear lights are also illuminated. The scene is dimly lit, with trees and a utility pole visible in the background. A yellow text box is overlaid on the bottom half of the image.

**Light and Reflect
for Farm Safety**





MOTOR VEHICLE LAWS OF NORTH CAROLINA



1997 EDITION

Reprinted from General Statutes of North Carolina
and 1997 Cumulative Supplement


MICHIE
CHARLOTTESVILLE, VIRGINIA
1997





Many of the crashes occur on clear days in the summer or autumn.



- **Speed Differential**

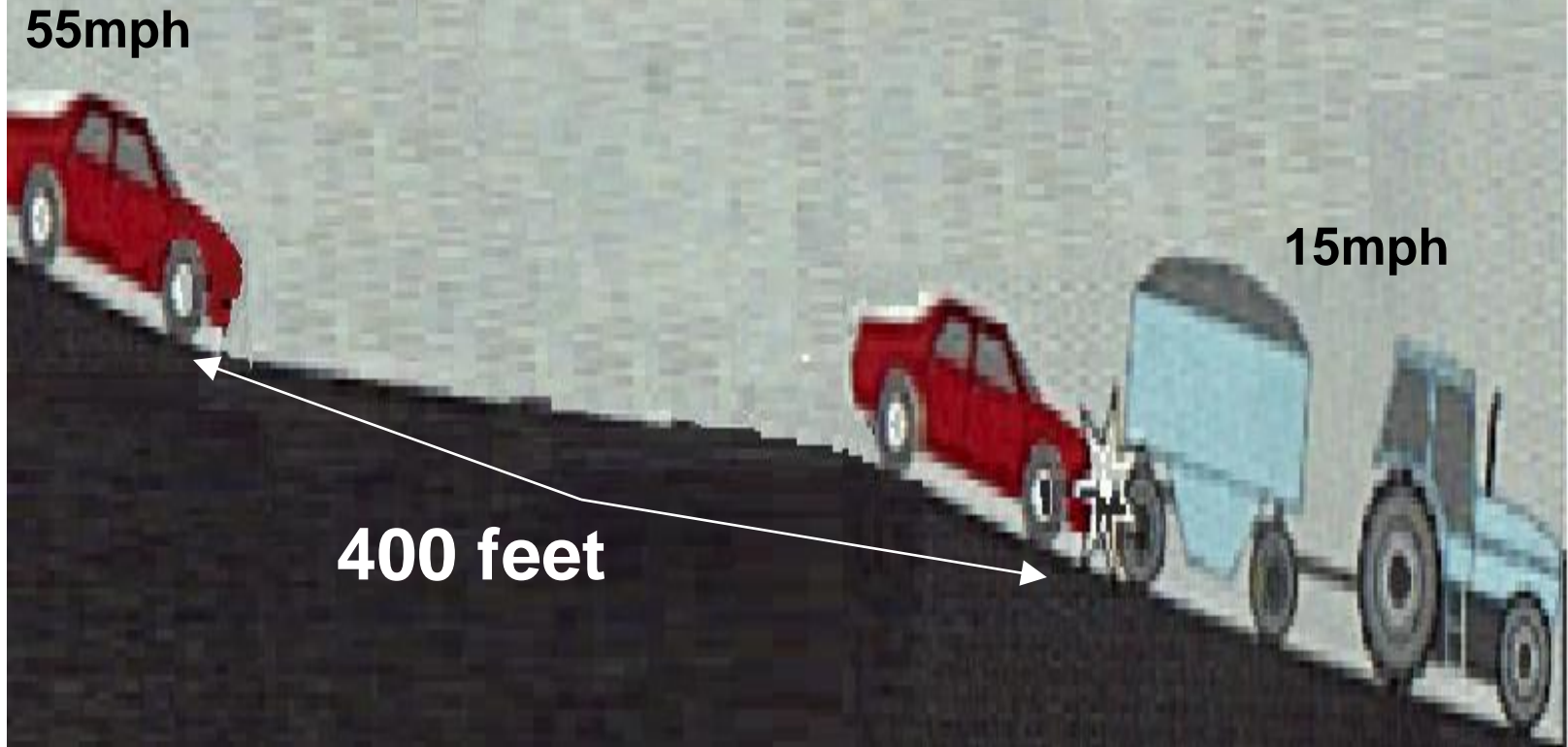
- **Increased Size of Machinery**

- **Time of Year**

- **Time of Day**

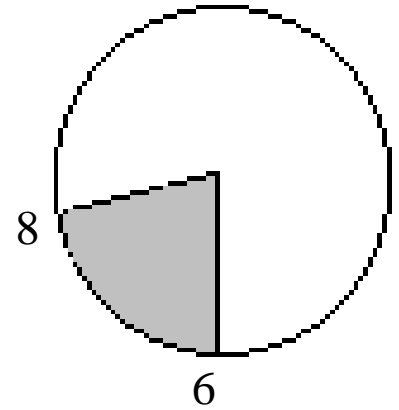


A car that is travelling 55 mph has 7 seconds to respond before crashing with farm machinery travelling at 15 mph that is 400 feet away.



**Increased size
of machinery**



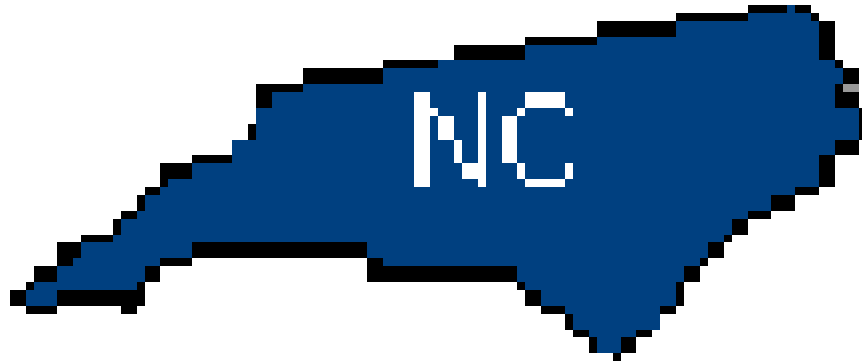


Most farm machinery is transported during 6:00-8:00 am and 6:00-8:00 p.m. Monday through Friday.

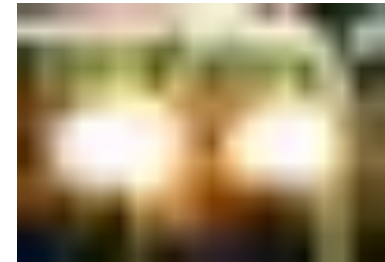


**Farm season
corresponds with
vacation season in
the summer and
fall months.**





- 
- **Machinery
Lighting**
 - **Machinery
Marking**
 - **Mirrors**
 - **Operating
Procedures**
 - **the Operator**



Machinery Lighting

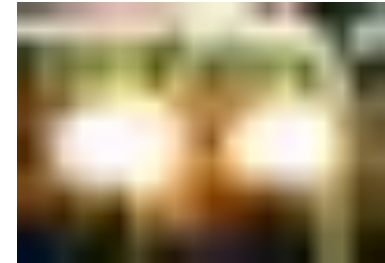


Machinery Lighting

- **Front Lighting Requirements:**
 - **Farm tractors operated on a public road at night must be equipped with at least one white lamp visible at a distance of 500 feet. (NCGS 20-129)**



American Society of Agricultural Engineers (ASAE) recommends two white lights mounted at the same level as far apart as possible in the front of machinery.



Machinery Lighting



ASAE recommends that farm equipment should have at least one red light-- mounted as far left as possible.

- **North Carolina Rear Lighting Requirements:**
 - At least one red lamp visible at a distance of 500 feet should be mounted to the rear of the farm equipment
 - Two red reflectors, each having a diameter of at least four inches, may be used in lieu of the lamp. (NCGS 20-129)

Machinery Lighting



- **ASAE also recommends:**
 - **If a second red light is used in the rear it should be mounted on the far right of the machinery.**

Machinery Lighting



Farm machinery that covers the brake lights must be equipped with a stop lamp that is activated by the foot brake of the towing unit.

(NCGS 20-125.1)





Machinery Markings

Machinery Marking

The Slow Moving Vehicle (SMV) is used to notify other drivers that they are approaching machinery traveling less than 25 mph.



Machinery Markings



The Slow Moving Vehicle emblem is not required by the Motor Vehicle Laws in North Carolina.

Machinery Markings

However, the Slow Moving Vehicle emblem is required by the Occupational Safety and Health Standards- 1910.145(d)(10).



Machinery Markings



The Slow Moving Vehicle emblem should be replaced if damaged or the orange center is faded.

Machinery Marking



The SMV emblem should be mounted two to four feet above ground.


Mirrors



Mirrors



Tractors and other farm machinery in North Carolina are not required to be equipped with mirrors. (NCGS 20-126)

A photograph of a green tractor with two side mirrors. Two red arrows point upwards towards the mirrors. A text box is overlaid on the center of the image.

Mirrors should be extended to allow machinery operators to see around wide equipment or blind spots caused by operator cabs.

Operating Procedures





- **Electronic turn signals are the best way to signal other drivers.**
- **Electronic turn signals are not required on farm machinery in North Carolina.**
- **However, all motor vehicles operators in public roads are required to signal when stopping or turning.** (NCGS 20-154)

Operating Procedures

Hand signals are acceptable for notifying others of turns or stopping.



STOP



LEFT
TURN



RIGHT
TURN

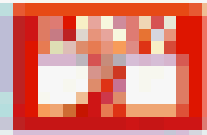


Machinery operators should not wave drivers around. The waving motion is too similar to a left hand turn signal and may confuse other drivers.

The Operator



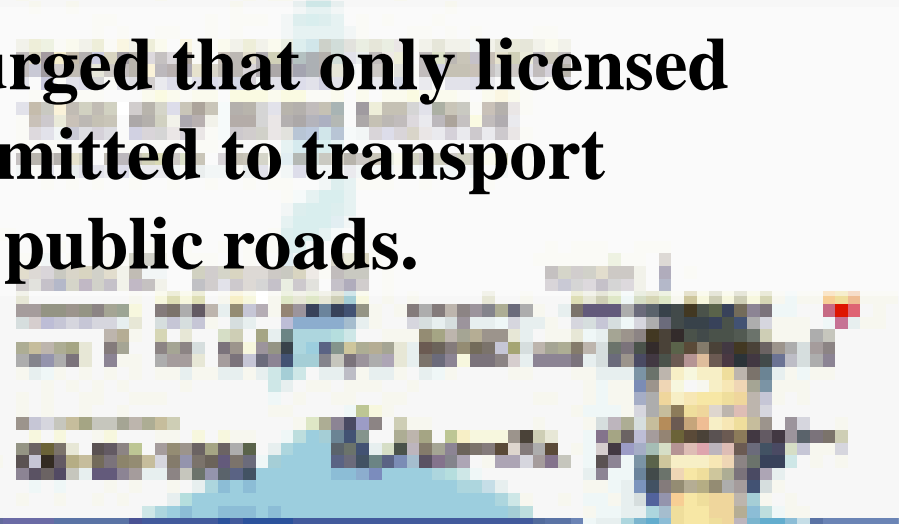
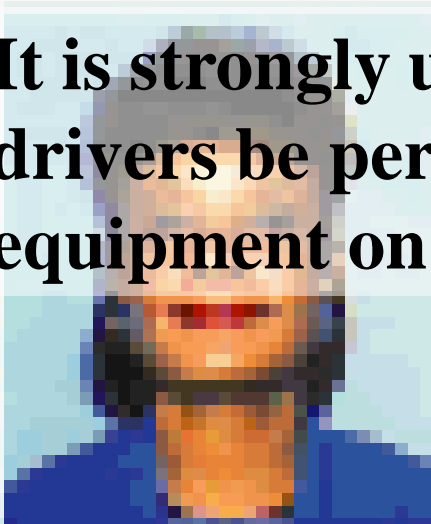
STATE OF NORTH CAROLINA



DEPARTMENT OF TRANSPORTATION

TRANSPORTATION

It is strongly urged that only licensed drivers be permitted to transport equipment on public roads.



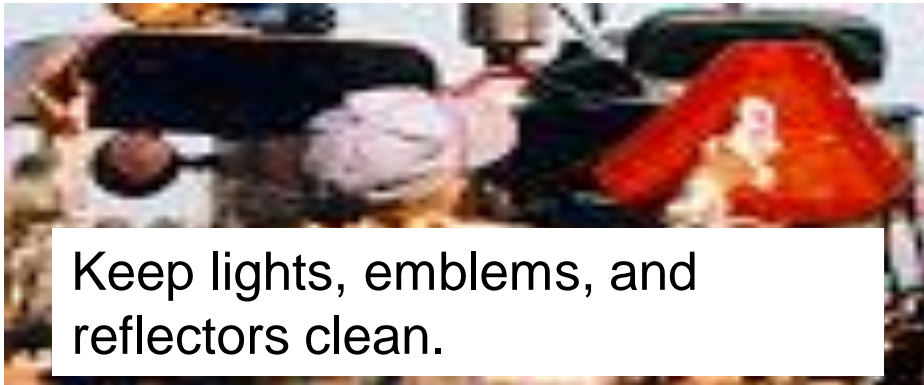




•Tips to Remember:

- Use adequate lighting on machinery**
- Use adequate markings to maximize the visibility of your machinery**
- Know and obey all traffic laws**
- Allow traffic to pass**


Most of all practice safe operating procedures when sharing the road with other vehicles.



This slide presentation was created by the North Carolina Department of Labor and produced with funds provided by the North Carolina Governors Highway Safety Council.

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For more information or a free SMV emblem please contact 1-800-Labor-NC.