See attached for the 2016 annual report for the Streets Division's solid waste collection efforts. Please note that this only covers the solid waste portion of the Streets Division facets, and does not cover snow plowing, road repair, or other vital functions.

The attached report shows again that the Streets Division's solid waste collection remains a vital and valuable service for the residents of Madison. As noted in the report, the Streets Division provides solid waste collection for the 74,970 properties that have 8 or fewer residential units. On average, each of those units pay \$20.03 a month for the refuse, recycling, brush, leaves, yard waste, and large items to be collected at the curb and to provide year-round drop-off site services where residents can recycle electronics, batteries, rigid plastic items, Styrofoam and drop off all the material that's collected at the curb. The rate of \$20.03, while considerably inexpensive considering the breadth of the services provided, it does represent a nearly 10% increase over the per-unit cost from 2015. This jump was not caused by higher fees or questions about material, but was due almost entirely to a jump in depreciation costs.

In terms of tonnage of material handled, as expected, the tonnage of brush processed increased from 2015 to 2016. The increase is notable because the tonnage jumped by 44% over 2015 to the highest tonnage recorded since 1999, which is the year that this data point can be reliably reported. While this increase may not be directly related to the emerald ash borer as there have been other large year-to-year jumps in brush tonnage handled (there was a 34% increase from 2008 to 2009), and brush tonnage does ebb and flow over time (there was a nearly 50% decrease from 2009 to 2010), it would be unwise to discount the emerald ash borer's impact on the brush handling burden of the Streets Division. With thousands of ash trees on public and private property being removed in response to this invasive species, a high tonnage of brush going forward should be expected and this is a trend to watch, especially as demand for brush processing and collection will likely increase.

In regards to tonnage increases, both the refuse and recycling tonnages for 2016 show an increase over reported totals in 2015, but there has effectively been no change in the actual tonnage collected. The increase shown is due to a re-calculation of how the weights are reported for diversion purposes. In years past, the weight of the refuse from the Madison School District and other sources, such as neighborhood festivals, and hauled to the landfill by the Streets Division was not counted toward the reported refuse amount. The diversion numbers for 2016 also includes the tonnage of recycling collected from the Madison School District for the first time. The district's recycling is collected by a private hauling company, but this year their tonnage was included since their refuse tonnage was included.

The contract with the Dane County Landfill allows for up to a 3.5% increase in tip fees every year starting in 2017. The landfill did not avail themselves on this option for 2017, but it remains an option they can use. It would be reasonable to assume that the tip fees will rise in the future and continue to do so thereafter.

Electronics collected at the drop-off sites in 2016 was 100 tons more than in 2015. It is interesting to note that 2015 represented a record amount of electronics recycled by the Streets Division, and the 2016 number far outstrips that. This significant increase is related mostly to televisions as people continue to upgrade from the heavy cathode ray TVs to high definitions sets – there were 274 tons worth of televisions recycled by the Streets Division in 2016. The high volume of televisions, and the related increase in cost to recycle them, led the Streets Division

to increase the recycling fee for residents wishing to drop-off televisions from \$10 to \$15 at the start of 2017.

The food waste diversion program, also known as the organics program, also collected a record amount of material in 2016. The program still has challenges, mostly related to issues of people placing non-compostable items into the carts – namely plastic items like bottles, bags, lids, and food containers, and also metal and glass items. Concerns about this contamination have led the Streets Division to be more careful with expansion plans and only invite volunteers. We have also been diligently monitoring the collection to contact those who are placing contamination into the cart when it can be noticed.

There are also a couple other trends in solid waste worth watching. For the third straight year, the overall diversion percentage for Madison dropped. Last year, we diverted 58% of our waste from the landfill. The good news is that Madison is still significantly above the 34% diversion rate the EPA reported as the national average. The decrease in the diversion rate is due predominantly from the decrease of recycling in construction and demolition waste.

The diversion percentage for construction and demolition recycling has declined every year since 2011 when the reported diversion percentage for this material was 96%. In 2016, the diversion percentage was 60%. The lowering number may be from a variety of causes, from difficult markets to changing materials to inadequate recycling reporting measures. Regardless of the cause, as the construction and demolition numbers dip, so does the city's overall waste diversion percentage.

Related to the diversion percentage is that in 2017, Pellitteri Waste Systems performed a sampling of the recycling material delivered to them. The sampling did not have any bearing on the 2016 numbers, but it is mentioned here because it will impact next year's numbers. Sampling is a regular part of recycling operations that is used to determine what makes up the recycling stream and is used to determine what rates the city will be reimbursed for recycling materials. While it is a normal task, it has not been performed since 2012 due to depressed commodity prices that have rebounded lately, at least in the short term. The 2012 sampling showed that 5.97% of the material delivered to Pellitteri was considered "residue," or in other words, non-recyclable trash. The 2017 sampling revealed a residue percentage of 9.05%. The sampling revealed other changes in the material delivered to them, such as less glass than in 2012, which would be expected as waste streams are always changing, but the residue rate is worth noting, worth watching, and will result in a lower overall diversion percentage for 2017.

The final item worth consideration is the uncertain impact policies pursued by the current federal administration may have on recycling. Recyclable materials are a global commodity and the impacts of the current federal administration have yet to be really felt on those prices. But, since potential trade conflicts with other countries could result from the tweets and policies of the president, it is useful to know that recycling commodity prices could be impacted. It should be noted, too, that not all outcomes would be negative for the recycling program in a strict dollars and cents interpretation. If foreign policy choices result in higher oil prices, for example, plastic prices also tend to go up, which would benefit recyclers. Therefore, it would be fair to say that wariness and unease rule the day as it is truly unknown what will come of this presidency – though perhaps, and it may only be by chance, positive market outcomes could result.