

**Technical Committee
Item # 2***District of Columbia**Bowie**College Park**Frederick County**Gaithersburg**Greenbelt**Montgomery County**Prince George's County**Rockville**Takoma Park**Alexandria**Arlington County**Fairfax**Fairfax County**Falls Church**Loudoun County**Manassas**Manassas Park**Prince William County***June 29, 2004****Memorandum****To:** TPB Technical Committee**From:** Daivamani Sivasailam
Principal Transportation Engineer**Subject:** Comparison of Mobile 6.2 vs. Mobile 6 emission rates

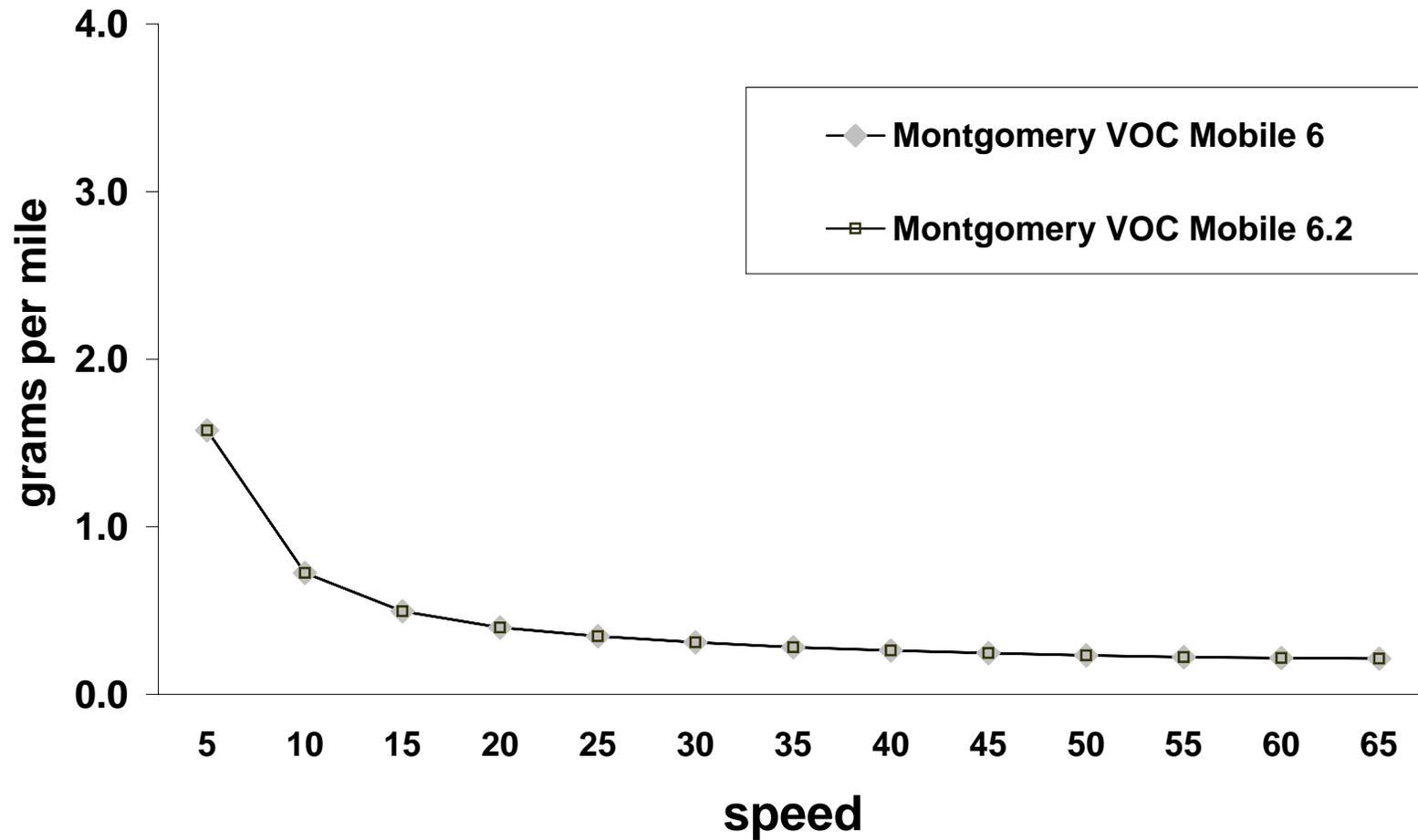
At the June Transportation Planning Board Technical Committee meeting, during the discussion on the status of the conformity analysis of the 2004 constrained long range plan (CLRP) and FY 2005-FY 2010 transportation improvement program (TIP), committee members asked staff to report on the changes to the emission rates with the implementation of the Mobile 6.2 model. Staff has completed such an exercise for analysis years 2005, 2015, 2025, and 2030 and will discuss the findings in the following paragraphs.

Mobile 6.2 was used to develop emission rates using the same inputs (vehicle registration, vehicle miles of travel, etc.) for all jurisdictions except the District of Columbia during the conformity analysis of the 2003 CLRP and FY 2004-FY 2009 TIP. A change to the inspection and maintenance (I&M) parameters in the District of Columbia was introduced at the request of District of Columbia Department of Consumer and Regulatory Affairs (DCDCRA). For all jurisdiction comparison of the new rates with the rates developed using Mobile 6.0 indicated: (1) no changes to volatile organic compounds (VOC) and nitrogen oxides (NO_x), and (2) the carbon monoxide (CO) rates decreased as compared to the Mobile 6.0 rates. These findings are consistent with the Mobile 6.2 documentation which indicate no changes to VOC and NO_x rates and a small decrease in the CO rates. Analysis year 2005 rates have been reviewed by the COG's department of environmental programs staff.

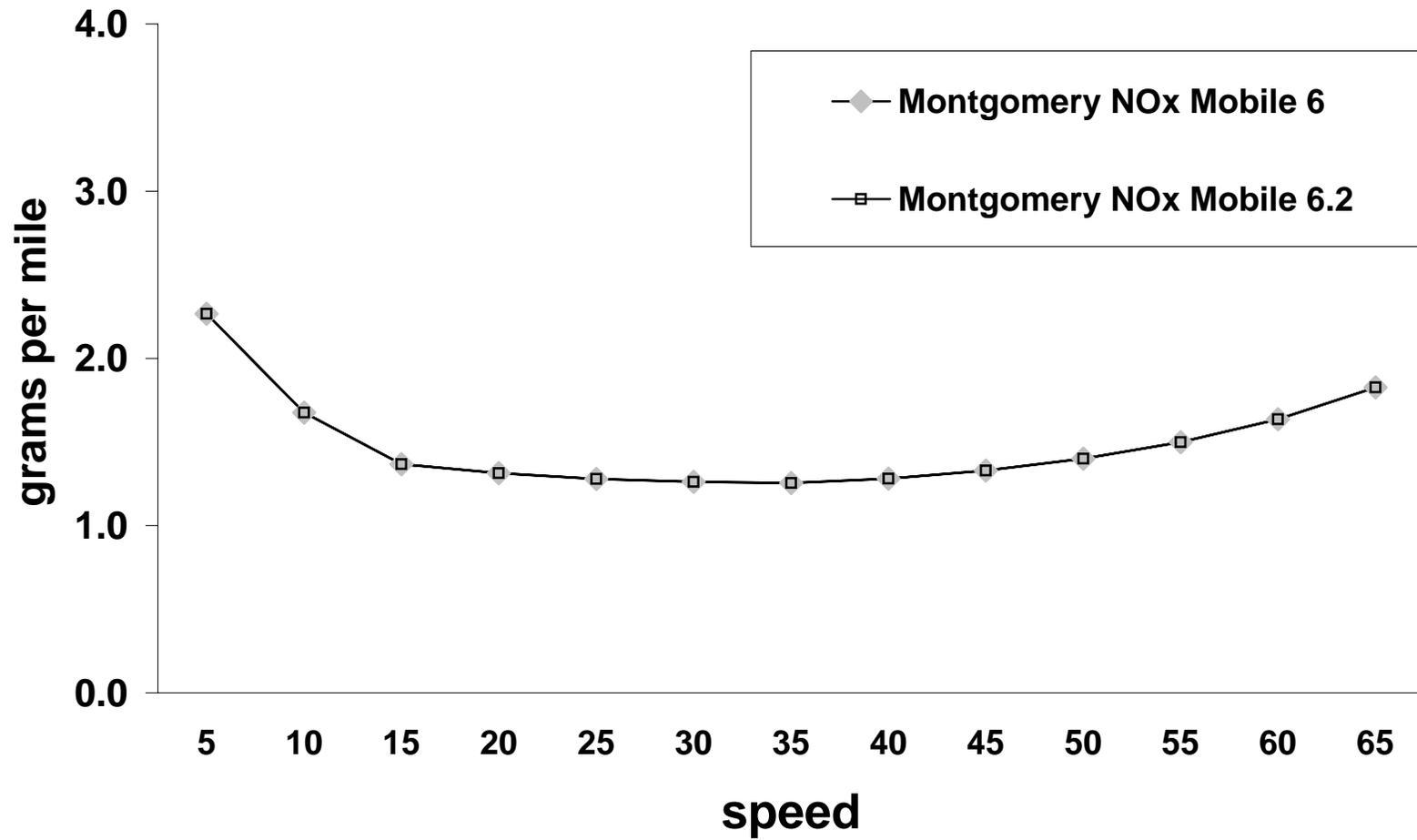
Attached are two sets of comparison charts between Mobile 6.2 and Mobile 6.0; one set shows the year 2005 running emissions factors in 5 mph increments for the three ozone season pollutants (VOC, NO_x and CO) for Montgomery County, Maryland. The second set is a similar comparison of the cold start, hot soak, diurnals, and resting loss factors (2005) of the three pollutants (VOC, NO_x and CO) for Montgomery County, Maryland.

Attachments:

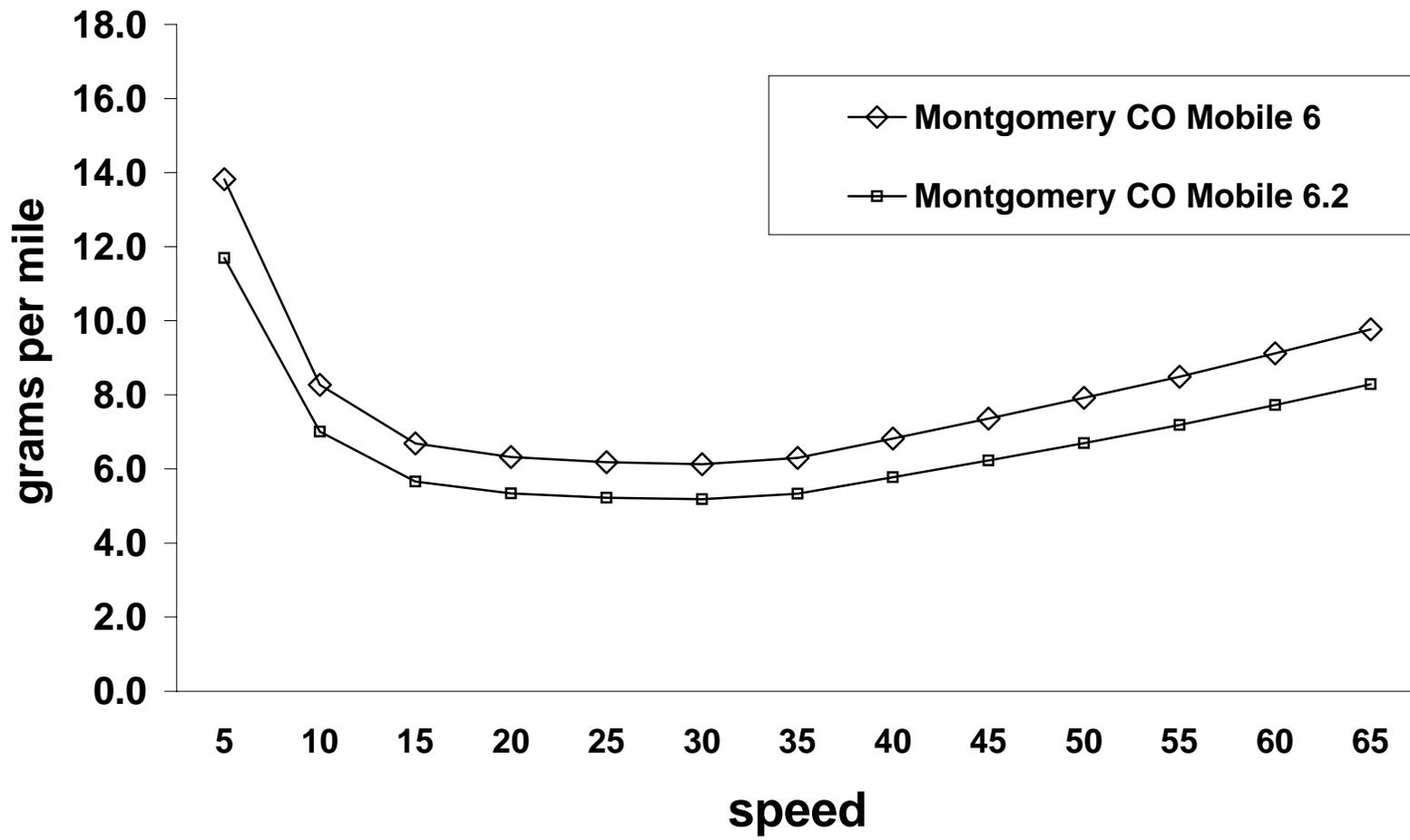
TOTAL 2005 VOC COMPOSITE MOBILE6 RUNNING EMISSION RATES FOR MONTGOMERY COUNTY FREEWAY



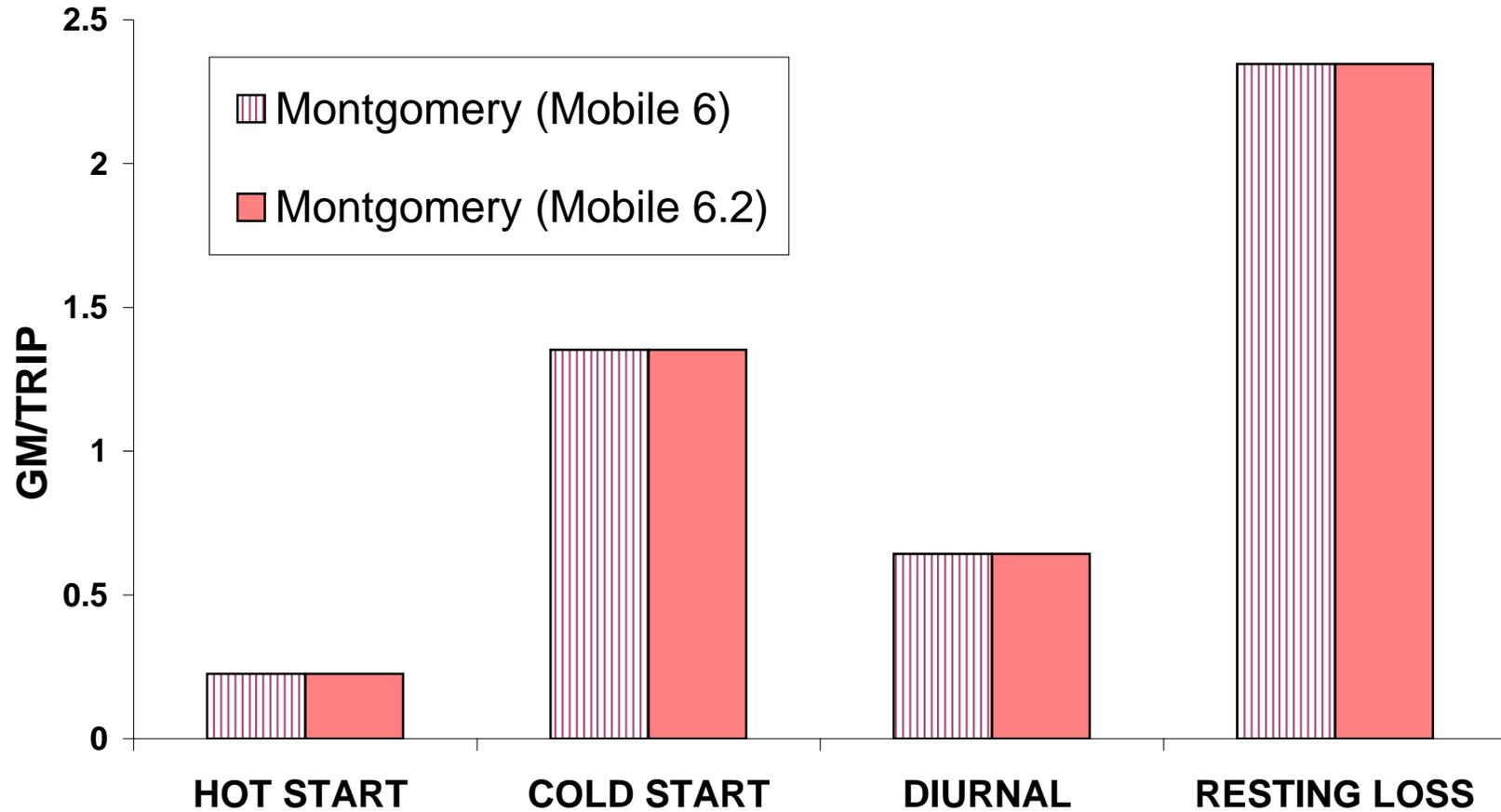
TOTAL 2005 NO_x COMPOSITE MOBILE6 RUNNING EMISSION RATES FOR MONTGOMERY COUNTY FREEWAY



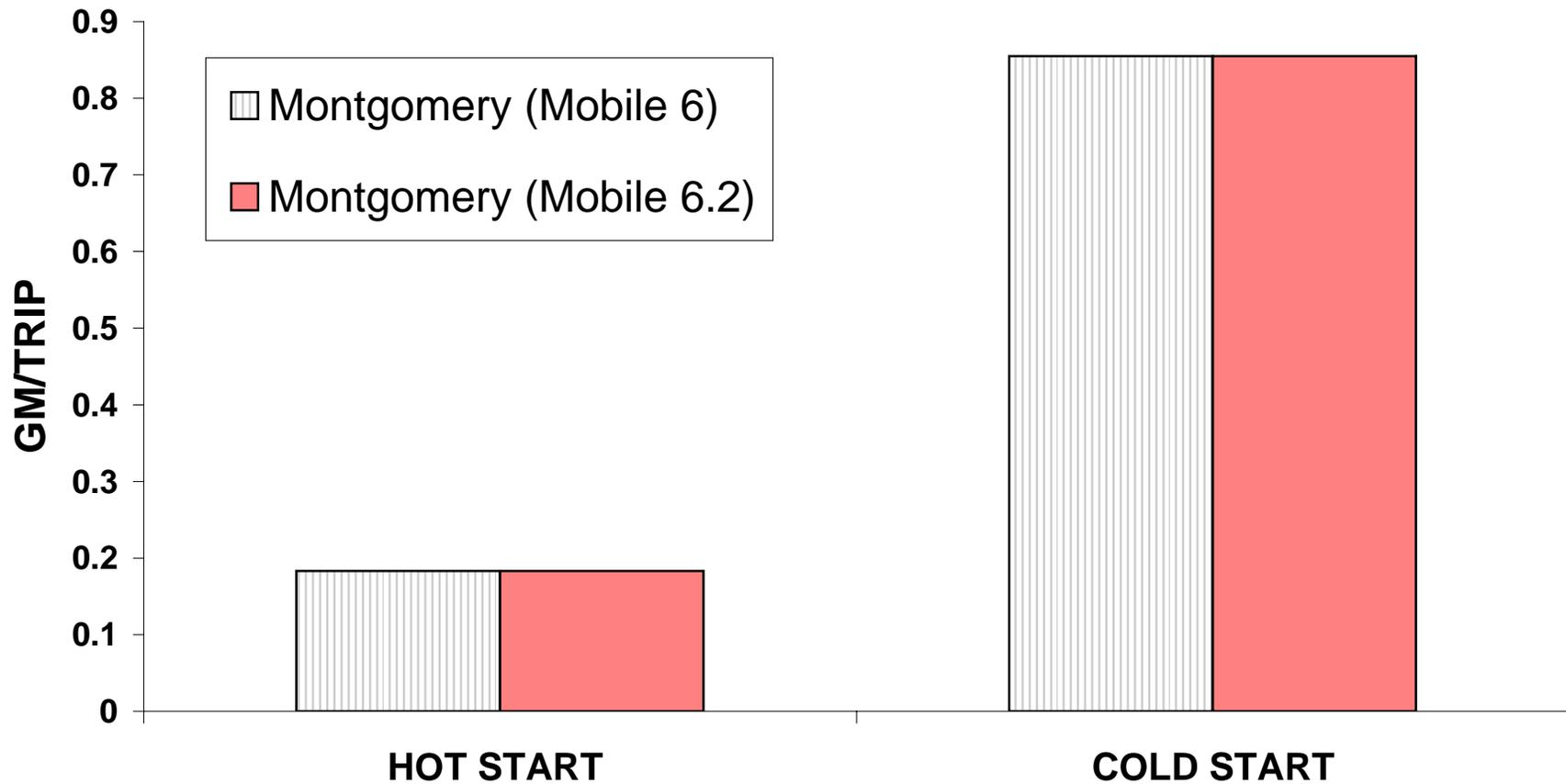
TOTAL 2005 CO COMPOSITE MOBILE6 RUNNING EMISSION RATES FOR MONTGOMERY COUNTY FREEWAY



2005 Mobile 6 VOC Rates Montgomery County



2005 Mobile 6 NOx Rates Montgomery County



2005 Mobile 6 CO Rates Montgomery County

