November 21, 2021

How has SMART Citizens Task Force arrived at the truck count of "as many as 600 trucks a day" between Woods Hole and the Vineyard?

For the last five years SMART members have requested from the Steamship Authority at the beginning of each calendar year a long report titled “Occupied Capacity Report” from the previous year.

What does the "Occupied Capacity Report" contain?

The report gives the exact number of vehicles and/or trucks that are transported by the Steamship Authority for each calendar day between Cape ports and the islands.

Here is a link to the full report for 2019 (posted on the SMART website):

https://smartmassachusetts.files.wordpress.com/2017/11/2019-occupied-capacity-reports.pdf

The Report consists of a per-calendar-day report of 10 different counts of trucks, including six different categories of trucks, three columns for U.S. mail trucks (there are very few trucks here), and a total count of trucks.

Here, as an example, is an excerpt of the Occupied Capacity pages in the Report for May 30, 2019:

Pages (2 pages) from Occupied Capacity Report for May 30, 2019

RUN DATE: 1/09/20
RUN TIME: 10:22:41

THE STEAMSHIP AUTHORITY
OCCUPIED CAPACITY REPORT
DATE: 5/30/2019

SSA115
PAGE: 0289
REQUESTED BY: DAVID

TRP	ROUTE	TOTAL AUTOS	TRUCKS TRLRS	TRUCKS 1-SP	TRUCKS 2-SP	TRUCKS 3-SP	TRUCKS 4-SP	TRUCKS 5-SP	U.S. MAIL 1-SP	U.S. MAIL 2-SP	U.S. MAIL TOTAL	TOTAL TRKS	AVG TRUCK LGTH.	TOTAL SPACE OCCUP	TOTAL SPACE CAPAC	PCT OCCUP CAPAC	NOMIN CAPAC	TOTAL NOMINAL CAPAC
005	WH-VH	5	0	8	6	3	2	1	0	0	0	20	189.0	47	60	78.33	60	78.33
006	VH-WH	21	0	10	2	0	2	0	0	0	0	14	132.1	43	52	82.69	52	82.69
007	WH-VH	9	0	12	5	0	2	0	0	1	1	20	106.3	41	52	78.85	52	78.85
008	VH-WH	35	1*	11	0	0	1	0	0	0	0	13	122.5	52	60	86.67	60	86.67
009	WH-VH	20	0	15	3	3	1	0	0	0	0	22	72.7	54	60	90.00	60	90.00
010	VH-WH	43	0	6	1	0	0	0	0	0	0	7	51.4	51	52	98.08	52	98.08
011	WH-OB	27	0	10	1	3	0	0	0	0	0	14	77.4	48	52	92.31	52	92.31
012	VH-WH	35	1*	6	0	0	2	0	0	1	1	10	151.0	53	60	88.33	60	88.33
013	WH-VH	34	0	10	1	0	2	1	0	0	0	14	81.9	59	60	98.33	60	98.33
014	OB-WH	46	0	4	1	0	0	0	0	0	0	5	63.0	52	52	100.00	52	100.00
015	WH-OB	42	1*	7	0	0	0	0	0	0	0	8	68.6	51	52	98.08	52	98.08
016	VH-WH	44	1*	6	3	0	0	0	0	0	0	10	72.7	58	60	96.67	60	96.67
017	WH-VH	42	2*	11	2	0	1	0	0	1	1	17	78.4	66	66	100.00	60	110.00
018	OB-WH	27	0	3	4	0	1	0	0	0	0	8	89.3	42	52	80.77	52	80.77
019	WH-OB	43	1*	5	1	0	0	0	0	0	0	7	53.5	52	52	100.00	52	100.00
020	VH-WH	29	0	15	0	2	1	0	0	0	0	18	91.6	54	60	90.00	60	90.00
021	WH-VH	46	0	7	3	2	0	0	0	0	0	12	72.8	65	65	100.00	60	108.33
022	OB-WH	18	0	8	5	4	0	0	0	0	0	17	78.5	48	52	92.31	52	92.31
023	WH-OB	34	0	2	0	0	3	0	0	0	0	5	134.4	48	52	92.31	52	92.31
024	VH-WH	26	0	7	5	2	0	1	0	1	1	16	147.3	56	60	93.33	60	93.33
025	WH-VH	41	1*	9	0	0	1	0	0	0	0	11	96.8	56	60	93.33	60	93.33
026	OB-WH	17	0	5	1	0	0	0	0	0	0	6	55.0	24	52	46.15	52	46.15
027	WH-VH	41	0	8	0	0	0	0	0	0	0	8	54.0	49	52	94.23	52	94.23
028	VH-WH	16	1*	12	0	1	3	1	0	0	0	18	123.5	50	60	83.33	60	83.33
029	WH-VH	45	2*	5	1	0	0	0	0	0	0	8	71.3	55	60	91.67	60	91.67
030	VH-WH	3	1*	2	1	1	0	0	0	0	0	5	93.0	12	52	23.08	52	23.08
031	WH-VH	21	0	3	0	0	0	0	0	0	0	3	55.0	24	52	46.15	52	46.15
032	VH-WH	4	1*	2	2	0	0	0	0	0	0	5	90.8	12	60	20.00	60	20.00
102	NT-HY	14	0	7	1	0	6	0	0	0	0	14	302.9	47	50	94.00	50	94.00
103	HY-NT	25	0	7	2	1	2	0	0	1	1	13	157.1	49	50	98.00	50	98.00
106	NT-HY	25	0	5	1	2	2	0	0	1	1	11	180.0	48	50	96.00	50	96.00
107	HY-NT	46	0	3	1	0	0	0	0	0	0	4	123.0	51	51	100.00	50	102.00
110	NT-HY	16	1*	12	1	0	4	0	0	0	0	18	209.9	48	50	96.00	50	96.00
111	HY-NT	20	1*	4	1	1	4	0	0	0	0	11	202.0	47	50	94.00	50	94.00
200	VH-WH	16	0	14	2	2	2	0	0	0	0	20	157.2	48	48	100.00	45	106.67
201	WH-VH	1	1*	8	6	4	0	0	0	0	0	19	192.9	35	39	89.74	39	89.74
202	VH-WH	7	0	1	2	1	3	0	0	0	0	7	273.4	27	39	69.23	39	69.23
203	WH-VH	0	0	0	6	3	6	0	0	0	0	15	304.7	45	45	100.00	45	100.00
204	VH-WH	30	1	9	1	2	0	0	0	0	0	13	98.7	48	48	100.00	45	106.67
205	WH-VH	0	0	0	3	3	4	0	0	0	0	10	139.8	31	39	79.49	39	79.49
206	VH-WH	18	0	5	2	1	1	0	0	0	0	9	131.7	34	39	87.18	39	87.18
207	WH-VH	7*	0	5	3	3	4	1	0	0	0	16	150.8	49	49	100.00	45	108.89
208	VH-WH	0	0	1	0	4	7	0	0	0	0	12	204.7	41	45	91.11	45	91.11
209	WH-VH	6	1*	3	4	6	0	0	0	0	0	14	102.9	37	39	94.87	39	94.87
210	VH-WH	19	0	5	1	1	1	0	0	0	0	8	112.5	33	39	84.62	39	84.62
211	WH-OB	24	1*	1	2	2	2	1	0	0	0	9	129.0	50	50	100.00	45	111.11
212	OB-WH	25	0	6	3	1	2	0	0	0	0	12	91.0	48	48	100.00	45	106.67
213	WH-VH	3	0	1	3	1	3	1	0	0	0	9	130.7	30	39	76.92	39	76.92

INCLUDES TRAFFIC FROM: 0 (0=ALL SOURCES, 1=RSVP, 2=TICKET READERS, 3=WEB PSG, 4=POS)
INCLUDES PASSENGERS: A (A=ALL, F=WITH FEES, N=NO FEES)

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TRP	ROUTE	TOTAL AUTOS	TRUCKS TRLRS	1-SP	2-SP	3-SP	4-SP	5-SP	U.S. MAIL 1-SP	2-SP	TOTAL	TOTAL TRKS	AVG TRUCK LGTH.	TOTAL SPACE OCCUP	TOTAL SPACE CAPAC	PCT OCCUP CAPAC	NOMIN CAPAC	TOTAL NOMINAL CAPAC
214	VH-WH	13*	0	2	1	3	1	1	0	0	0	8	159.0	36	39	92.31	39	92.31
215	WH-OB	35	1*	10	2	1	0	0	0	0	0	14	86.2	54	54	100.00	45	120.00
216	OB-WH	17	0	7	6	4	0	0	0	0	0	17	78.5	48	48	100.00	45	106.67
217	WH-VH	25	0	2	1	1	1	0	0	0	0	5	107.4	36	39	92.31	39	92.31
218	VH-WH	9	0	8	3	1	3	0	0	0	0	15	123.5	38	39	97.44	39	97.44
219	WH-OB	41	0	11	1	0	0	0	0	0	0	12	54.0	54	54	100.00	45	120.00
220	OB-WH	10	1*	7	10	4	0	0	0	0	0	22	80.4	51	51	100.00	45	113.33
221	WH-VH	32	1	6	2	0	0	0	0	0	0	9	65.6	43	43	100.00	42	102.38
222	VH-WH	8	0	7	2	2	1	1	0	0	0	13	153.1	34	42	80.95	42	80.95
223	WH-VH	40	0	10	0	0	0	0	0	0	0	10	54.3	50	50	100.00	45	111.11
225	WH-VH	12	0	2	0	0	0	0	0	0	0	2	57.0	14	42	33.33	42	33.33
226	VH-WH	0	0	1	0	0	0	0	0	0	0	1	76.0	1	42	2.38	42	2.38
301	HY-NT	1	0	2	2	6	4	0	0	0	0	14	240.4	41	41	100.00	39	105.13
302	NT-HY	0	0	0	1	0	5	0	0	0	0	6	224.7	22	39	56.41	39	56.41
303	HY-NT	1	1*	2	1	0	6	0	0	0	0	10	437.6	31	39	79.49	39	79.49
304	NT-HY	1	0	1	1	0	8	0	0	0	0	10	272.0	36	39	92.31	39	92.31
305	HY-NT	2	0	0	2	0	8	0	0	0	0	10	214.8	38	39	97.44	39	97.44
306	NT-HY	1	0	1	2	1	7	0	0	0	0	11	246.8	37	39	94.87	39	94.87
307	HY-NT	4	0	2	2	0	6	1	0	0	0	11	196.4	39	39	100.00	39	100.00
308	NT-HY	2	0	1	7	2	4	0	0	0	0	14	188.9	39	39	100.00	39	100.00
309	HY-NT	3	0	0	1	0	6	2	0	0	0	9	295.6	39	39	100.00	39	100.00
310	NT-HY	0	0	1	4	3	5	0	0	0	0	13	250.5	38	39	97.44	39	97.44
311	HY-NT	4	0	0	1	1	6	1	0	0	0	9	291.1	38	39	97.44	39	97.44
312	NT-HY	1	1*	4	2	3	3	1	0	0	0	14	198.2	37	39	94.87	39	94.87
313	HY-NT	3	0	4	4	0	5	1	0	0	0	14	196.8	40	40	100.00	39	102.56
314	NT-HY	0	0	0	0	0	5	0	0	0	0	5	308.0	20	39	51.28	39	51.28
403	HY-NT	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00
404	NT-HY	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00
405	HY-NT	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00
406	NT-HY	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00
407	HY-NT	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00
408	NT-HY	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00
409	HY-NT	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00
410	NT-HY	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00
411	HY-NT	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00
412	NT-HY	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00
DAY	TOTAL	1381	24	397	151	91	159	15	0	6	782	843	46.6	3122	3578	87.26	3512	88.90

* = AUTO OR TRAILER GREATER THEN 1-SPACE

INCLUDES TRAFFIC FROM: 0 (0=ALL SOURCES, 1=RSVP, 2=TICKET READERS, 3=WEB PSG, 4=POS)
INCLUDES PASSENGERS: A (A=ALL, F=WITH FEES, N=NO FEES)

Source: https://smartmassachusetts.files.wordpress.com/2017/11/2019-occupied-capacity-reports.pdf

The "Total Trucks" column

The "Occupied Capacity Report" contains a separate column titled "Total Trucks."

How do we arrive at the number of trucks carried between only Woods Hole and the Vineyard?

Our math is simple. We look at the total number of trucks carried to and from the Vineyard and to and from Nantucket according to the Occupied Capacity Report, and subtract from the "Total Trucks" the total number to and from Nantucket.

The remainder is the total number of trucks per day to and from the Vineyard from Woods Hole.

How many trucks does the "Occupied Capacity Report" indicate on the SSA boats on the Woods Hole and Vineyard route?

We examine the last line of the "Occupied Capacity Report" for the day of May 30, 2019:

		TOTAL	TRUCKS						U.S. MAIL			TOTAL
TRP	ROUTE	AUTOS	TRLRS	1-SP	2-SP	3-SP	4-SP	5-SP	1-SP	2-SP	TOTAL	TRKS
DAY	TOTAL	1381	24	397	151	91	159	15	0	6	782	843

Source: https://smartmassachusetts.files.wordpress.com/2017/11/2019-occupied-capacity-reports.pdf

We see there is a count of 843 "Total Trucks" carried on both the Vineyard and Nantucket routes on May 30, 2019.

We subtract the total Nantucket truck count of 221 trucks.

We conclude there are 622 SSA-identified trucks on the Woods Hole – Vineyard route carried on that day.

A SMART conclusion: There are as many as 600 trucks on some days on the Vineyard route.

But the SSA has said that some of its reported trucks are in fact vans and SUVs?

SSA staff pointed out at the September 29, 2021 meeting of the SSA Noise and Traffic Working Group that some SSA reported trucks are in fact vans and SUVs.

A recording of that meeting and conversation about truck definitions is posted here (begins at time stamp approx. 23 min. of recording):

https://www.youtube.com/watch?v=NiNqHZr6n2A

Here is a statement from SSA staff made during that meeting: "Our category for 1-space trucks does include vans and pickup trucks." SSA staff asked that in future the Falmouth representatives to the Working Group "make a disclaimer that it [the total truck number] does include pickup trucks."

But how many vans and pickup trucks are included in the 1-space column ("SP-1" column) in the Occupied Capacity Report?

SMART has no idea.

Are the vans mentioned commercial vans (such as an electrician or plumbers use) or do they include passenger mini-vans? SMART has no idea.

Are there a lot of vans on the WH - Vineyard route? Our sense is that there are likely not that many vans on the route.

By the SSA's own definition, the SSA's annual total truck count includes vehicles that the SSA has classified as a truck.

SMART does not agree that pickup trucks should be excluded from "total truck" counts for as long as the Steamship Authority includes pickup trucks in its own truck count.

SMART believes it is consistent and fair to count both vans and pickup trucks in the "truck" until the SSA updates its own summary truck counts on its website above.

Why does SMART say "as many as (n = number) trucks" rather than cite an average daily truck count?

SMART emphasizes that the qualifier “as many as *(n = number)* trucks a day” is far different from a count of “an average of *(n = number)* trucks a day.”

Weekdays are when the vast majority of trucks travel. It is also those weekdays when the trucks cause the most problem with waking up Falmouth residents in the early morning, with noise pollution from the loudest trucks traveling through Falmouth neighborhoods during the day. Those trucks (for five months of the year) travel from 5:00AM to 10:20-10:25PM on weekdays through our neighborhoods, that is for almost 17 and a half hours a day.

What is misleading about reporting an average of trucks per day?

An average count of trucks a day is significantly lower than a count of “as many as *(n = number)* trucks a day.”

Impacted neighbors do not see or hear or experience averages. Those neighbors experience noise and air pollution on specific days from specific trucks. It is those specific days that are the source of the problem for Falmouth residents. The largest impacts of the SSA-carried trucks come on weekdays.

By reporting an average of trucks per day and including lower numbers of trucks on weekend days and holidays, the Steamship Authority diminishes the reported impact of truck numbers we experience in our neighborhoods.

SMART finds any discussions of truck counts on average per day to be largely non-sensical.

When will the SSA modify its own total count of trucks?

As of November 21, 2021, the SSA website continues to show total truck data as shown in the table below.

WOODS HOLE, MARTHA'S VINEYARD AND NANTUCKET STEAMSHIP AUTHORITY

TRUCKS CARRIED/ MARTHA'S VINEYARD AND NANTUCKET

MAINLAND TO THE VINEYARD AND RETURN

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1996	3,687	4,144	4,954	5,762	6,551	5,924	5,609	5,578	5,109	5,563	4,817	4,529	62,227
1997	4,175	3,952	5,005	6,153	6,961	6,350	6,244	5,528	5,472	5,791	4,742	4,799	65,172
1998	4,608	4,382	5,719	6,645	6,600	6,329	6,540	5,871	5,849	5,975	4,878	4,760	68,156
1999	4,604	4,394	5,823	6,838	7,080	7,157	6,396	6,358	5,981	6,029	5,561	5,440	71,661
2000	4,900	4,984	6,209	6,489	7,607	7,391	6,388	6,823	5,829	6,071	5,158	4,693	72,542
2001	5,064	5,053	5,627	6,773	7,585	7,347	6,956	6,868	5,819	6,063	5,447	4,669	73,271
2002	4,976	4,563	5,667	6,999	7,343	7,149	7,181	6,809	6,123	6,118	5,087	4,436	72,451
2003	4,759	4,014	5,406	6,517	7,179	7,333	7,182	6,569	6,107	6,183	4,684	4,613	70,546
2004	5,881	5,747	7,021	7,790	8,557	9,001	8,050	7,660	7,149	7,353	6,468	6,489	87,166
2005	5,991	6,385	7,788	8,842	9,678	9,543	8,630	8,655	8,442	8,052	7,733	7,856	97,595
2006	7,522	7,070	9,199	9,736	10,513	10,094	9,003	8,802	8,511	8,452	7,785	7,252	103,939
2007	6,864	6,378	8,041	8,683	10,292	9,574	8,655	8,710	7,803	8,555	7,810	6,892	98,257
2008	7,047	6,822	8,226	9,277	9,645	9,430	8,976	8,085	8,248	8,378	7,155	7,104	98,393
2009	7,480	7,277	8,807	10,392	11,222	11,548	11,106	10,092	10,389	10,019	8,607	8,661	115,600
2010	7,591	7,183	9,602	10,510	11,516	11,759	10,632	9,965	10,178	9,733	8,832	8,960	116,461
2011	7,439	7,227	9,439	9,967	11,272	11,679	10,631	10,256	9,893	9,798	8,747	8,434	114,782
2012	7,322	7,460	9,150	9,887	11,505	11,106	10,480	10,271	9,457	9,143	8,854	8,323	112,958
2013	7,739	6,857	9,020	10,562	12,281	11,669	11,461	10,491	10,604	10,779	8,891	8,568	118,922
2014	7,620	7,588	9,115	11,011	12,170	12,084	11,419	10,091	11,144	11,067	8,936	9,135	121,380
2015	7,290	6,862	9,594	11,326	12,590	12,516	11,841	10,511	11,483	11,480	9,956	9,629	125,078
2016	8,441	8,107	10,921	11,795	12,988	13,157	11,773	11,202	11,582	11,343	10,482	9,794	131,585
2017	8,806	8,267	10,611	12,283	14,177	13,807	12,133	11,970	11,049	12,634	11,031	9,938	136,706
2018	8,783	8,845	8,811	11,925	14,037	13,801	12,718	12,453	12,183	12,522	11,065	10,492	137,635
2019	9,352	9,029	11,607	12,801	14,134	13,680	13,066	12,474	12,308	11,825	10,788	10,228	141,292
2020	9,588	9,496	8,873	5,483	9,111	12,771	12,680	11,976	11,860	12,824	10,742	10,807	126,211
2021	9,987	9,114	12,134	13,420	13,474	13,074	12,847	12,473					96,523

In 2004, changes to the SSA's rate structure for vehicles less than 20 feet in length resulted in a reclassification of certain vehicles from Automobiles to Trucks
In 2009, the SSA no longer classified any non-commercial trucks of any length as automobiles.

Source: https://www-steamship-assets.s3.amazonaws.com/versioned_downloadable_forms/path/august_2021_monthly_traffic_statistics.pdf

SMART finds its representation of “as many as 600 trucks” per day to be fully consistent with the count in the “Total” column of “Trucks carried/Mainland to the Vineyard and Return” reported by the Steamship Authority on its website. See table above from the SSA official website.