

Metro Bus Size Study Madison, WI

Background

Metro Transit in Madison operates 200 fixed-route buses with a peak of 170 buses in the a.m. and p.m. during the school year (UW, MATC, and K-12). In 2010 there were 13.6 million rides taken on the fixed-route system with an average of 35.7 rides per bus per hour for the year. Metro currently uses all 40-foot buses in its fixed-route fleet. There is a fairly common perception in the community that Metro Transit would be more efficient if it used smaller buses, especially during the off-peak periods. There is also some support to consider larger buses (i.e., articulated) on the UW campus where average loads of 100 riders per hour and more are common.

Purpose

The purpose of this bus size study is to analyze Metro Transit's ridership and operating data to determine if a different "bus size mix" would be more efficient.

Scope of Work – Overview

The consultant will collect data on all routes during the morning (6:30 a.m.- 8:30 a.m) peak and afternoon (3:30 p.m. – 5:30 p.m.) peak times during the school year and analyze the data on peak ridership. For UW, some additional weekday data will be gathered to assess ridership loads on campus routes (Route 80's). The consultant will look for areas where smaller vehicles or larger vehicles might be more appropriate in improving efficiency by reducing fuel and operating costs, or capital purchase costs. The consultant will factor in the interlining of bus routes and compute any savings or extra costs that would apply if different sized vehicles were used. The analysis should include a life-cycle cost/benefit comparison over the life of the vehicles.

Budget

The amount of funds available for this study will not exceed \$125,000. This is based on 170 peak vehicles at 8 hours of survey work per bus, and \$20/hour for temp work to conduct the survey. An additional \$20,000 is estimated to tabulate this data, and 400 hours at \$150 per hour of consultant time to analyze the data and formulate recommendations to Metro Transit's current focus on 40-foot buses in the fixed-route fleet.