Truck Parking Information Systems (TPIS)
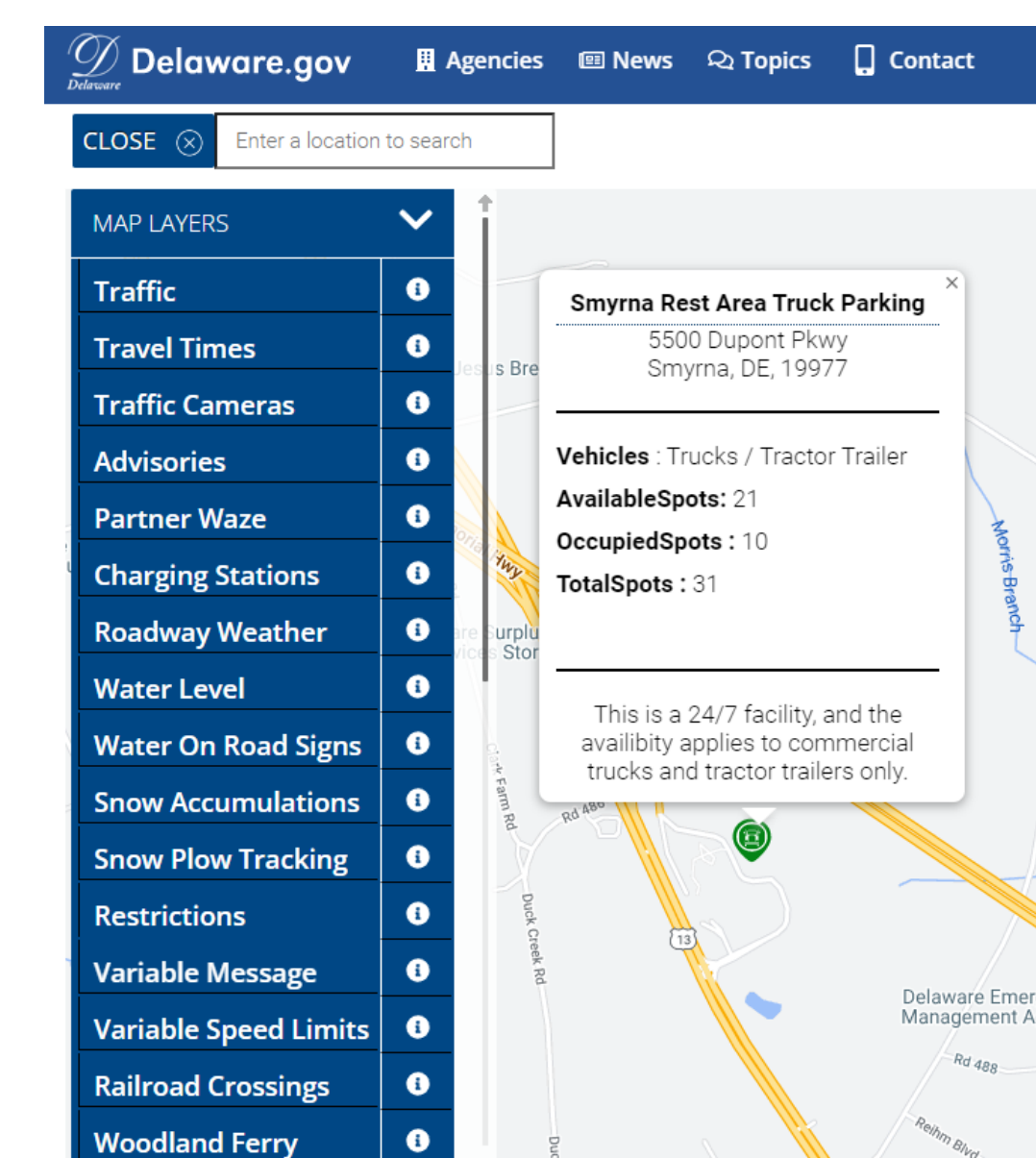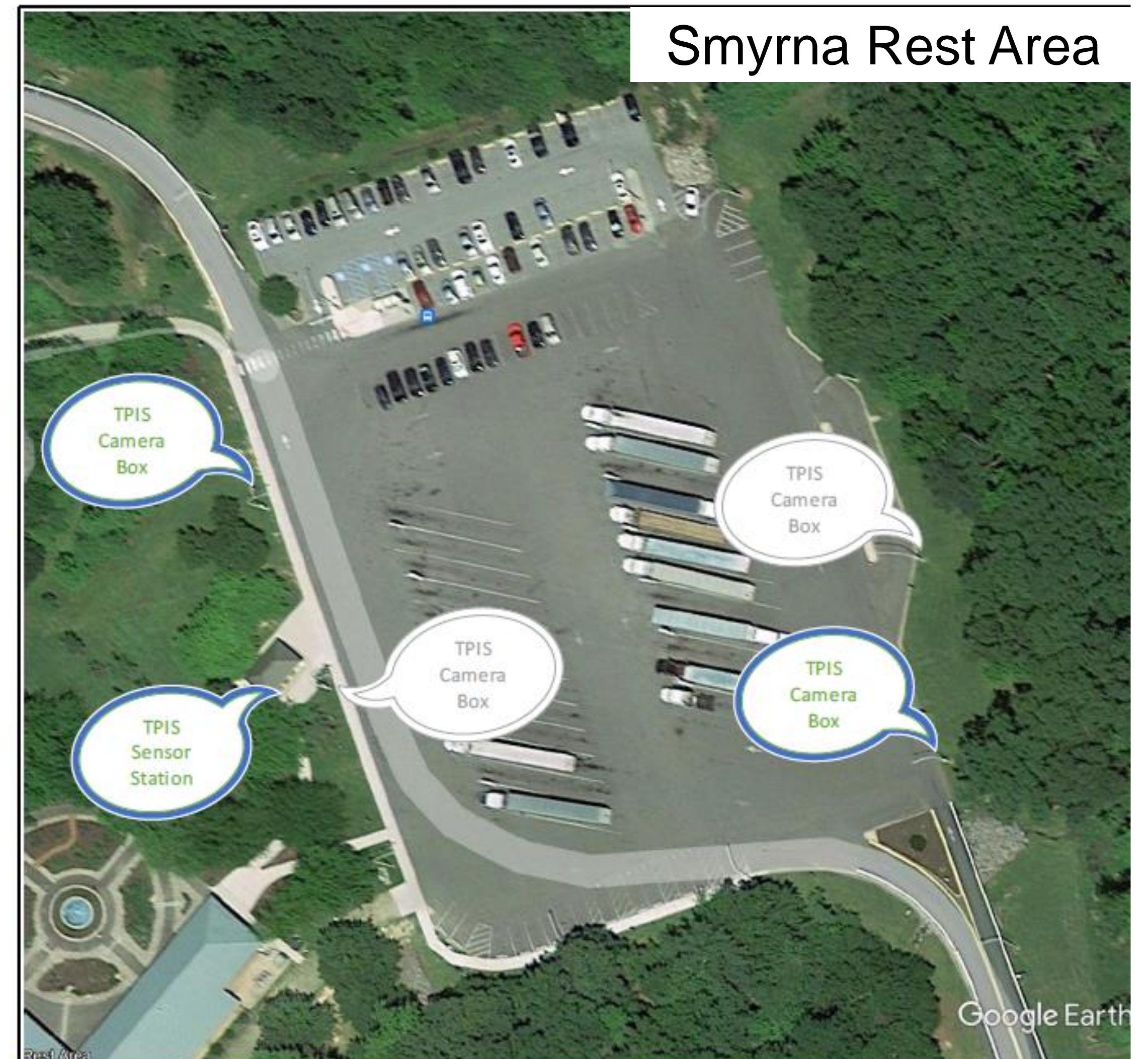
Real Time Truck Parking Data Update Smyrna Rest Area

Project Background:

In 2019, the Volpe Center worked with DelDOT to identify potential truck parking locations in Delaware and develop a pilot system for providing parking availability information at these location(s) to CMV drivers in a safe and non-intrusive manner.

Infrastructure installed at Smyrna includes:
- TPIS Sensor Station with broadband that provides internet access to the four cameras.
- Four TPIS cameras mounted on lamp posts.
- Video analytics provided by WiseMoving.

Data availability
- Up to the minute updates on spaces available on the DelDOT website and the free DelDOT App
- Historical data can be retrieved to track parking space usage and duration of stay.

Smyrna Rest Area

https://deldot.gov/map/

Parking Usage Results: Spring 2024

Avg. Duration (in hours) of Stop: Spring 2024*

hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun
midnight	4:58	5:04	4:22	4:49	5:20	4:10	9:16
1am	4:29	2:30	5:36	3:31	3:10	4:56	5:43
2am	4:55	3:16	3:04	3:33	2:46	2:11	3:59
3am	1:40	2:12	2:04	2:55	2:41	6:09	2:39
4am	1:25	2:09	0:57	1:47	2:06	6:55	1:52
5am	0:56	1:15	1:10	1:13	1:05	1:50	1:36
6am	0:38	0:38	1:14	0:47	0:39	2:06	1:12
7am	0:32	1:12	1:09	0:36	1:58	1:43	2:55
8am	0:28	0:27	0:50	0:35	0:38	0:41	4:30
9am	0:49	0:34	0:29	0:18	0:19	4:15	0:56
10am	0:24	0:22	0:34	0:21	0:29	1:23	3:21
11am	0:22	0:31	0:31	0:42	0:32	5:47	1:08
noon	0:28	0:31	0:37	1:08	1:47	0:56	3:18
1pm	1:16	0:32	1:16	0:32	0:24	2:38	2:47
2pm	2:43	1:20	1:09	1:09	0:27	1:13	1:11
3pm	3:09	2:19	2:35	0:58	0:29	2:24	4:40
4pm	2:31	2:45	3:05	1:14	0:37	5:01	2:19
5pm	2:28	7:26	6:01	2:37	1:03	11:23	4:20
6pm	7:48	4:58	4:20	3:27	4:13	2:33	4:48
7pm	5:56	6:49	6:15	4:44	4:22	4:27	6:49
8pm	7:51	6:05	4:15	6:33	5:42	9:05	8:58
9pm	6:03	5:40	6:17	6:50	6:12	6:13	8:36
10pm	7:44	5:33	4:25	5:09	6:42	6:31	7:34
11pm	5:53	4:01	6:00	3:59	7:33	7:00	4:30

* Based on average parking duration of vehicles arriving in each hour

% of Spaces Used: Spring 2024

hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun
midnight	72%	79%	84%	85%	79%	69%	61%
1am	73%	82%	84%	84%	79%	68%	64%
2am	73%	82%	84%	84%	79%	71%	64%
3am	74%	81%	84%	85%	79%	70%	65%
4am	73%	80%	84%	84%	77%	69%	64%
5am	70%	78%	81%	81%	72%	66%	60%
6am	63%	67%	74%	73%	65%	60%	51%
7am	53%	55%	62%	61%	54%	51%	46%
8am	44%	42%	51%	48%	43%	44%	41%
9am	39%	33%	42%	39%	34%	40%	38%
10am	34%	28%	36%	35%	30%	35%	39%
11am	29%	25%	34%	30%	31%	30%	41%
noon	29%	23%	34%	29%	32%	31%	39%
1pm	29%	25%	31%	29%	30%	30%	42%
2pm	26%	27%	38%	34%	31%	29%	41%
3pm	28%	30%	41%	37%	31%	30%	42%
4pm	33%	34%	47%	39%	30%	30%	43%
5pm	38%	45%	50%	42%	30%	33%	46%
6pm	42%	51%	58%	49%	36%	38%	48%
7pm	48%	59%	65%	53%	39%	44%	53%
8pm	57%	69%	68%	63%	48%	48%	58%
9pm	64%	77%	76%	67%	58%	52%	60%
10pm	69%	79%	81%	74%	63%	55%	65%
11pm	75%	84%	85%	78%	66%	57%	68%