

## Transportation Control Measure (TCM) Summary Assessment

**TCM Definition:** University Rideshare Program  
**ARC Project Number:** AR 220

**TCM Project/Policy Description:**

This is a lump sum eligible to all colleges and universities within the 10 county ARC region. The intent is to provide startup funds for a student and staff based rideshare program to encourage car and vanpooling. The program will be designed to work closely with ARCs Commute Connections Program.

**TABLE 1.0 SUMMARY OF AIR QUALITY IMPACTS**

Year	1996	1999	2005	2010
<b>HC Reduction Tons/Day</b>	0.00	0.019	0.016	0.014
<b>NOx Reduction Tons/Day</b>	0.00	0.017	0.016	0.015

**Assumptions:**

- (a) 40% Peak Off-Highway Speeds for 20% Cold Starts
- (b) 60% Off-Peak Off-Highway Speeds for 20% Cold Starts
- (c) Average Staff Trip Length of 13 Miles Each Direction (50% of trips)
- (d) Average Student Trip Length of 7 Miles Each Direction (50% of trips)

**Calculations:**

It was estimated that the program would be available to 40,000 students and staff in the region. It was assumed that of the 90% who currently do not carpool or use transit two percent would take part in the program. This would result in an approximate reduction of 14,400 VMT per day. VMT reductions applied to the appropriate emissions factor will result in the amount of pollutant reduction per day. Pollutant reductions are summarized in table 1.0. These calculations are summarized in the following expressions:

$$\begin{aligned} \text{Daily Auto Trips} * 2\% &= \text{Trips Reduced Per Day} \\ \text{Trips Reduced Per Day} * \text{Average trip Length} &= \text{VMT Reduced Per Day} \\ \text{VMT Reduced Per Day} * \text{Mobile5A Emissions Factor} &= \text{Amount of Pollutant Reduction Per Day} \end{aligned}$$