



### **3. SAFETY**

#### **3-I. TEST OBJECTIVE**

The objective of this test is to determine handling and stability of the bus by measuring speed through a double lane change test.

#### **3-II. TEST DESCRIPTION**

The Safety Test is a vehicle handling and stability test. The bus will be operated at SLW on a smooth and level test track. The bus will be driven through a double lane change course at increasing speed until the test is considered unsafe or a speed of 45 mph is reached. The lane change course will be set up using pylons to mark off two 12 foot center to center lanes with two 100 foot lane change areas 100 feet apart. The bus will begin in one lane, change to the other lane in a 100 foot span, travel 100 feet, and return to the original lane in another 100 foot span. This procedure will be repeated, starting first in the right-hand and then in the left-hand lane.

#### **3-III. DISCUSSION**

The double-lane change was performed in both right-hand and left-hand directions. The bus was able to safely negotiate the test course in both the right-hand and left-hand directions up to the maximum test speed of 45 mph.

### SAFETY DATA FORM

Bus Number: 0706	Date: 8-29-07
Personnel: B.S., T.S. & S.C.	

Temperature (°F): 68	Humidity (%): 100
Wind Direction: Calm	Wind Speed (mph): Calm
Barometric Pressure (in.Hg): 30.15	

<b>SAFETY TEST: DOUBLE LANE CHANGE</b>	
Maximum safe speed tested for double-lane change to left	45 mph
Maximum safe speed tested for double-lane change to right	45 mph
<b>Comments of the position of the bus during the lane change:</b> A safe profile was maintained through all portions of testing.	
<b>Comments of the tire/ground contact patch:</b> Tire/ground contact was maintained through all portions of testing.	

### 3. SAFETY



**RIGHT - HAND APPROACH**



**LEFT - HAND APPROACH**