Appendix G

Control Option 10

Control Option: Local VMT Reductions

Description:

Local vehicle-miles-traveled (VMT) reductions in and near RMNP have been suggested to reduce emissions affecting the Park. Further restricting or banning vehicles in the Park and controlling/reducing VMT in the Estes Park and Northern Front Range region would reduce emissions from those close-in sources. Other methods of reducing VMT include mass transit systems, carpooling/vanpooling, and development of new or modification of existing routing to make it more efficient. Similar to other areas of the State, light and heavy-duty vehicles that account for the VMT near the park are on average becoming cleaner burning with fewer emissions.

The NPS is proactive in seeking innovative approaches to pollution prevention in its national Parks and RMNP is no exception. Opportunities related to the transportation sector include VMT reduction considerations, more in-park transportation systems, low-emissions buses/shuttles, conversion of park vehicle fleets to cleaner fuels, and other available measures. Most recently, RMNP is participating with the local gateway community of Estes Park to review existing, and plan for an improved, transit program that will accomplish emissions reductions throughout the area.

Benefits of Local VMT Reductions:

By reducing the miles traveled by road-use vehicles, mobile source emissions can be reduced. Less VMT can be accomplished by reducing total traffic levels, creating a more efficient route system, or both. In addition to directly reducing emissions due to less miles traveled, another benefit would generally include traffic congestion mitigation, further lowering emissions associated with idling and longer engine operating times for the same distance traveled by a vehicle.

If existing VMT is a factor in traffic congestion, another benefit of reducing VMT might be a higher quality experience associated with travel, including less stress and delays, and likelihood for traffic-related accidents.

The on-road mobile source contribution to NOx emissions in Larimer County based on the 1996 WRAP emissions inventory was approximately 5000 tons per year, or slightly less than 50% of the total for that year. With an accurate, geographically distributed VMT for the county's road traffic system, the Mobile 6 model could be used to predict the effect of local VMT reductions on air quality in the surrounding area, including RMNP.

Costs/Tradeoffs Associated with VMT Reductions:

There would be some cost to plan for and develop systems and programs associated with reducing local VMT. A transportation study will be necessary to better quantify the distribution of local VMT.

Some tradeoffs might include less privacy and flexibility in schedule for those who may be required to use mass transit, for instance, to travel into areas of RMNP that could restrict or ban use of privately owned vehicles.

An air quality assessment would need to be performed to address the potential for increased ozone levels affecting the area. If ozone that often affects the park in summer months is due to long range transport and not generated locally, then local NOx reductions could exacerbate the ozone problem due to potentially less scavenging of the transported ozone as it travels through the local area of NOx emissions.