

# Air Quality 2017 Midterm Report

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#### Abstract

Particulate Matter 2.5 (PM 2.5) is a serious air pollutant with major health impacts. We are monitoring the concentration of PM 2.5 in two high-traffic and heavy-use recreation facilities at UCLA, John Wooden Center and the Bruin Fitness Center, to investigate a potential air quality problem observed by the 201 SAR Air Quality team. To determine if there is an issue, we took measurements in 5 locations in John Wooden Center and 4 locations in Bruin Fitness Center at maximum and minimum usage times using the Dylos 1700, an air quality monitor recommended to us by Eon Lee, our postgraduate student adviser. After 5 weeks of measurements and basic data analysis, we do not anticipate finding a PM 2.5 air quality issue in either of these facilities. This good news opens up the potential for reducing the number of air exchanges in Wooden Center for energy and cost savings.

#### Introduction/Background

Last year's indoor air quality Sustainability Action Research team originally planned on conducting research on the air filtration systems within the John Wooden Center. However, they changed the course of their project after discovering that the system was broken. Instead, they shifted their project to investigate the overall air quality at Wooden. Using the Q-trak and DustTrak devices, they collected data on carbon dioxide and PM 2.5 concentrations in 10 locations within the facility, three times a day, for a week. Their results showed elevated PM 2.5 levels in the weight room. Although the results were concerning, the sample size was not large enough to declare it an issue and further research was recommended.

The findings of the previous team provided a foundation for the Air Quality team this year. Our goal was to conduct more extensive research on the air quality at the John Wooden

Center, especially in the weight rooms where elevated rates of carbon dioxide and PM 2.5 had previously been detected. We expanded to include the Bruin Fitness Center to identify any trends in the air quality between the two facilities and to determine if the issue found last year was John Wooden Center specific. Rather than collect data on both carbon dioxide and PM 2.5, our team decided to focus solely on PM 2.5 because of its negative human health. After collecting and analyzing our data, we planned to either provide suggestions to improve the indoor air quality of the facilities if we found an air quality issue or explore ways to improve sustainability relating to air quality and public health within UCLA Recreation if we did not.

Previous research on air quality has emphasized the significance of indoor air quality on health, because people spend about 90 percent of their time indoors (The Inside Story). Maintaining a healthy indoor air quality is especially important in fitness centers because they are high-traffic areas where strenuous activity takes place. Factors such as poor ventilation, issues controlling temperature, high or low humidity, recent construction or renovation, and the presence of mold, cleaning supplies, pesticides, and airborne chemicals all affect air quality, and human health as a result (The Inside Story). Among these different factors, there is a general consensus throughout the literature that pollution that is classified as PM 2.5 and PM10 have the greatest effect on indoor air quality and public health (Binder et al; Branis et al, 2005; Fromme et al, 2008). Since indoor particulate matter is primarily generated by human activities, high levels of PM 2.5 can be mitigated with appropriate countermeasures (Fromme et al, 2008). Particulate matter is especially concerning because of its ability to penetrate deep into the lungs and enter the bloodstream. Research has shown that the tiny particles can cause throat and lung irritation, coughing, sneezing, and even worsen medical conditions such as asthma (Ambient). PM 2.5 affects various people in different ways, but overall has a negative effect on human health.

Although the Occupational Safety and Health Administration currently does not have standards defining the maximum limit of indoor PM 2.5, other agencies have established guidelines to maximize indoor air quality by regulating outdoor air quality and proper air ventilation inside. The Environmental Protection Agency has 24-hour and primary annual standards for outdoor PM2.5, of 35g/m3 and 12 g/m3 respectively, which are the benchmarks we will compare our findings to (Ambient Air).

The most common method to improve indoor air quality is the installation of an air filtration system. Studies have used models to estimate percent reduction in indoor particle mass concentration taking many factors into account including air flow rates, indoor air volution, particle removal efficiency of various filters, among many other factors, to create the most accurate models. They also estimated the overall cost of each type of filter over its lifetime, including the energy cost, filter replacement frequencies, and cost per filter. Although the results showed that the highest grade of filter, HEPA, was the most effective at reducing particulate matter concentrations, it had modest difference from the second filter, MERV (Fisk *et al*, 2001).

#### Methodology

#### Stage 1: Planning & Strategies

We decided to measure PM 2.5 in John Wooden Center and the Bruin Fitness Center for a period of 6 weeks, rather than the 1 week measured last year, to improve our dataset and get more conclusive results. We used a similar measurement methodology as last year's team, measuring multiple areas in large rooms and a single area in smaller rooms, but rather than conducting three, twenty minute tests, three times a day - morning, afternoon, and evening, we tested the rooms twice a day - once during the maximum-use period, and once during the minimum-use period - to determine if there was a correlation between facility usage and air quality. Our stakeholder, Katie Zeller, provided us with room count data for the John Wooden Recreation Center, which included the number of people in each room every day every hour for 2016. Our team randomly chose and analyzed 26 days out of the year to determine the minimum and maximum usage times of this facility. We also used this data to decide which rooms in the facility we wanted to measure. We choose to measure the weight room and cardio room because they are the most heavily used rooms in the facility, so any air quality issue there would have the strongest effect on the UCLA community. Based on the room count data, we decided to have one testing interval at the minimum usage time between 7:00 - 8:00 a.m. and one testing interval at the maximum usage time between 5:00 p.m. - 6:00 p.m., Monday through Friday. Our initial measurement period was between February 13th, 2017 - March 17th, 2017. We will also take measurements during the first week of Spring quarter from April 3rd-April 7th to gather data to account for changes in gym usage due to starting a new quarter.

In addition to testing three locations in the weight room and one location in the cardio room in John Wooden Recreation, we decided to test two locations in the weight room and one location in the cardio room at the Bruin Fitness Center to determine if any potential issue in Wooden was localized or UCLA Recreation-wide. Later in the quarter, beginning February 28th, we added an additional measurement location outside each gym to normalize our data based on ambient air quality - bringing our total measurement locations to 9.

#### Stage 2: Data Collection

We interviewed the building engineers for both gyms as they were giving us a tour of the facilities. The main three questions that we asked the building engineers were:

- Can you explain how air filtration, circulation, and exhaust work inside this facility?
- 2. What are the factors that influence indoor air quality at this facility and can you describe them?
- 3. If there was a air quality issue, what steps can be taken in order to find a solution?

Both building engineers were skeptical that there would be an air quality issue in the building. UCLA uses MERV 12 filters, which, while not the highest quality possible, are several times better than required and are energy efficient. There are steps that can be taken in the case of an air quality issue, but they are expensive and invasive - requiring an extra circulation system to be installed directly into a particular room or area. The building engineers advised us to formulate a solution to the air quality issue after finding one, as they were confident we would not –a claim our initial data analysis supports.

The air filtration systems of each building had interesting differences. The Bruin Fitness Center has no central air circulation system; because of its design, air circulates naturally through traffic out the main entrance. Air from the outside passes through a MERV 12 filter and sensors throughout the facility automatically open additional exhaust ports if they detect an issue. John Wooden Center, the older building, has a large central air circulation system with many filters and exhaust. Like the Bruin Fitness Center, most rooms in John Wooden Center use outside air, the highest quality air for an exhaust system. Unlike Bruin Fitness Center, John Wooden Center must keep its circulation system on at full power to always accommodate the maximum capacity of the gym. This is important during peak usage as the staff there do not keep track of current occupancy, but is less important during the new additional hours after 1:00 a.m. where building occupancy is below 20. This represents a potential area for energy savings that we have planned to investigate further.

Eon Lee, a postdoctoral student at UCLA, gave us a Dylos DC1700 Standard Laser Air Quality Monitor to take samples of PM 2.5. We used the monitor to take 3-minute air samples in each location, which we averaged to get each data point. From February 13th to March 8th we placed the Dylos monitor on the ground level at each gym and outside. From March 9th to March 17th we corrected our sampling methodology and started taking samples at about 1.6 meters above ground level at each gym and outside sampling location. This change was made after talking to Mr. Lee, who counseled us to measure at 1.6 meters off the ground since that was the level at which most students breathe during exercise. In order to asses the validity of our samples taken from February 13th-March 8<sup>th</sup>, we took an additional measurement at both ground level and at 1.6 meters above in one location of the weight rooms of both facilities to compare the two. We took this extra measurement from March 9th-March 17th and will continue from April 3rd-April 7th. If there is a significant difference between the two measurement techniques, we will expand our data collection period beyond April 7th to compensate. In winter quarter, we collected about 11 hours worth of air sample in B-Fit and 14 hours worth of air samples in Wooden. Our current dataset is included in Appendix A.

#### **Challenges and Difficulties**

Our team initially had a very straightforward goal for our research project due to the previous SAR team's conclusion that demonstrated the need for further research in the Wooden Center weight room. However, we encountered several issues throughout the quarter that arose in the early stages of developing our project.

One issue we faced early on was knowing we wanted to continue testing the of air quality

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in the weight room of John Wooden Center and other areas of the gym, but not having the proper equipment to do so. We communicated early on in the quarter with Professor Yifang Zhu, a professor in the UCLA Fielding School of Public Health, to inquire about seeking support on our project and perhaps using her air quality measurement devices. However, she took several weeks to respond to our emails. In the meantime, we utilized this time to learn more about indoor air quality by scheduling key informant interviews with recreation facility building engineers and touring the recreational facilities to gain a better understanding of how the air filtration and circulation systems impacted air quality in the John Wooden and B-Fit Recreation centers.

During the 5<sup>th</sup> week of the quarter, one of our team members scheduled an appointment to pick the Dylos air quality monitor. However, we were unfortunately unable to meet with Eon Lee, the postgraduate student who lent it to us, to receive immediate instructions and guidance on how to properly conduct air quality measurements. Instead, we relied on online tutorials on YouTube, the device's website, and trial and error in order to learn how to operate the device. Because we tried to teach ourselves how to use the machine, we had an imperfect understanding of it, which was not corrected until we met with Mr. Lee for the first time during 9th week.

During the first week of testing, we realized the importance of pointing the air intake area of the machine away from the wall and toward the open space. We learned that it was not feasible to take air quality measurements in the center of the different rooms since the battery mode was inconvenient and the machine needed to be reconnected to a power source between each measurement. Because of that, we changed our measurement locations to be near the outlets in each location. As previously mentioned, we also began measuring air quality outside during 8<sup>th</sup> week to serve as a baseline for indoor air quality, and changed measurement methodology again during 9<sup>th</sup> week, to measure air quality at 1.6 meters off the ground to be at breathing level

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height.

In addition to the challenges we had in establishing a consistent methodology to collect the data, we also had difficulty identifying potential solutions to an air quality issue if the data we collected supported the results from last year. During both facility tours, our inquiries on solutions to possible air quality issues such as higher quality filters and a greater number of filter changes were met with disapproval. As experts in their field, both building engineers were confident that there was little chance of an issue with the gym's air quality. For much of the quarter, we were concerned with the possibility of having feasible solution if there was indeed a air quality issue. However, this concern was unsubstantiated, as the preliminary results show no need for intervention and instead may suggest we alter the scope of our project to focus on other aspects of sustainability within UCLA recreation.

#### **Future Plans**

Moving forward, we plan to complete our data set with one more week of facility measurements. This final week will work to ensure a higher confidence interval for our work. However, preliminary data analysis has begun and shows excellent levels of air quality across the board. In some cases, air quality was found to be superior inside facilities than outside them; initial data analysis is included in Appendix B. It would be ineffective to find improvements to air quality as air quality is already in acceptable condition. We plan on sharing our findings and completed data set with our stakeholder, Katie Zeller after preliminary analysis.

Because we predict no air quality issue in either facility, our team is in need to change the scope of our project. With these preliminary results in mind, we have begun to brainstorm ideas for interesting and meaningful ways to pivot our project. One of the ideas we have considered is

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to create a focus group or conduct a survey to determine whether there are comfort issues in regards to air quality in John Wooden Center. While the hard data shows there is no issue at hand, qualitative data would add another dimension to our data analysis and may prove useful to facility management.

Another idea our team proposed was to pivot entirely away from air quality and look for other avenues to increase the sustainability of John Wooden Center as a building. This athletic center is one of the highest trafficked facilities on the university campus, and small sustainability increases would have a considerable effect on campus and environmental health. One avenue we are particularly interested in exploring is making changes in ventilation rates to lower energy costs and increase filter life span, while maintaining acceptable air quality. We anticipate pushback from management and would have to build a compelling case for this proposal if we decide to pursue it. This holistic facility sustainability approach can also include changes to energy utilization and energy source, lighting, water access, and other quality of life adjustments.

Spring quarter will be interesting as we explore with Katie Zeller possible new directions for our project after we complete our measurements and data analysis with Eon Lee. While the results were not what we expected based on last year's findings and leaves us without a specific path forward, not having an air quality problem is a good problem to have. Our team has faced a minor setback but we are optimistic about our future in SAR and our role in promoting campus sustainability.

### Works Cited

"Ambient Air Quality Standards (AAQS) for Particulate Matter." *Air Resources Board*. California Environmental Protection Agency, 01 Feb. 2001. Web. 28 Jan. 2017. <a href="https://www.arb.ca.gov/research/aaqs/pm/pm.htm">https://www.arb.ca.gov/research/aaqs/pm/pm.htm</a>.

Binder, R. E., Mitchell, C. A., Hosein, H. R., & Bouhuys, A. (1976). Importance of the Indoor Environment in Air Pollution Exposure. *Archives of Environmental Health: An International Journal*, *31*(6), 277–279. <u>https://doi.org/10.1080/00039896.1976.10667235</u>

Branis, M., Rezacova, P., & Domasova, M. (2005). The effect of outdoor air and indoor human activity on mass concentrations of PM10, PM2.5, and PM1 in a classroom. *Environmental Research*, *99*, 143–149. <u>https://doi.org/10.1016/j.envres.2004.12.001</u>

- Fisk, W. J., Faulkner, D., Palonen, J., & Seppanen, O. "Performance and Costs of Particle Air Filtration Technologies" *Indoor Air*. (2001): n. Pag. *Energy and Technologies Area (ETA)*. Berkeley Lab. Web. 25 Jan. 2017. <a href="https://eetd.lbl.gov/sites/all/files/lbnl-47833.pdf">https://eetd.lbl.gov/sites/all/files/lbnl-47833.pdf</a> >.
- Fromme, H., Diemer, J., Dietrich, S., Cyrys, J., Heinrich, J., Lang, W., Twardella, D. (2008). Chemical and morphological properties of particulate matter (PM10, PM 2.5) in school classrooms and outdoor air. *Atmospheric Environment*, 42, 6597–6605. <<u>https://doi.org/10.1016/j.atmosenv.2008.04.047</u>>.
- "The Inside Story: A Guide to Indoor Air Quality." *EPA*. Environmental Protection Agency, 31 May 2016. Web. 22 Jan. 2017.

j —	A	B	С	D	E
1	KEY - John Wooden Center	Weights L T1	Weights L T2	Weights L T3	Average
2	W6M - 2/13/17 - Morning	95	109	121	108.3333333
3	W6T - 2/14/17	824	829	902	851.6666667
4	W6W - 2/15/17	365	373	378	372
5	W6H - 2/16/17	2109	2081	2170	2120
6	W6F - 2/17/17	443	460	483	462
7	W7M - 2/20/17	Skip (President's	Day)		#DIV/0!
8	W7T - 2/21/17	375	388	402	388.3333333
9	W7W - 2/22/17	521	620	495	545.3333333
10	W7H - 2/23/17	172	190	199	187
11	W7F - 2/24/17	Overslept :(			#DIV/0!
12	W8M - 2/27/17	440	500	532	490.6666667
13	W8T - 2/28/17	287	321	300	302.6666667
14	W8W - 3/1/17	404	423	434	420.3333333
15	W8H - 3/2/17	130	140	145	138.3333333
16	W8F - 3/3/17	348	357	402	369
17	W9M - 3/6/17	787	654	572	671
18	W9T - 3/7/17	392	443	415	416.6666667
19	W9W - 3/8/17	Cord stopped wor	king		#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	318	385	383	362
22	W10M - 3/13/17	4319	4313	724	3118.666667
23	W10T - 3/14/17	639	718	751	702.6666667
24	W10W - 3/15/17	405	394	463	420.6666667
25	W10H - 3/16/17	1438	1444	1445	1442.333333
26	W10F - 3/17/17	892	907	927	908.6666667
27	S1M - 3/20/17				#DIV/0!
28	S11 - 3/21/17				#DIV/0!
29	S1W - 3/22/17				#DIV/0!
30	S1H - 3/23/17				#DIV/0!
31	S1F - 3/24/17				#DIV/0!

Appendix A John Wooden Center

22 22 - 11 - 11	A	В	С	D	E
32	KEY - John Wooden Center	Weights L T1	Weights L T2	Weights L T3	Average
33	W6M - 2/13/17 - Evening	621	613	620	618
34	W6T - 2/14/17	1266	1130	1001	1132.333333
35	W6W - 2/15/17	1043	765	1104	970.6666667
36	W6H - 2/16/17	397	418	475	430
37	W6F - 2/17/17	544	615	632	597
38	W7M - 2/20/17	(Skip- President's	Day)		#DIV/0!
39	W7T - 2/21/17				#DIV/0!
40	W7W - 2/22/17	407	458	447	437.3333333
41	W7H - 2/23/17	208	210	208	208.6666667
42	W7F - 2/24/17	529	699	580	602.6666667
43	W8M - 2/27/17	1416	1857	2341	1871.333333
44	W8T - 2/28/17	199	193	169	187
45	W8W - 3/1/17	342	333	417	364
46	W8H - 3/2/17	224	201	213	212.6666667
47	W8F - 3/3/17	383	362	277	340.6666667
48	W9M - 3/6/17	501	446	353	433.33333333
49	W9T - 3/7/17	541	517	1002	686.6666667
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	1485	1607	2065	1719
52	W9F - 3/10/17	529	574	602	568.3333333
53	W10M - 3/13/17				#DIV/0!
54	W101 - 3/14/17	2576	2712	2985	2/5/.66666/
55	W10W - 3/15/17	589	598	582	589.6666667
56	W10H - 3/16/17	1296	1382	1300	1326
57	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	S11 - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	S1H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!

2	F	G	Н	1	J
1	KEY	Weights Ground T1	Weights Ground T2	Weights Ground	Average
2	W6M - 2/13/17 - Morning				#DIV/0!
3	W6T - 2/14/17				#DIV/0!
4	W6W - 2/15/17				#DIV/0!
5	W6H - 2/16/17				#DIV/0!
6	W6F - 2/17/17				#DIV/0!
7	W7M - 2/20/17				#DIV/0!
8	W7T - 2/21/17				#DIV/0!
9	W7W - 2/22/17				#DIV/0!
10	W7H - 2/23/17				#DIV/0!
11	W7F - 2/24/17				#DIV/0!
12	W8M - 2/27/17				#DIV/0!
13	W8T - 2/28/17				#DIV/0!
14	W8W - 3/1/17				#DIV/0!
15	W8H - 3/2/17				#DIV/0!
16	W8F - 3/3/17				#DIV/0!
17	W9M - 3/6/17				#DIV/0!
18	W9T - 3/7/17				#DIV/0!
19	W9W - 3/8/17				#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	338	338	339	338.3333333
22	W10M - 3/13/17	3907	3888	3997	3930.666667
23	W10T - 3/14/17	620	634	613	622.3333333
24	W10H - 3/16/17	473	431	1410	1404
26	W10F - 3/17/17	829	820	856	835
27	S1M - 3/20/17				#DIV/0!
28	S1T - 3/21/17				#DIV/0!
29	S1W - 3/22/17				#DIV/0!
31	S1F - 3/24/17				#DIV/0!

	F	G	H	I	J
32	KEY	Weights Ground T1	Weights Ground T2	Weights Ground	Average
33	W6M - 2/13/17 - Evening				#DIV/0!
34	W6T - 2/14/17				#DIV/0!
35	W6W - 2/15/17				#DIV/0!
36	W6H - 2/16/17				#DIV/0!
37	W6F - 2/17/17				#DIV/0!
38	W7M - 2/20/17				#DIV/0!
39	W7T - 2/21/17				#DIV/0!
40	W7W - 2/22/17				#DIV/0!
41	W7H - 2/23/17				#DIV/0!
42	W7F - 2/24/17				#DIV/0!
43	W8M - 2/27/17				#DIV/0!
44	W8T - 2/28/17				#DIV/0!
45	W8W - 3/1/17				#DIV/0!
46	W8H - 3/2/17				#DIV/0!
47	W8F - 3/3/17				#DIV/0!
48	W9M - 3/6/17				#DIV/0!
49	W9T - 3/7/17				#DIV/0!
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	1276	1268	1395	1313
52	W9F - 3/10/17				#DIV/0!
53	W10M - 3/13/17				#DIV/0!
54	W10T - 3/14/17	2570	2598	2449	2539
55	W10W - 3/15/17	554	625	589	589.3333333
56	W10H - 3/16/17	1112	1091	1234	1145.666667
57	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	S1T - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	S1H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!

	K	L	М	N	0
1	KEY	Weights M T1	Weights M T2	Weights M T3	Average
2	W6M - 2/13/17 - Morning	94	114	109	105.6666667
3	W6T - 2/14/17	629	625	648	634
4	W6W - 2/15/17	296	282	290	289.3333333
5	W6H - 2/16/17	2145	2306	2437	2296
6	W6F - 2/17/17	263	269	276	269.3333333
7	W7M - 2/20/17				#DIV/0!
8	W7T - 2/21/17	390	403	409	400.6666667
9	W7W - 2/22/17	463	479	485	475.6666667
10	W7H - 2/23/17	368	381	374	374.3333333
11	W7F - 2/24/17				#DIV/0!
12	W8M - 2/27/17	342	344	360	348.6666667
13	W8T - 2/28/17	242	227	248	239
14	W8W - 3/1/17	223	225	239	229
15	W8H - 3/2/17	415	420	423	419.3333333
16	W8F - 3/3/17	151	155	162	156
17	W9M - 3/6/17	183	176	183	180.6666667
18	W9T - 3/7/17	255	197	197	216.3333333
19	W9W - 3/8/17				#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	343	392	380	371.6666667
22	W10M - 3/13/17	3430	3563	3525	3506
23	W10T - 3/14/17	490	532	557	526.3333333
24	W10W - 3/15/17	450	448	452	450
25	W10H - 3/16/17	1397	1405	1409	1403.666667
20	S1M 2/20/17	781	743	758	#DIV/01
28	S1T - 3/21/17				#DIV/01
29	S1W - 3/22/17				#DIV/01
30	S1H - 3/23/17				#DIV/0!
31	S1F - 3/24/17				#DIV/0!

	К	L	М	N	0
32	KEY	Weights M T1	Weights M T2	Weights M T3	Average
33	W6M - 2/13/17 - Evening	541	552	554	549
34	W6T - 2/14/17	932	1011	914	952.3333333
35	W6W - 2/15/17	648	672	699	673
36	W6H - 2/16/17	576	717	761	684.6666667
37	W6F - 2/17/17	612	630	645	629
38	W7M - 2/20/17				#DIV/0!
39	W7T - 2/21/17	422	417	380	406.3333333
40	W7W - 2/22/17	377	444	436	419
41	W7H - 2/23/17	341	527	627	498.3333333
42	W7F - 2/24/17	304	321	307	310.6666667
43	W8M - 2/27/17	425	432	472	443
44	W8T - 2/28/17	554	584	674	604
45	W8W - 3/1/17	343	348	369	353.3333333
46	W8H - 3/2/17	246	261	259	255.3333333
47	W8F - 3/3/17	241	260	244	248.3333333
48	W9M - 3/6/17	407	407	359	391
49	W9T - 3/7/17	377	387	391	385
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	1181	1227	1333	1247
52	W9F - 3/10/17	314	287	286	295.6666667
53	W10M - 3/13/17				#DIV/0!
54	W10T - 3/14/17	2664	2859	2959	2827.333333
55	W10W - 3/15/17	526	523	557	535.3333333
56	W10H - 3/16/17	780	745	960	828.3333333
57	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	S1T - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	S1H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!

	Р	Q	R	S	Т
1	KEY	Weights R T1	Weights R T2	Weights R T3	Average
2	W6M - 2/13/17 - Morning	87	80	98	88.33333333
3	W6T - 2/14/17	640	621	616	625.6666667
4	W6W - 2/15/17	224	233	213	223.3333333
5	W6H - 2/16/17	2154	2165	2254	2191
6	W6F - 2/17/17	261	282	292	278.3333333
7	W7M - 2/20/17				#DIV/0!
8	W7T - 2/21/17	350	366	370	362
9	W7W - 2/22/17	522	536	522	526.6666667
10	W7H - 2/23/17	514	514	466	498
11	W7F - 2/24/17				#DIV/0!
12	W8M - 2/27/17	327	342	344	337.6666667
13	W8T - 2/28/17	218	206	196	206.6666667
14	W8W - 3/1/17	183	183	176	180.6666667
15	W8H - 3/2/17	185	189	195	189.6666667
16	W8F - 3/3/17	118	113	112	114.3333333
17	W9M - 3/6/17	179	164	186	176.3333333
18	W9T - 3/7/17	161	179	161	167
19	W9W - 3/8/17				#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	447	427	420	431.3333333
22	W10M - 3/13/17	3554	3690	3430	3558
23	W10T - 3/14/17	477	460	478	471.6666667
24	W10W - 3/15/17	468	474	498	480
25	W10H - 3/16/17	1380	1387	1392	1386.333333
20	VV IUF - 3/17/17 S1M - 2/20/17	848	810	791	810.3333333 #DIV/01
28	S1T - 3/21/17				#DIV/01
29	S1W - 3/22/17				#DIV/01
30	S1H - 3/23/17				#DIV/01
31	S1F - 3/24/17				#DIV/0!

	Р	Q	R	S	Т
32	KEY	Weights R T1	Weights R T2	Weights R T3	Average
33	W6M - 2/13/17 - Evening	434	451	430	438.3333333
34	W6T - 2/14/17	879	933	937	916.3333333
35	W6W - 2/15/17	602	632	590	608
36	W6H - 2/16/17	501	510	498	503
37	W6F - 2/17/17	398	380	306	361.3333333
38	W7M - 2/20/17				#DIV/0!
39	W7T - 2/21/17	282	320	294	298.6666667
40	W7W - 2/22/17	276	282	268	275.3333333
41	W7H - 2/23/17	286	297	300	294.3333333
42	W7F - 2/24/17	225	241	241	235.6666667
43	W8M - 2/27/17	352	355	337	348
44	W8T - 2/28/17	237	212	206	218.3333333
45	W8W - 3/1/17	252	273	343	289.3333333
46	W8H - 3/2/17	296	318	374	329.3333333
47	W8F - 3/3/17	394	288	285	322.3333333
48	W9M - 3/6/17	294	306	319	306.3333333
49	W9T - 3/7/17	584	1301	397	760.6666667
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	1085	1037	1086	1069.333333
52	W9F - 3/10/17	269	273	260	267.3333333
53	W10M - 3/13/17				#DIV/0!
54	W10T - 3/14/17	2192	2191	1981	2121.333333
55	W10W - 3/15/17	634	706	526	622
56	W10H - 3/16/17	940	979	896	938.3333333
57	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	S1T - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	S1H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!

	U	V	W	Х	Y
1	KEY	Cardio T1	Cardio T2	Cardio T3	Average
2	W6M - 2/13/17 - Morning	117	118	118	117.6666667
3	W6T - 2/14/17	263	253	258	258
4	W6W - 2/15/17	132	118	119	123
5	W6H - 2/16/17	709	710	791	736.6666667
6	W6F - 2/17/17	175	192	192	186.3333333
7	W7M - 2/20/17				#DIV/0!
8	W7T - 2/21/17	202	210	222	211.3333333
9	W7W - 2/22/17	265	271	288	274.6666667
10	W7H - 2/23/17	100	91	85	92
11	W7F - 2/24/17				#DIV/0!
12	W8M - 2/27/17	227	209	214	216.6666667
13	W8T - 2/28/17	397	392	377	388.6666667
14	W8W - 3/1/17	134	164	121	139.6666667
15	W8H - 3/2/17	146	151	155	150.6666667
16	W8F - 3/3/17	86	70	85	80.33333333
17	W9M - 3/6/17	126	131	84	113.6666667
18	W9T - 3/7/17	75	81	80	78.66666667
19	W9W - 3/8/17				#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	132	126	141	133
22	W10M - 3/13/17	709	846	908	821
23	W10T - 3/14/17	219	230	263	237.3333333
24	W10W - 3/15/17	194	219	278	230.3333333
25	W10H - 3/16/17	498	502	505	501.66666667
26	W10F - 3/17/17	452	512	529	497.66666667
21	STW - 3/20/17				#DIV/01
20	S1W - 3/22/17				#DIV/01
30	S1H - 3/23/17				#DIV/01
31	S1F - 3/24/17				#DIV/0!

	U	V	W	Х	Y
32	KEY	Cardio T1	Cardio T2	Cardio T3	Average
33	W6M - 2/13/17 - Evening	256	276	289	273.6666667
34	W6T - 2/14/17	329	325	317	323.6666667
35	W6W - 2/15/17	327	364	309	333.33333333
36	W6H - 2/16/17	383	391	380	384.6666667
37	W6F - 2/17/17	260	290	299	283
38	W7M - 2/20/17				#DIV/0!
39	W7T - 2/21/17	262	257	239	252.6666667
40	W7W - 2/22/17	303	291	291	295
41	W7H - 2/23/17	271	251	248	256.6666667
42	W7F - 2/24/17	195	214	202	203.6666667
43	W8M - 2/27/17	239	271	285	265
44	W8T - 2/28/17	164	124	176	154.6666667
45	W8W - 3/1/17	115	109	115	113
46	W8H - 3/2/17	156	195	187	179.3333333
47	W8F - 3/3/17	<mark>1</mark> 17	128	130	125
48	W9M - 3/6/17	189	182	184	185
49	W9T - 3/7/17	192	178	199	189.6666667
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	299	302	308	303
52	W9F - 3/10/17	142	134	138	138
53	W10M - 3/13/17				#DIV/0!
54	W10T - 3/14/17	726	831	1040	865.6666667
55	W10W - 3/15/17	305	320	415	346.6666667
56	W10H - 3/16/17	361	418	469	416
57	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	S1T - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	S1H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!

	Z	AA	AB	AC	AD
1	KEY	Outside T1	Outside T2	Outside T3	Average
2	W6M - 2/13/17 - Morning				#DIV/0!
3	W6T - 2/14/17				#DIV/0!
4	W6W - 2/15/17				#DIV/0!
5	W6H - 2/16/17				#DIV/0!
6	W6F - 2/17/17				#DIV/0!
7	W7M - 2/20/17				#DIV/0!
8	W7T - 2/21/17				#DIV/0!
9	W7W - 2/22/17				#DIV/0!
10	W7H - 2/23/17				#DIV/0!
11	W7F - 2/24/17				#DIV/0!
12	W8M - 2/27/17				#DIV/0!
13	W8T - 2/28/17	392	373	377	380.6666667
14	W8W - 3/1/17	452	479	452	461
15	W8H - 3/2/17	285	299	306	296.6666667
16	W8F - 3/3/17	263	257	279	266.3333333
17	W9M - 3/6/17	240	216	252	236
18	W9T - 3/7/17	418	414	414	415.3333333
19	W9W - 3/8/17				#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	1409	1483	1565	1485.666667
22	W10M - 3/13/17	13241	13367		13304
23	W10T - 3/14/17	2131	2211	2188	2176.666667
24	W10W - 3/16/17	1954	2059	1817	4837 666667
26	W10F - 3/17/17	3172	3145	3245	3187 333333
27	S1M - 3/20/17			-2.10	#DIV/0!
28	S1T - 3/21/17				#DIV/0!
29	S1W - 3/22/17				#DIV/0!
30	S1H - 3/23/17				#DIV/0!
31	S1F - 3/24/17				#DIV/0!

	Z	AA	AB	AC	AD
32	KEY	Outside T1	Outside T2	Outside T3	Average
33	W6M - 2/13/17 - Evening				#DIV/0!
34	W6T - 2/14/17				#DIV/0!
35	W6W - 2/15/17				#DIV/0!
36	W6H - 2/16/17				#DIV/0!
37	W6F - 2/17/17				#DIV/0!
38	W7M - 2/20/17				#DIV/0!
39	W7T - 2/21/17				#DIV/0!
40	W7W - 2/22/17				#DIV/0!
41	W7H - 2/23/17	405	391	360	385.3333333
42	W7F - 2/24/17				#DIV/0!
43	W8M - 2/27/17	975	912	875	920.6666667
44	W8T - 2/28/17	382	362	383	375.6666667
45	W8W - 3/1/17	483	490	458	477
46	W8H - 3/2/17	323	258	280	287
47	W8F - 3/3/17	376	510	353	413
48	W9M - 3/6/17	766	726	698	730
49	W9T - 3/7/17	852	792	769	804.3333333
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	3265	3517	2482	3088
52	W9F - 3/10/17	754	827	817	799.3333333
53	W10M - 3/13/17				#DIV/0!
54	W10T - 3/14/17	4013	4524	4837	4458
55	W10W - 3/15/17	1179	1271	1274	1241.333333
56	W10H - 3/16/17	2245	2253	2264	2254
57	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	S1T - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	S1H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!

	AE	AF	AG	AH	AI
1	KEY - Bruin Fitness Center	Weights F T1	Weights F T2	Weights F T3	Average
2	W6M - 2/13/17 - Morning	205	215	219	213
3	W6T - 2/14/17	724	777	798	766.3333333
4	W6W - 2/15/17	519	518	529	522
5	W6H - 2/16/17	2081	2158	2159	2132.666667
6	W6F - 2/17/17	566	560	581	569
7	W7M - 2/20/17				#DIV/0!
8	W7T - 2/21/17	504	515	529	516
9	W7W - 2/22/17	661	629	614	634.6666667
10	W7H - 2/23/17	269	253	246	256
11	W7F - 2/24/17				#DIV/0!
12	W8M - 2/27/17				536
13	W8T - 2/28/17	424	418	418	420
14	W8W - 3/1/17	326	350	336	337.3333333
15	W8H - 3/2/17	100	106	110	105.3333333
16	W8F - 3/3/17	320	333	385	346
17	W9M - 3/6/17	285	294	168	249
18	W9T - 3/7/17	399	420	437	418.6666667
19	W9W - 3/8/17				#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	867	852	877	865.3333333
22	W10M - 3/13/17	3468	3785	4046	3766.333333
23	W10T - 3/14/17	1009	1171	1126	1102
24	W10W - 3/15/17	563	593	598	584.6666667
25	W10H - 3/16/17	3633	3635	3640	3636
20	WIUF - 3/1//1/ S1M 2/20/47	1330	1413	1420	1389.000007 #DIV/01
28	S1T - 3/21/17				#DIV/01
29	S1W - 3/22/17				#DIV/01
30	S1H - 3/23/17				#DIV/01
31	S1F - 3/24/17				#DIV/0!

**Bruin Fitness Center** 

5	AE	AF	AG	AH	AI
32	KEY - Bruin Fitness Center	Weights F T1	Weights F T2	Weights F T3	Average
33	W6M - 2/13/17 - Evening	539	582	498	539.6666667
34	W6T - 2/14/17	602	627	657	628.6666667
35	W6W - 2/15/17	1008	1078	1025	1037
36	W6H - 2/16/17	767	726	886	793
37	W6F - 2/17/17				#DIV/0!
38	W7M - 2/20/17				#DIV/0!
39	W7T - 2/21/17	932	995	996	974.3333333
40	W7W - 2/22/17	330	350	336	338.6666667
41	W7H - 2/23/17	404	400	399	401
42	W7F - 2/24/17	393	378	449	406.6666667
43	W8M - 2/27/17	508	477	651	545.3333333
44	W8T - 2/28/17	334	380	262	325.3333333
45	W8W - 3/1/17	238	242	269	249.6666667
46	W8H - 3/2/17	239	233	217	229.6666667
47	W8F - 3/3/17	334	317	359	336.6666667
48	W9M - 3/6/17	320	329	297	315.3333333
49	W9T - 3/7/17	451	382	428	420.3333333
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	1071	1086	981	1046
52	W9F - 3/10/17	BUCK BOLLA			#DIV/0!
53	W10M - 3/13/17	000000			#DIV/0!
54	W10T - 3/14/17	2408	2375	2127	2303.333333
55	W10W - 3/15/17	539	562	624	575
56	W10H - 3/16/17	1325	1284	1308	1305.666667
57	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	S1T - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	S1H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!

	AJ	AK	AL	AM	AN
1	KEY	Weights Ground	Weights Ground	Weights Ground	Average
2	W6M - 2/13/17 - Morning				#DIV/0!
3	W6T - 2/14/17				#DIV/0!
4	W6W - 2/15/17				#DIV/0!
5	W6H - 2/16/17				#DIV/0!
6	W6F - 2/17/17				#DIV/0!
7	W7M - 2/20/17				#DIV/0!
8	W7T - 2/21/17				#DIV/0!
9	W7W - 2/22/17				#DIV/0!
10	W7H - 2/23/17				#DIV/0!
11	W7F - 2/24/17				#DIV/0!
12	W8M - 2/27/17				#DIV/0!
13	W8T - 2/28/17				#DIV/0!
14	W8W - 3/1/17				#DIV/0!
15	W8H - 3/2/17				#DIV/0!
16	W8F - 3/3/17				#DIV/0!
17	W9M - 3/6/17				#DIV/0!
18	W9T - 3/7/17				#DIV/0!
19	W9W - 3/8/17				#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	797	928	1014	913
22	W10M - 3/13/17	3496	3313	3158	3322.333333
23	W10T - 3/14/17	1138	11/5	1124	1145.666667
25	W10H - 3/16/17	3600	3611	3615	3608 666667
26	W10F - 3/17/17	1240	1244	1275	1253
27	S1M - 3/20/17				#DIV/0!
28	S1T - 3/21/17				#DIV/0!
29	S1W - 3/22/17 S1H - 3/23/17				#DIV/01
31	S1F - 3/24/17				#DIV/0!

	AJ	AK	AL	AM	AN
32	KEY	Weights Ground	Weights Ground	Weights Ground	Average
33	W6M - 2/13/17 - Evening				#DIV/0!
34	W6T - 2/14/17				#DIV/0!
35	W6W - 2/15/17				#DIV/0!
36	W6H - 2/16/17				#DIV/0!
37	W6F - 2/17/17				#DIV/0!
38	W7M - 2/20/17				#DIV/0!
39	W7T - 2/21/17				#DIV/0!
40	W7W - 2/22/17				#DIV/0!
41	W7H - 2/23/17				#DIV/0!
42	W7F - 2/24/17				#DIV/0!
43	W8M - 2/27/17				#DIV/0!
44	W8T - 2/28/17				#DIV/0!
45	W8W - 3/1/17				#DIV/0!
46	W8H - 3/2/17				#DIV/0!
47	W8F - 3/3/17				#DIV/0!
48	W9M - 3/6/17				#DIV/0!
49	W9T - 3/7/17				#DIV/0!
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	981	1071	1184	1078.666667
52	W9F - 3/10/17				#DIV/0!
53	W10M - 3/13/17				#DIV/0!
54	W101 - 3/14/17	21/3	2155	2095	2141
55	W10W - 3/15/17	513	458	536	502.3333333
56	W10H - 3/16/17	114	1241	1223	859.3333333
5/	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	511 - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	51H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!

	AO	AP	AQ	AR	AS
1	KEY	Weights B T1	Weights B T2	Weights B T3	Average
2	W6M - 2/13/17 - Morning	121	135	131	129
3	W6T - 2/14/17	771	804	766	780.3333333
4	W6W - 2/15/17	458	435	424	439
5	W6H - 2/16/17	1952	1094	1916	1654
6	W6F - 2/17/17	437	455	475	455.6666667
7	W7M - 2/20/17				#DIV/0!
8	W7T - 2/21/17	488	492	499	493
9	W7W - 2/22/17	494	537	553	528
10	W7H - 2/23/17	263	257	244	254.6666667
11	W7F - 2/24/17				#DIV/0!
12	W8M - 2/27/17				384
13	W8T - 2/28/17	336	344	346	342
14	W8W - 3/1/17	304	303	317	308
15	W8H - 3/2/17	130	137	145	137.3333333
16	W8F - 3/3/17	231	229	243	234.3333333
17	W9M - 3/6/17	274	241	295	270
18	W9T - 3/7/17	357	349	348	351.3333333
19	W9W - 3/8/17				#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	477	540	525	514
22	W10M - 3/13/17	3110	3230	3416	3252
23	W10T - 3/14/17	757	816	837	803.3333333
24	W10W - 3/15/17	408	461	494	454.3333333
25	W10H - 3/16/17	2372	2377	2380	2376.333333
26	W10F - 3/17/17	1073	1112	1170	1118.333333
27	S1M - 3/20/17				#DIV/0!
28	511 - 3/21/17				#DIV/0!
29	STW - 3/22/17				#DIV/0!
30	STH - 3/23/17				#DIV/0!
31	STF - 3/24/17				#DIV/0!

	AO	AP	AQ	AR	AS
32	KEY	Weights B T1	Weights B T2	Weights B T3	Average
33	W6M - 2/13/17 - Evening	575	600	588	587.6666667
34	W6T - 2/14/17	899	915	846	886.6666667
35	W6W - 2/15/17	836	852	856	848
36	W6H - 2/16/17	612	608	610	610
37	W6F - 2/17/17				#DIV/0!
38	W7M - 2/20/17				#DIV/0!
39	W7T - 2/21/17	673	675	694	680.6666667
40	W7W - 2/22/17	297	292	294	294.3333333
41	W7H - 2/23/17	294	305	304	301
42	W7F - 2/24/17	265	261	273	266.3333333
43	W8M - 2/27/17	312	291	315	306
44	W8T - 2/28/17	260	261	220	247
45	W8W - 3/1/17	209	191	305	235
46	W8H - 3/2/17	207	192	235	211.3333333
47	W8F - 3/3/17	229	213	222	221.3333333
48	W9M - 3/6/17	240	241	225	235.3333333
49	W9T - 3/7/17	294	278	360	310.6666667
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	616	559	1071	748.6666667
52	W9F - 3/10/17	342	359	317	339.3333333
53	W10M - 3/13/17				#DIV/0!
54	W10T - 3/14/17	1794	1860	2173	1942.333333
55	W10W - 3/15/17	473	443	439	451.6666667
56	W10H - 3/16/17	936	933	876	915
57	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	S1T - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	S1H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!

	AT	AU	AV	AW	AX
1	KEY	Cardio T1	Cardio T2	Cardio T3	Average
2	W6M - 2/13/17 - Morning	198	218	213	209.6666667
3	W6T - 2/14/17	929	996	1033	986
4	W6W - 2/15/17	553	500	561	538
5	W6H - 2/16/17	2175	2271	2374	2273.333333
6	W6F - 2/17/17	612	659	711	660.6666667
7	W7M - 2/20/17				#DIV/0!
8	W7T - 2/21/17	521	528	532	527
9	W7W - 2/22/17	672	703	720	698.3333333
10	W7H - 2/23/17	319	326	318	321
11	W7F - 2/24/17				#DIV/0!
12	W8M - 2/27/17				521
13	W8T - 2/28/17	372	450	395	405.6666667
14	W8W - 3/1/17	347	360	392	366.3333333
15	W8H - 3/2/17	115	122	128	121.6666667
16	W8F - 3/3/17	360	381	337	359.3333333
17	W9M - 3/6/17	322	365	408	365
18	W9T - 3/7/17	410	425	434	423
19	W9W - 3/8/17				#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	807	927	986	906.6666667
22	W10M - 3/13/17	3913	4310	4664	4295.666667
23	W10T - 3/14/17	1265	1359	1494	1372.666667
24	W10W - 3/15/17	2100	2200	2008	2200 666667
26	W10F - 3/17/17	1436	1616	1859	1637
27	S1M - 3/20/17	1100	1010	1000	#DIV/0!
28	S1T - 3/21/17				#DIV/0!
29	S1W - 3/22/17				#DIV/0!
30	S1H - 3/23/17				#DIV/0!
31	S1F - 3/24/17				#DIV/0!

2 8. 1111	AT	AU	AV	AW	AX
32	KEY	Cardio T1	Cardio T2	Cardio T3	Average
33	W6M - 2/13/17 - Evening	669	665	572	635.3333333
34	W6T - 2/14/17	450	429	486	455
35	W6W - 2/15/17	1078	1065	1011	1051.333333
36	W6H - 2/16/17	439	429	424	430.6666667
37	W6F - 2/17/17				#DIV/0!
38	W7M - 2/20/17				#DIV/0!
39	W7T - 2/21/17	382	373	401	385.3333333
40	W7W - 2/22/17	430	431	424	428.3333333
41	W7H - 2/23/17	236	235	260	243.6666667
42	W7F - 2/24/17	547	508	534	529.6666667
43	W8M - 2/27/17	892	903	899	898
44	W8T - 2/28/17	213	178	208	199.6666667
45	W8W - 3/1/17	302	293	175	256.6666667
46	W8H - 3/2/17	149	148	145	147.33333333
47	W8F - 3/3/17	278	256	270	268
48	W9M - 3/6/17	341	375	361	359
49	W9T - 3/7/17	543	515	527	528.3333333
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	1084	1115	1072	1090.333333
52	W9F - 3/10/17	411	472	453	445.3333333
53	W10M - 3/13/17				#DIV/0!
54	W10T - 3/14/17	2102	2279	2569	2316.666667
55	W10W - 3/15/17	605	632	609	615.3333333
56	W10H - 3/16/17	1111	1225	1138	1158
57	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	S11 - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	S1H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!

	AY	AZ	BA	BB	BC
1	KEY	Outside T1	Outside T2	Outside T3	Average
2	W6M - 2/13/17 - Morning				#DIV/0!
3	W6T - 2/14/17				#DIV/0!
4	W6W - 2/15/17				#DIV/0!
5	W6H - 2/16/17				#DIV/0!
6	W6F - 2/17/17				#DIV/0!
7	W7M - 2/20/17				#DIV/0!
8	W7T - 2/21/17				#DIV/0!
9	W7W - 2/22/17				#DIV/0!
10	W7H - 2/23/17				#DIV/0!
11	W7F - 2/24/17				#DIV/0!
12	W8M - 2/27/17				#DIV/0!
13	W8T - 2/28/17	462	415	507	461.3333333
14	W8W - 3/1/17	516	538	604	552.6666667
15	W8H - 3/2/17	240	248	252	246.6666667
16	W8F - 3/3/17	397	358	367	374
17	W9M - 3/6/17	272	313	337	307.3333333
18	W9T - 3/7/17	545	580	679	601.3333333
19	W9W - 3/8/17				#DIV/0!
20	W9H - 3/9/17				#DIV/0!
21	W9F - 3/10/17 - 1.5 m	1389	1572	1548	1503
22	W10M - 3/13/17	6818	6373	5853	6348
23	W10T - 3/14/17	1634	1598	1576	1602.666667
24	W10W - 3/15/17	939	808	834	860.3333333
25	W10H - 3/16/17	4400	4402	4407	4403
26	W10F - 3/17/17	2316	2545	2530	2463.666667
2/	STM - 3/20/17				#DIV/0!
28	511 - 3/21/17 S1M - 2/22/17				#DIV/0!
29	STW - 3/22/17 STU - 3/22/17				#DIV/0!
31	S1F - 3/24/17				#DIV/01

	AY	AZ	BA	BB	BC
32	KEY	Outside T1	Outside T2	Outside T3	Average
33	W6M - 2/13/17 - Evening				#DIV/0!
34	W6T - 2/14/17				#DIV/0!
35	W6W - 2/15/17				#DIV/0!
36	W6H - 2/16/17				#DIV/0!
37	W6F - 2/17/17				#DIV/0!
38	W7M - 2/20/17				#DIV/0!
39	W7T - 2/21/17				#DIV/0!
40	W7W - 2/22/17				#DIV/0!
41	W7H - 2/23/17	395	413	616	474.6666667
42	W7F - 2/24/17				#DIV/0!
43	W8M - 2/27/17	931	928	993	950.6666667
44	W8T - 2/28/17	562	553	561	558.6666667
45	W8W - 3/1/17	410	541	369	440
46	W8H - 3/2/17	309	452	2933	1231.333333
47	W8F - 3/3/17	502	603	505	536.6666667
48	W9M - 3/6/17	690	710	871	757
49	W9T - 3/7/17				#DIV/0!
50	W9W - 3/8/17				#DIV/0!
51	W9H - 3/9/17 - 1.5 m	2965	2953	2927	2948.333333
52	W9F - 3/10/17	753	737	777	755.6666667
53	W10M - 3/13/17	1.1.1			#DIV/0!
54	W10T - 3/14/17	4044	4093	3894	4010.333333
55	W10W - 3/15/17	1449	1317	1290	1352
56	W10H - 3/16/17	3094	3511	3261	3288.666667
57	W10F - 3/17/17				#DIV/0!
58	S1M - 3/20/17				#DIV/0!
59	511 - 3/21/17				#DIV/0!
60	S1W - 3/22/17				#DIV/0!
61	S1H - 3/23/17				#DIV/0!
62	S1F - 3/24/17				#DIV/0!



