**1.0 Understanding the Layout of the “YYYY Raw Data.xlsx” Files**

All counter data for a particular year are imported into Excel spreadsheets with the generic file name “YYYY Raw Data.xlsx”, where YYYY represents the calendar year of the traffic counts. Once data is imported into this spreadsheet, calculations are carried out to determine: daily total traffic, hourly total traffic by month, average traffic by day of week and month, percent of data collected, average annual daily traffic (AADT), and peak summer average daily traffic (PSADT). “YYYY Raw Data.xlsx” consists of 4 worksheets:

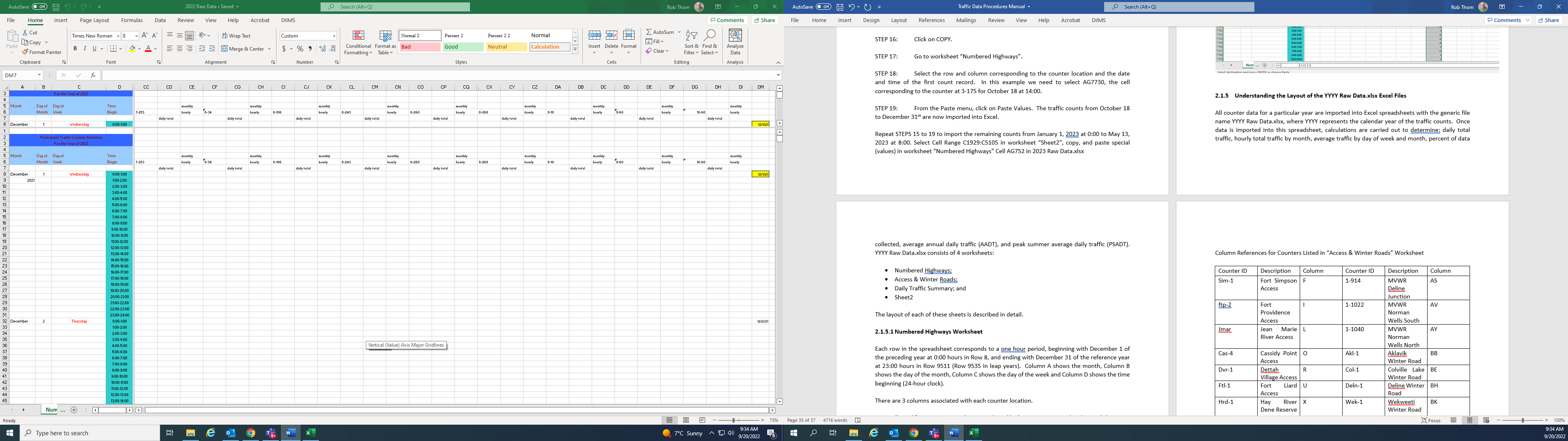
* Numbered Highways;
* Access & Winter Roads;
* Daily Traffic Summary; and
* Sheet2

The layout and contents of each of these sheets is described in detail.

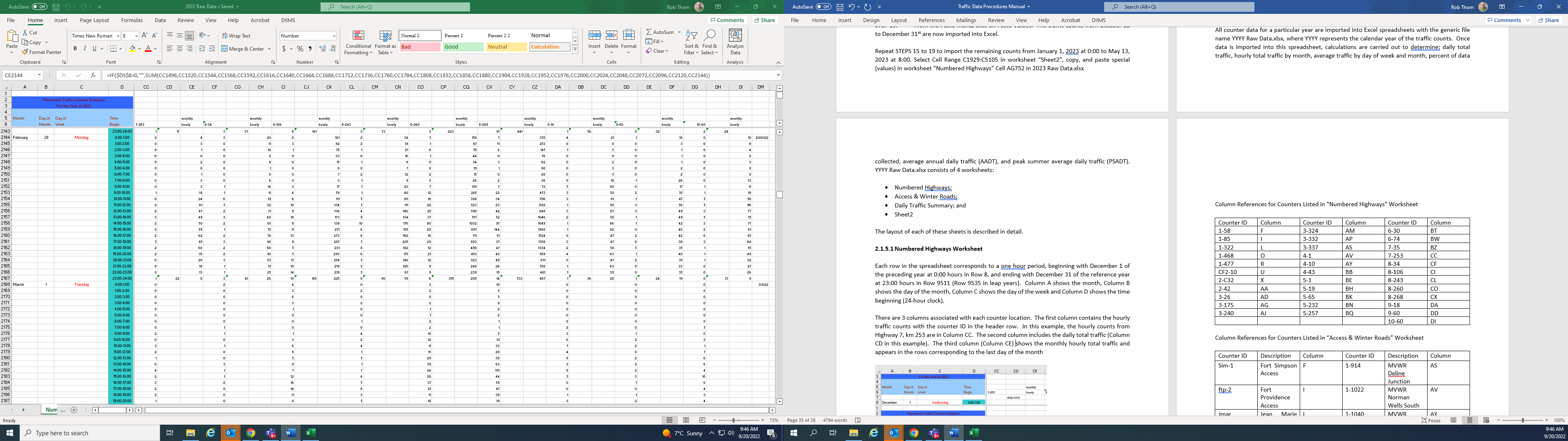
**1.1 “Numbered Highways” Worksheet**

Data collected from counters on the 10 numbered highways are imported in this worksheet. Each row in the spreadsheet corresponds to a one-hour period, beginning with December 1 of the preceding year at 0:00 hours in Row 8, and ending with December 31 of the reference year at 23:00 hours in Row 9511 (Row 9535 in leap years). Column A shows the month, Column B shows the day of the month, Column C shows the day of the week and Column D shows the time beginning (24-hour clock).

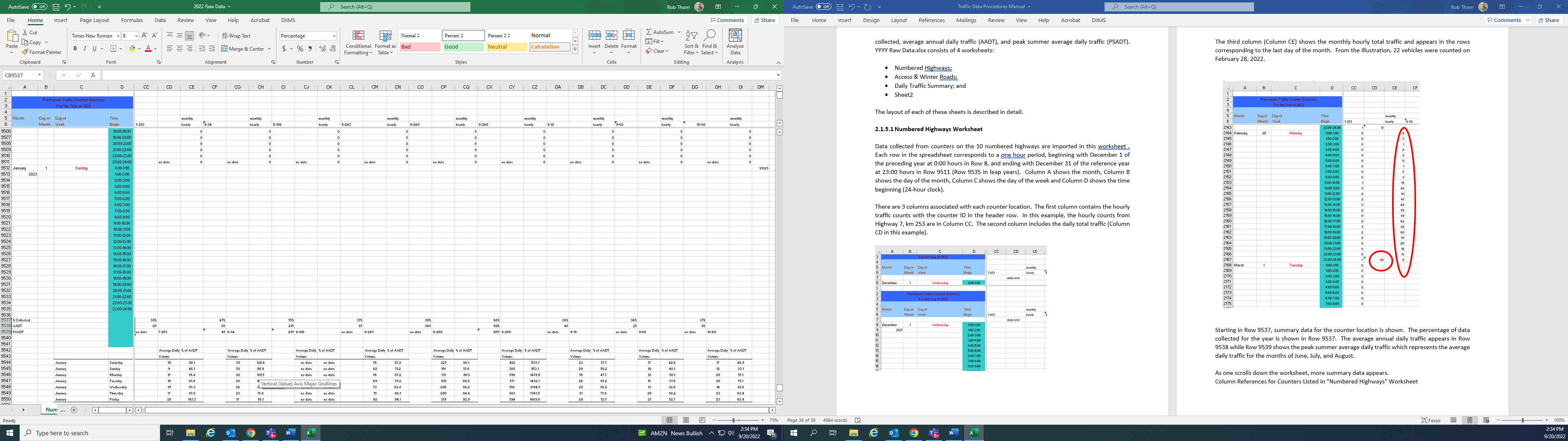
There are 3 columns associated with each counter location. The first column contains the hourly traffic counts with the counter ID in the header row. In this example, the hourly counts from Highway 7, km 253 are in Column CC. The second column includes the daily total traffic (Column CD in this example).



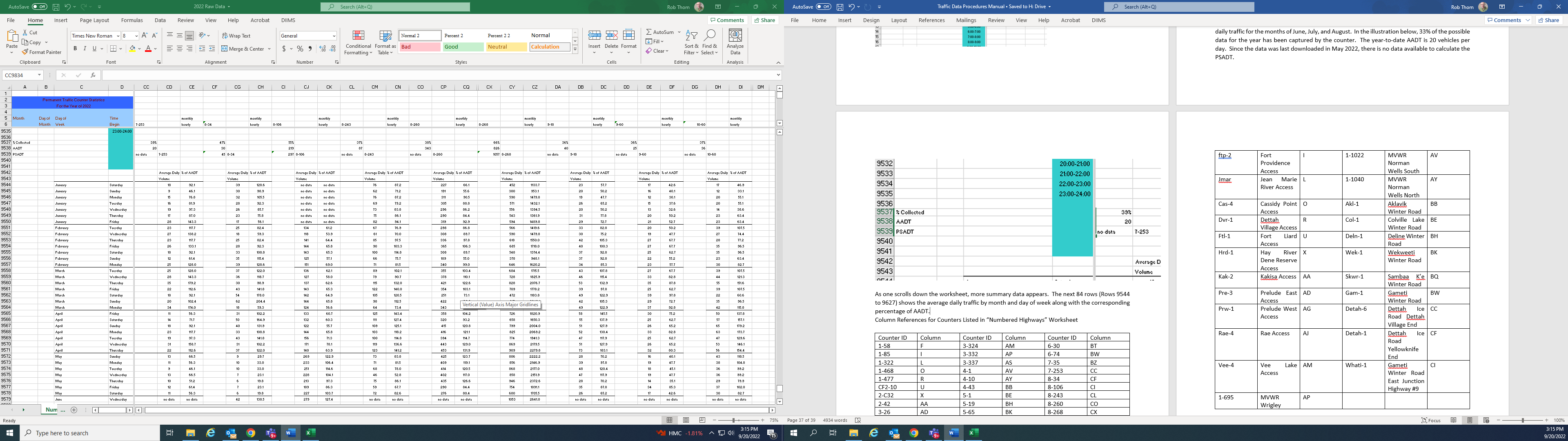
The third column (Column CE) shows the monthly hourly total traffic and appears in the 24 rows corresponding to the last day of the month. From the illustration, 22 vehicles were counted on February 28, 2022.



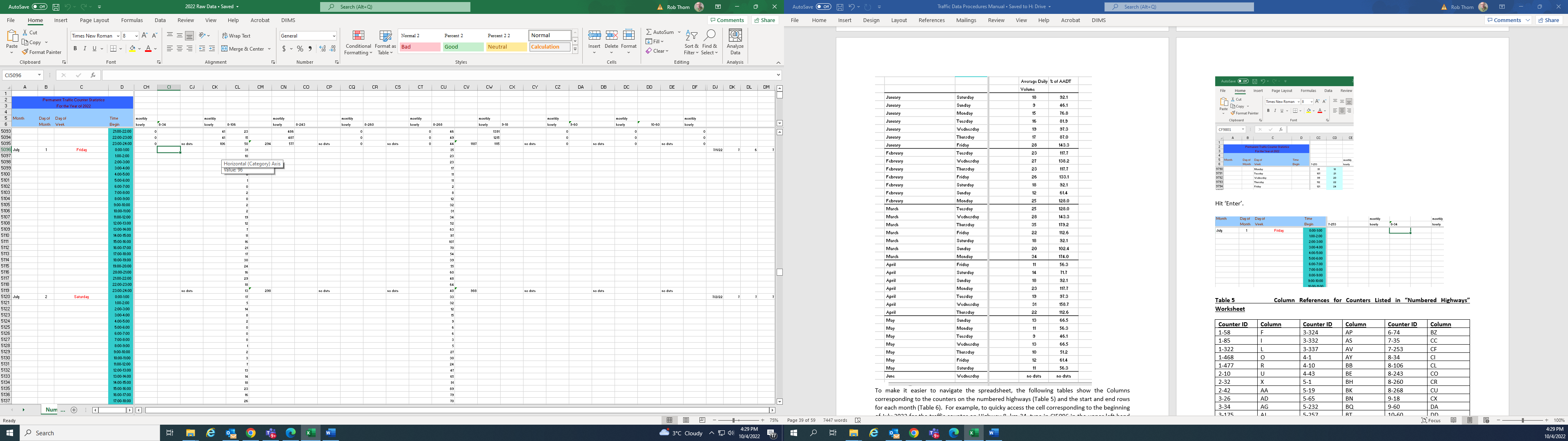
Starting in Row 9537, summary data for the counter location is shown. The percentage of data collected for the year is shown in Row 9537. The average annual daily traffic appears in Row 9538 while Row 9539 shows the peak summer average daily traffic which represents the average daily traffic for the months of June, July, and August. These values are used to populate Figures 2.2, 2.3, 2.4, 2.5, and 2.8 in the annual NWT Highway Traffic Report. In the illustration below, 39% of the possible data for the year has been captured by the counter. The year-to-date AADT is 20 vehicles per day. Since the data was last downloaded in May 2022, there is no data available to calculate the PSADT.



As one scrolls down the worksheet, more summary data appears. The next 84 rows (Rows 9544 to 9627) show the average daily traffic by month and day of week along with the corresponding percentage of AADT as illustrated on the next page.



To make it easier to navigate the spreadsheet, the following tables show the columns corresponding to the counters on the numbered highways (Table 2-5) and the start and end rows for each month (Table 2-6). For example, to quicky access the cell corresponding to the beginning of July 2022 for the traffic counter on Highway 8, km 34, type in ‘CI5096’ in the upper left hand window immediately below “Clipboard” then hit “Enter”.



**Table 1-1 Column References for Counters Listed in “Numbered Highways” Worksheet**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Counter ID** | **Column** | **Counter ID** | **Column** | **Counter ID** | **Column** |
| 1-58 | F | 3-324 | AP | 6-74 | BZ |
| 1-85 | I | 3-332 | AS | 7-35 | CC |
| 1-322 | L | 3-337 | AV | 7-253 | CF |
| 1-468 | O | 4-1 | AY | 8-34 | CI |
| 1-477 | R | 4-10 | BB | 8-84 | CL |
| 2-10 | U | 4-43 | BE | 8-243 | CO |
| 2-32 | X | 5-1 | BH | 8-260 | CR |
| 2-42 | AA | 5-19 | BK | 8-264 | CU |
| 3-26 | AD | 5-65 | BN | 9-18 | CX |
| 3-34 | AG | 5-232 | BQ | 9-60 | DA |
| 3-175 | AJ | 5-257 | BT | 10-60 | DD |
| 3-240 | AM | 6-30 | BW |  |  |

**Table 1-2 Row References for Beginning and End of Month, “Numbered Highways” and “Access & Winter Roads” Worksheets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Regular Year** | | **Leap Year** | |
|  | **Start Row Number** | **End Row Number** | **Start Row Number** | **End Row Number** |
| January | 752 | 1495 | 752 | 1495 |
| February | 1496 | 2167 | 1496 | 2191 |
| March | 2168 | 2911 | 2192 | 2935 |
| April | 2912 | 3631 | 2936 | 3655 |
| May | 3632 | 4375 | 3656 | 4399 |
| June | 4376 | 5095 | 4400 | 5119 |
| July | 5096 | 5839 | 5120 | 5863 |
| August | 5840 | 6583 | 5864 | 6607 |
| September | 6584 | 7303 | 6608 | 7327 |
| October | 7304 | 8047 | 7328 | 8071 |
| November | 8048 | 8767 | 8072 | 8791 |
| December | 8768 | 9511 | 8792 | 9535 |

**1.2 “Access & Winter Roads” Worksheet**

Data downloaded from counters deployed on the access and winter roads are imported into this worksheet. The layout is the same as for the “Numbered Highways” worksheet. Table 2-7 shows the column references for counters on the access and winter roads.

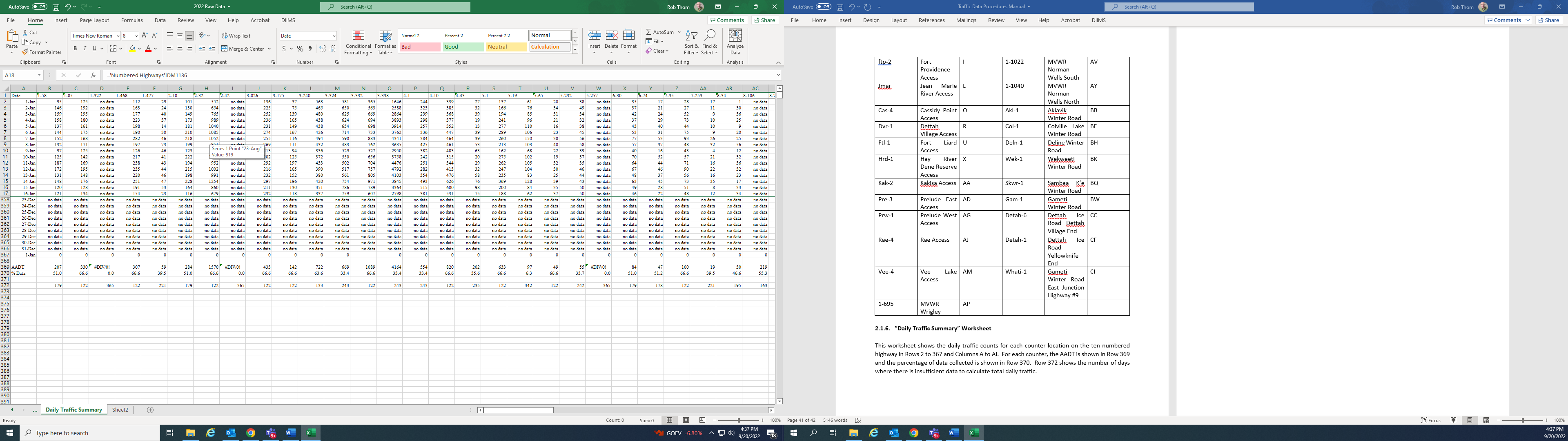
**Table 1-3 Column References for Counters Listed in “Access & Winter Roads” Worksheet**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Counter ID** | **Description** | **Column** | **Counter ID** | **Description** | **Column** |
| sim-1 | Fort Simpson Access | F | 1-914 | MVWR Deline Junction | AS |
| ftp-2 | Fort Providence Access | I | 1-1022 | MVWR Norman Wells South | AV |
| jmar | Jean Marie River Access | L | 1-1040 | MVWR Norman Wells North | AY |
| cas-4 | Cassidy Point Access | O | akl-1 | Aklavik Winter Road | BB |
| dvr-1 | Dettah Village Access | R | col-1 | Colville Lake Winter Road | BE |
| ftl-1 | Fort Liard Access | U | celn-1 | Deline Winter Road | BH |
| hrd-1 | Hay River Dene Reserve Access | X | wek-1 | Wekweeti Winter Road | BK |
| kak-2 | Kakisa Access | AA | skwr-1 | Sambaa K’e Winter Road | BQ |
| pre-3 | Prelude East Access | AD | gam-1 | Gameti Winter Road | BW |
| prw-1 | Prelude West Access | AG | detah-6 | Dettah Ice Road Dettah Village End | CC |
| rae-4 | Rae Access | AJ | detah-1 | Dettah Ice Road Yellowknife End | CF |
| vee-4 | Vee Lake Access | AM | whati-1 | Gameti Winter Road East Junction Highway #9 | CI |
| 1-695 | MVWR Wrigley | AP |  |  |  |

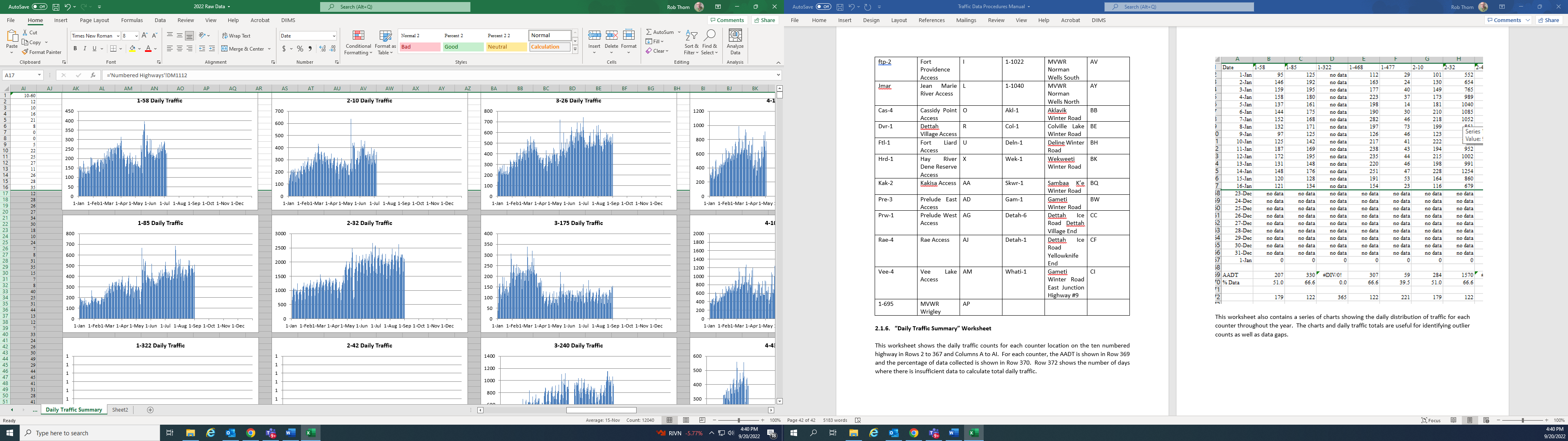
The monthly average daily traffic values in the “Access and Winter Roads” worksheet are used to populate Figures 2.4 and 2.5 of the annual NWT Highway Traffic Report.

**1.3 “Daily Traffic Summary” Worksheet**

This worksheet, for 2020 traffic data files and onward, shows the daily traffic counts for each counter location on the ten numbered highways in Rows 2 to 367 and Columns A to AI. For each counter, the AADT is shown in Row 369 and the percentage of data collected is shown in Row 370. Row 372 shows the number of days where there is insufficient data to calculate total daily traffic.



This worksheet also contains a series of charts showing the daily distribution of traffic for each counter on the numbered highways throughout the year. The charts and daily traffic totals are useful for identifying outlier counts as well as data gaps.



**1.4 “Sheet2” Worksheet**

This essentially blank worksheet is used to paste the raw data from the TXT files and to apply the “Convert Text to Columns Wizard” utility to put the date, hour, and counts into separate columns, This worksheet can also be used to estimate counts where data is missing by averaging counts from other date ranges or from another counter location.