

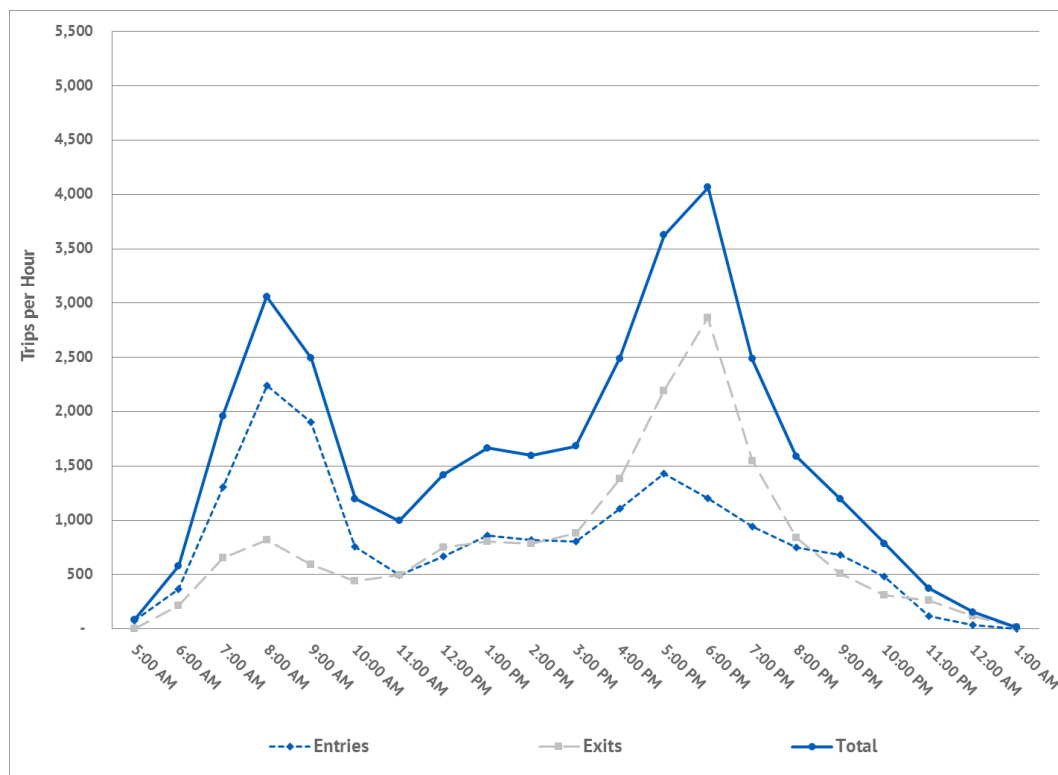
Highlights

Entry/exit station data helps to show how trips occur throughout the day and if they are consolidated during the peak hours or more spread out throughout the day. The Pentagon City Metro Station shows higher midday and evening trips because of the high concentration of retail and retail jobs within the station area.

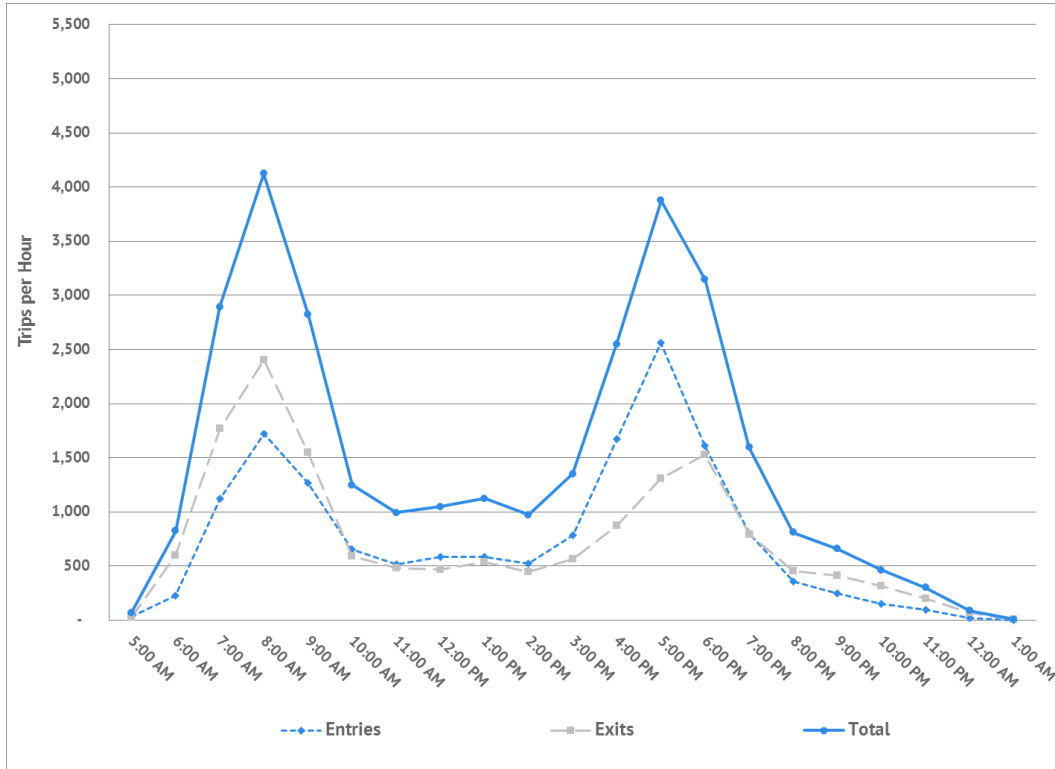
Description

These charts and tables, originally developed as part of the review of the PenPlace site plan in 2010, show the number of passenger trips entering and exiting Metrorail stations each hour, over the course of one day. Specifically the data is from May 12th, 2010. This snap shot of data is analogous of the activities on a typical weekday in 2010, when Metrorail Ridership at the Crystal City, Pentagon, and Pentagon City Stations was at its peak.

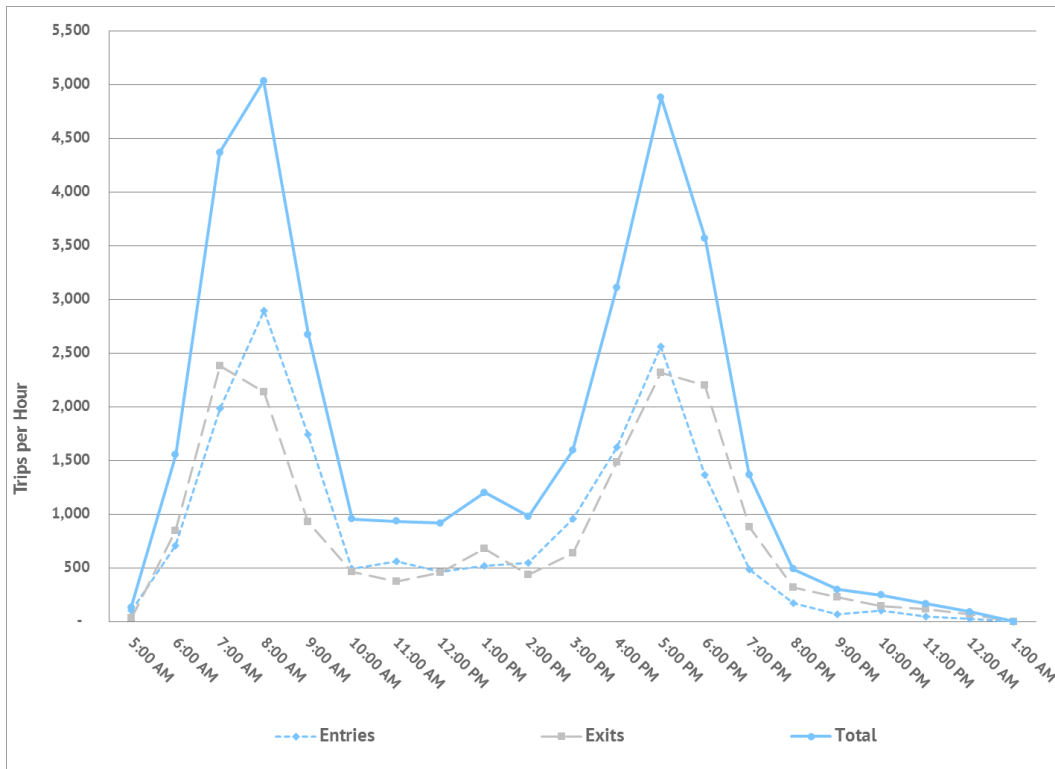
Pentagon City – Hourly Metrorail Ridership for Wednesday May 12th, 2010



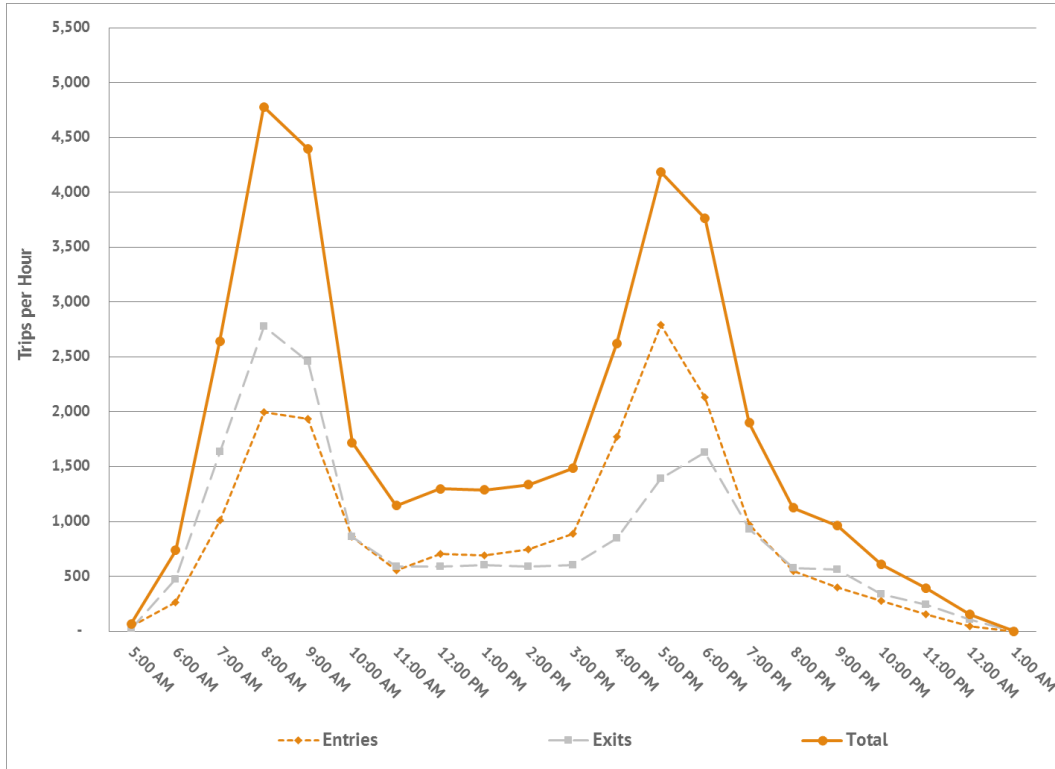
Crystal City – Hourly Metrorail Ridership for Wednesday May 12th, 2010



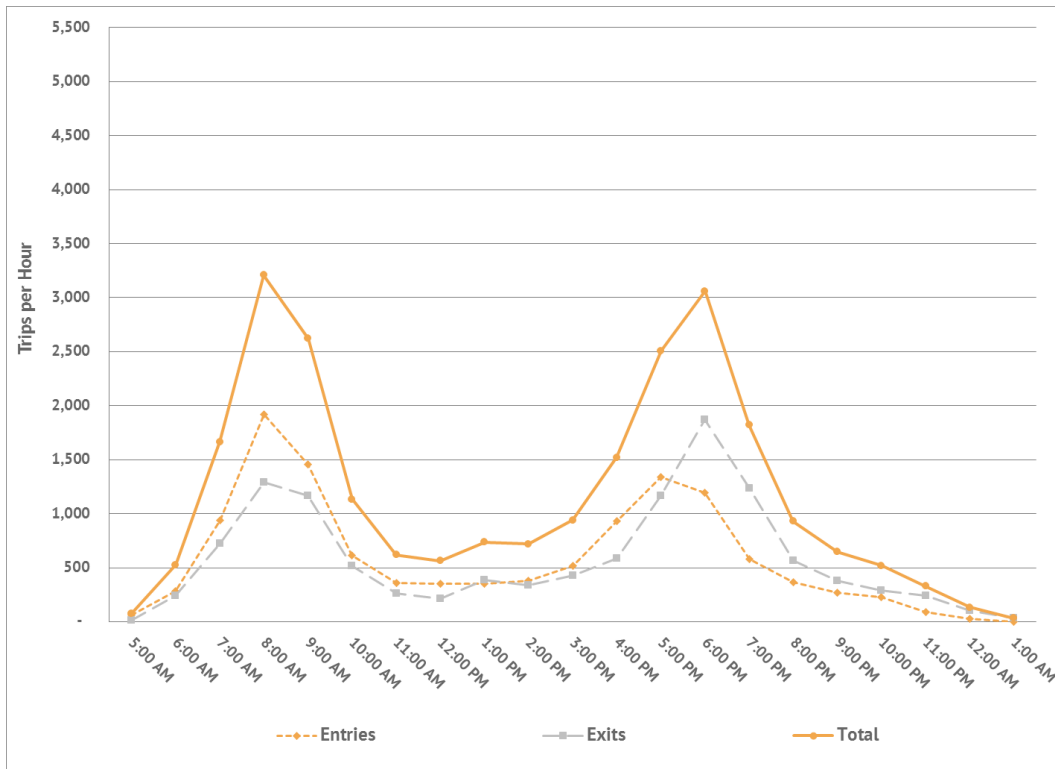
Pentagon – Hourly Metrorail Ridership for Wednesday May 12th, 2010



Rosslyn – Hourly Metrorail Ridership for Wednesday May 12th, 2010



Ballston - MU – Hourly Metrorail Ridership for Wednesday May 12th, 2010



Context in Planning Spectrum

Where in the planning spectrum does this data get used typically?



Background

Entry/exit station data helps to show how trips occur throughout the day and if they are consolidated during the peak hours or more spread out throughout the day. The data also helps illustrate how station entries and exits may or may not be relatively balanced. The daily totals shown here will likely be different from the average weekday numbers also shown as part of this report; as such they should not be directly compared or interchanged.

The flow of passengers in and out of a station is principally influenced by the surrounding land uses and transfers from surface transit and carpool modes. These trends don't normally significantly change on a daily or yearly basis. Two factors contribute to high levels of entries in the morning and conversely exits in the evening 1) the amount and density of surrounding residential land uses and 2) the number of transfers from buses or carpools that serve the station. In cases outside of Arlington, large park and ride lots can take the place of residential land use adding to morning entries. Normally high levels of station exits in the morning and entries in the evening are the result of the number and concentration of jobs surrounding the station. In addition, large amounts of retail close to a station can spread out trips throughout the day and into the evening.

Findings/Conclusions

- This data is best used to generally look at station activities throughout the day.
- The Pentagon City Metro Station shows higher midday and evening trips than other stations. It is one of the busiest stations over the course of a weekday because of the high concentration of retail and retail jobs within the station area.
- The AM peak period activity at Pentagon City Metro Station is more in line with the activity at the Ballston-MU Metro Station, however, a review of the Pentagon City Station's daily ridership shows it actually has a similar number of total riders to Rosslyn.
- Even though ridership is higher at Rosslyn, the distribution of trips throughout the day is extremely similar to what is observed at Crystal City.
- The data shown is over five years old now, however, since development activities have remained relatively flat during the same time period the data continues to help explain typical activities at the Metrorail stations within the 22202 zip code area.

Data Source

This data was provided to Arlington County in 2010 from the Washington Metropolitan Area Transit Authority. The original data linked below provides entry and exit counts each half hour for all Metrorail stations in operation on Wednesday, May 12, 2010 as part of the Pen Place site plan review. For reference, Arlington County staff compiled and charted data for all Arlington stations. This data can be found in the attached PDF.

Data Tables

<u>Hour Beginning</u>	<u>Entries</u>	Pentagon City <u>Exits</u>	<u>Total</u>
5:00 AM	77	4	81
6:00 AM	367	214	581
7:00 AM	1,309	650	1,959
8:00 AM	2,240	818	3,058
9:00 AM	1,903	590	2,493
10:00 AM	757	440	1,197
11:00 AM	498	498	996
12:00 PM	668	748	1,416
1:00 PM	860	806	1,666
2:00 PM	816	781	1,597
3:00 PM	803	878	1,681
4:00 PM	1,109	1,380	2,489
5:00 PM	1,430	2,195	3,625
6:00 PM	1,200	2,865	4,065
7:00 PM	939	1,548	2,487
8:00 PM	751	838	1,589
9:00 PM	683	512	1,195
10:00 PM	480	307	787
11:00 PM	115	260	375
12:00 AM	38	116	154
<u>1:00 AM</u>	<u>0</u>	<u>11</u>	<u>11</u>
Daily Total	17,043	16,459	33,502

Crystal City

<u>Hour Beginning</u>	<u>Entries</u>	<u>Exits</u>	<u>Total</u>
5:00 AM	37	31	68
6:00 AM	227	598	825
7:00 AM	1,120	1,773	2,893
8:00 AM	1,719	2,405	4,124
9:00 AM	1,268	1,553	2,821
10:00 AM	656	593	1,249
11:00 AM	516	479	995
12:00 PM	584	465	1,049
1:00 PM	585	539	1,124
2:00 PM	524	448	972
3:00 PM	784	568	1,352
4:00 PM	1,674	876	2,550
5:00 PM	2,563	1,312	3,875
6:00 PM	1,615	1,532	3,147
7:00 PM	800	795	1,595
8:00 PM	357	453	810
9:00 PM	250	410	660
10:00 PM	150	314	464
11:00 PM	99	203	302
12:00 AM	19	70	89
<u>1:00 AM</u>	<u>1</u>	<u>9</u>	<u>10</u>
<i>Daily Total</i>	15,548	15,426	30,974

<u>Hour Beginning</u>	<u>Entries</u>	Rosslyn <u>Exits</u>	<u>Total</u>
5:00 AM	46	22	68
6:00 AM	265	473	738
7:00 AM	1,007	1,637	2,644
8:00 AM	1,998	2,780	4,778
9:00 AM	1,934	2,461	4,395
10:00 AM	861	859	1,720
11:00 AM	555	589	1,144
12:00 PM	707	589	1,296
1:00 PM	688	600	1,288
2:00 PM	742	592	1,334
3:00 PM	886	600	1,486
4:00 PM	1,771	848	2,619
5:00 PM	2,790	1,394	4,184
6:00 PM	2,135	1,626	3,761
7:00 PM	970	929	1,899
8:00 PM	546	578	1,124
9:00 PM	401	560	961
10:00 PM	273	334	607
11:00 PM	152	242	394
12:00 AM	43	108	151
<u>1:00 AM</u>	<u>0</u>	<u>0</u>	<u>0</u>
<i>Daily Total</i>	18,770	17,821	36,591

Ballston -MU

<u>Hour Beginning</u>	<u>Entries</u>	<u>Exits</u>	<u>Total</u>
5:00 AM	63	12	75
6:00 AM	281	244	525
7:00 AM	939	726	1,665
8:00 AM	1,916	1,294	3,210
9:00 AM	1,457	1,166	2,623
10:00 AM	615	519	1,134
11:00 AM	357	261	618
12:00 PM	352	212	564
1:00 PM	352	385	737
2:00 PM	380	341	721
3:00 PM	517	425	942
4:00 PM	934	587	1,521
5:00 PM	1,340	1,167	2,507
6:00 PM	1,191	1,870	3,061
7:00 PM	583	1,238	1,821
8:00 PM	366	563	929
9:00 PM	271	377	648
10:00 PM	226	293	519
11:00 PM	90	238	328
12:00 AM	29	105	134
<u>1:00 AM</u>	<u>0</u>	<u>31</u>	<u>31</u>
<i>Daily Total</i>	12,259	12,054	24,313