Greg Giaimo welcomed everyone to the meeting. 30 people were in attendance.

Jim Patterson motioned to approve last meeting's minutes. Lisa Householder seconded. The motion passed.

No requests for membership were received.

Andrew Rohne reported that the otdmug.org website domain was renewed for another 2-3 years. Presentations are still not up on the website.

Greg Giaimo noted that the MUG meetings are being moved to the second Friday of the month with the exception of the March meeting, which will be on the third Friday of the month. This takes effect at the next meeting.

Harvey Miller gave his presentation titled "Results from ODOT Research on Estimating External Travel Using Purchased Third-Party Data." Archived Travel Data (ATD) was introduced as data that can be purchased from vendors from data collected from travelers. These data need to also be factored by DPV (devices/vehicle) and VPD (vehicles/device). Similar research was noted. ATRI data is at Block Group level and was assigned to the Lima network using shortest path. Inrix was at external stations (TAZ). Airsage was analyzed two different ways: weighted by ADT and assigned to shortest path. Note that Streetlight/Inrix is weighted based upon a road segment of IR95 on the east coast. This dataset has order of magnitude differences. Andrew Rohne mentioned that Streetlight told him that he should choose a count with which he's comfortable and to scale the data to that. Results shown include trip length, trip purpose (which Westat is doing based upon the raw data), EE Flows, EI/IE Flows (all are rather terrible), and External Stations. ODOT requested the shares of IE/EE traffic per external station as well.

Johnny Han gave his presentation titled "Development of Standard Models in Kentucky Using Airsage Data." KYTC's regional TDMs are in Transcad and are 3-step models. They had no recent HTS data, so they purchased Airsage with trip purposes and time periods. The first regional model was Lexington, and now all 5 are complete. Counties with poor cell coverage were pretty bad. This is not a problem as the CTPP noted that trip flows <1% of HBW trips are in those counties. HBO/NHB intrazonal trips were exceedingly high. They reduced intrazonals to about 6% of total trips for Owensboro and 15% of total trips for District 9. Airsage cannot be directly used for trip generation rates. There is not much improvement on rates using ODME. Rural trip rates/Non-rural trip rates are: HBW=1.0, HBO=0.9, NHB=1.0. NCHRP 716 and the KYSTM were used to validate area type factors. In friction factor development, he fratared the Airsage data to match NCHRP trip rates (NCHRP 716 for productions and NCHRP 365 for attractions) in Owensboro model, while used ODME to adjust AirSage data in District 9 model. He showed validation statistics. Airsage advantages include cost, quick turnaround, and large coverage. Disadvantages include aggregation, trip purpose is derived, data transmission times are not necessarily accurate, and unusual results in trip tables (e.g. intrazonals). ODME is recommended for refinement and adjustment of trip tables before trip distribution analysis.

Vince Bernardin gave his presentation titled "Incorporating Big Data in Statewide and MPO Travel Demand Models in Tennessee" regarding the Tennessee Statewide and Chattanooga MPO models,

which used AirSage. He pointed out that you can't use HTSs to estimate trip tables due to the low sample size. He showed maps of 1, 2, and 7 days of ATRI data for US 30 trucks east of Canton: more data gives a more complete picture. Cleaning is important. Sometimes he throws out 2% to get it decent, but 2% isn't all that much as there is a ton of data to begin with. They haven't used the imputed purposes as they haven't found them accurate enough. They try to use CTPP and LEHD to determine HBW trips and then to break them out of the Airsage data. In combing AirSage and ATRI in TN, they filtered out short stops.   This eliminated 87% of direct conflicts between AirSage and ATRI reducing problems from 11% of cells and 0.2% of trips to 1% of cells and 0.09% of trips. Trip duration biases are a problem. Some sort of count-based expansion is needed. (A 100 mile trip is 12x as likely to be captured as a 10 mile trip.) Airsage keeps changing their intrazonal algorithms, so it may not be consistent across purchases.

$49.54 was spent on refreshments. $58.54 was collected. The balance is now $99.