



**PIONEER
VALLEY
PLANNING
COMMISSION**

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February 3, 2006

Hon. Mary Clare Higgins
Mayors Office
City Hall
210 Main Street
Northampton, MA 01060

RE: Number of Users Observed on the City of Northampton Bikeway
(April – November 2005)

Dear Mayor Higgins;

In response to your request, the Pioneer Valley Planning Commission (PVPC) has collected volume data for the number of users on the Northampton Bike Path. The off-season **weekday** volume on the bikepath averaged 301 users per day for the first two weeks in April and 280 users for the first two week period in November. These volumes contrast with a midweek average daily volume during July and August of 417 and the average weekend/holiday volume during the summer months of 470 users.

The volume of users on the bikepath was monitored intermittently from April 5, 2005 until November 15, 2005. The counter uses a passive infra-red signal detector with a data logger to tabulate and store volume counts (events). The device records a count each time the infra-red beam is interrupted by a passing cyclist or pedestrian. PVPC was unable to collect bikepath volume data for months of December and January as the counting equipment experienced a catastrophic failure caused by extremely low overnight temperatures. Efforts were further hampered by municipal snow removal operations that buried the counting device or otherwise obstructed its operation.

The Northampton City Bikeway

The City of Northampton Bikeway (or Ryan Memorial Bikeway) consists of a 10-foot wide asphalt paved path extending 2.5 miles from behind Stop and Shop on State Street northwest to Bridge Road near Look Park in the Florence section of town. The bikepath was opened and dedicated as the "Ryan Memorial Bikeway" in 1984 in honor of Francis P. Ryan, long time director of the Department of Public Works. Construction of the rail trail followed the installation of a municipal sewer in the 1970's along the Williamsburg branch of the New Haven Railroad (circa 1867). With a population of 29,287 (2003) Northampton is home to Smith College, Cooley Dickinson Hospital and a vibrant downtown. The City has growing network of bicycle facilities, including regionally significant extensions to the Norwottuck Rail Trail and the Manhan Rail Trail.

The Northampton Bikeway has ten primary access points and numerous informal access points from connecting neighborhood streets and private yards. Parking is offered near Stop and Shop off of King Street, North Maple Street, Bridge Road (JFK Middle School), and Depot Street. Most users appear to prefer walking or bicycling to the trail.

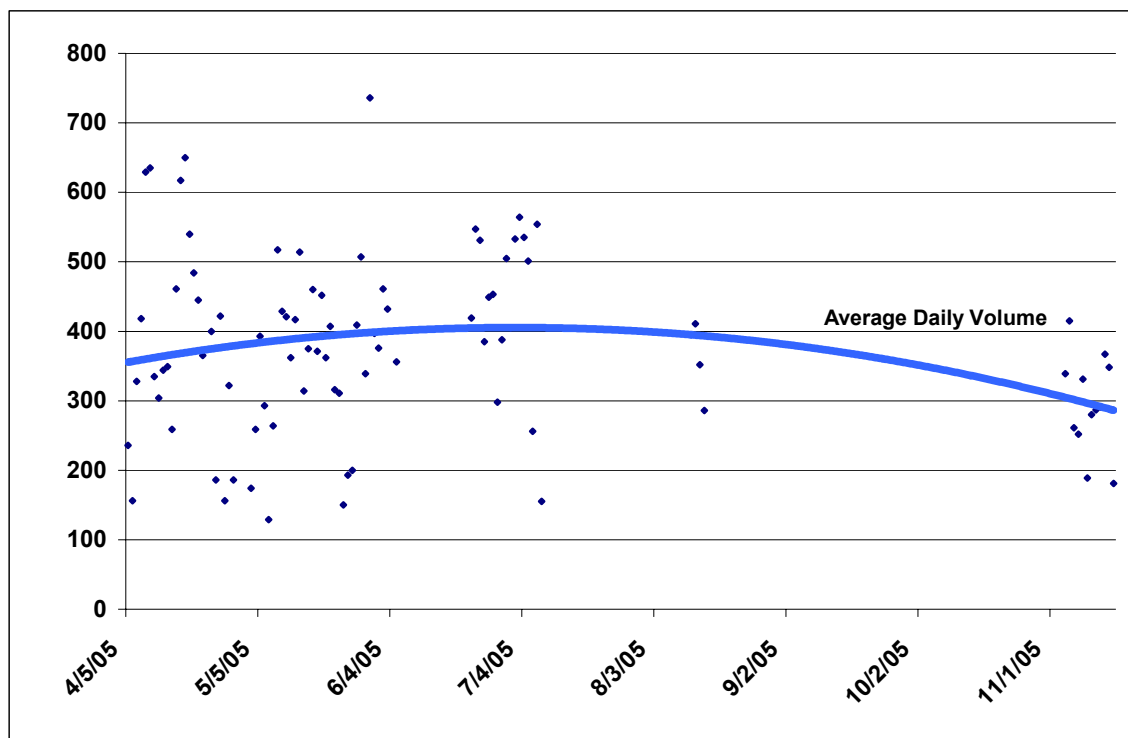
Methodology Used for Data Collection

The volume of users on the bikeway was monitored intermittently from April 5, 2005 until November 15, 2005. A passive infra-red signal detector with a data logger was used to tabulate and store volume counts (events) on the bikeway at a location north of Chestnut Street. The device recorded a count each time an infra-red beam was interrupted by a passing cyclist or pedestrian. The weatherproof data logger (Onset Computer Corp) has the capacity to store 16,000 events. The counter is not certified and the data collected does have a potential for error. The potential for error exists when two users trip the infra-red beam at precisely the same moment. In these instances, the counter “under counts” and logs only one count or event. Opportunities for error also occur during heavy rainstorms or hail activity. As we have recently learned the counting device operates within a temperature range of 14 to 158 degrees F and will lose all data if temperatures exceed these limits. In each instance where the counting device records erroneously high or low volumes the errors can be identified when the data is downloaded and normalized.

Estimated Annual Volume of Use

The average estimated annual volume for the Northampton City Bikepath at the location north of Chestnut Street is 100,000 to 120,000. Studies completed of other bikepaths in the region have shown that most users travel on only a portion of the bikepath, averaging 45 minutes for each visit. Based on this assumption, the volumes recorded at Chestnut Street represent only a percentage of the overall number of users for the entire bikepath. Individuals that enter and exit the trail at other locations may not be included in this calculation. The busiest season for the Northampton Bikeway occurs during July and August and appears to remain strong through September and October before dropping off.

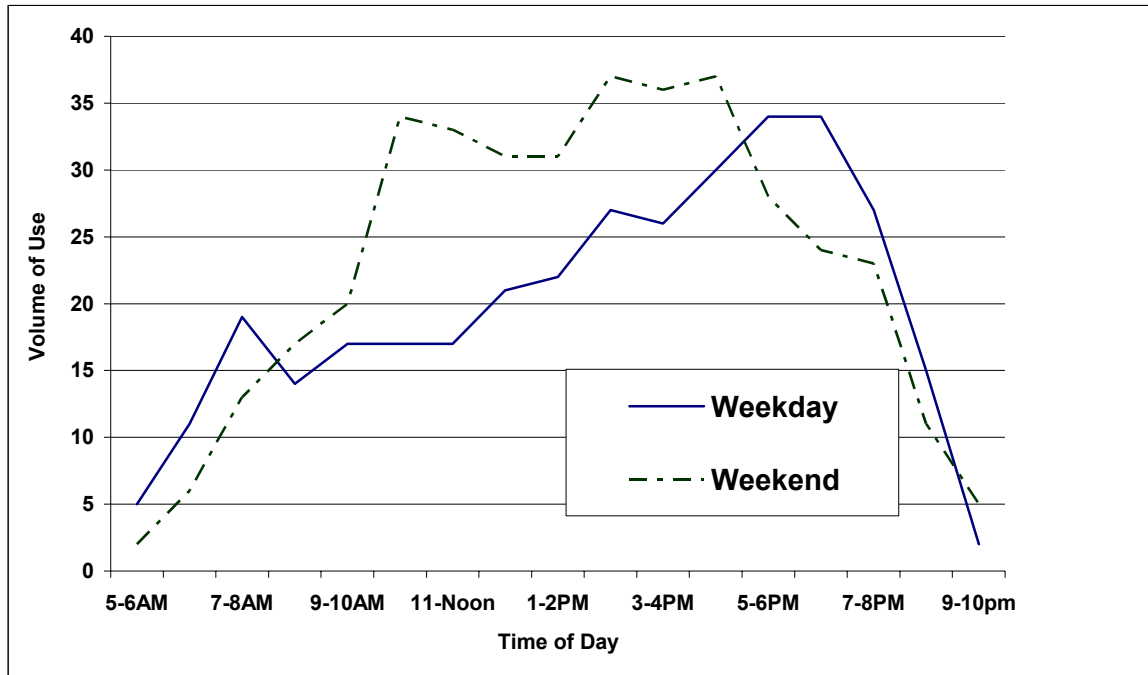
Figure 1.0
Volume of Users (Seasonal) on the Northampton Bikeway



Number of Users Observed

The usage continually increased as the day progressed with a peak volume between 6 and 7 PM for the weekday and 4 to 5 pm during the weekend. This distribution of users on the Northampton Bikeway is consistent with the trend of other multi-use trails in the region.

Figure 2.0
Hourly Volume of Users Observed



PVPC staff will continue to collect data as the weather and conditions allow. If you or your staff have any questions regarding the data provided, or if PVPC can be of further assistance, please feel free to contact me.

Sincerely

Jeffrey McCollough
Senior Transportation Planner

cc: Wayne Feiden

Volume of Users Observed on the Northampton City Bikeway

Date	Day of the Week	Temperature		Precipitation	% Cloud Cover	Volume
	(weekends & holidays in bold)	High Temp (F)	Low Temp (F)	(inches)	10 = Cloudy 0 = Sunshine	Daily
4/5/05	Tuesday	62	39	0	0.8	236
4/6/05	Wednesday	75	43	0	6.3	156
4/7/05	Thursday	70	47	0	9.9	328
4/8/05	Friday	65	48	0	7.2	418
4/9/05	Saturday	66	38	0	0	629
4/10/05	Sunday	74	33	0	2.5	635
4/11/05	Monday	56	38	0	0	335
4/12/05	Tuesday	54	32	0	3.6	304
4/13/05	Wednesday	59	34	0	2.4	344
4/14/05	Thursday	64	41	0	3.4	349
4/15/05	Friday	62	36	0	0	259
4/16/05	Saturday	70	30	0	0	461
4/17/05	Sunday	80	33	0	0.7	617
4/18/05	Monday	76	44	0	1.8	650
4/19/05	Tuesday	81	39	0	0	540
4/20/05	Wednesday	86	50	0	6.2	484
4/21/05	Thursday	67	43	0	0.4	445
4/22/05	Friday	63	35	0	8.6	365
4/24/05	Sunday	63	46	0.17	6.9	400
4/25/05	Monday	52	43	0.01	5.8	186
4/26/05	Tuesday	70	41	0	5.1	422
4/27/05	Wednesday	58	51	0.15	10	156
4/28/05	Thursday	61	42	0.01	6.4	322
4/29/05	Friday	66	38	0	3.9	186
5/3/05	Tuesday	57	36	0.01	6.5	174
5/4/05	Wednesday	57	48	0	6.8	259
5/5/05	Thursday	65	30	0	4.3	393
5/6/05	Friday	60	34	0	10	293
5/7/05	Saturday	49	43	0.12	9.7	129
5/8/05	Sunday	55	43	0	9	264
5/9/05	Monday	72	47	0	4.1	517
5/10/05	Tuesday	77	43	0	0.4	429
5/11/05	Wednesday	75	47	0	6.8	421
5/12/05	Thursday	61	35	0	4.4	362
5/13/05	Friday	66	39	0	2.4	417
5/14/05	Saturday	70	49	0	7.9	514
5/15/05	Sunday	65	20	0.22	9.4	314
5/16/05	Monday	69	54	0.02	6.6	375
5/17/05	Tuesday	70	62	0	3	460
5/18/05	Wednesday	67	43	0	6.7	371
5/19/05	Thursday	71	39	0	5.2	452
5/20/05	Friday	56	41	0	7	362
5/21/05	Saturday	67	39	0.02	6.8	407
5/22/05	Sunday	55	45	0.2	9.6	316
5/23/05	Monday	59	40	0.34	9.4	311
5/24/05	Tuesday	51	39	0.16	10	150
5/25/05	Wednesday	51	49	0.03	10	193
5/26/05	Thursday	55	52	0.14	10	200
5/27/05	Friday	74	50	0.12	8	409
5/28/05	Saturday	79	47	0.01	7	507
5/29/05	Sunday	74	55	0	7.8	339
5/30/05	Monday	77	52	0	5	736
5/31/05	Tuesday	74	52	0.32	7.5	397
6/1/05	Wednesday	72	53	0	7.9	376
6/2/05	Thursday	74	55	0	4.6	461
6/3/05	Friday	78	55	0	8.5	432
6/5/05	Sunday	89	57	0	1.9	356
6/22/05	Wednesday	73	49	0.29	6.3	419
6/23/05	Thursday	79	45	0	4.1	547
6/24/05	Friday	88	54	0	6.2	531
6/25/05	Saturday	95	61	0	2.6	385
6/26/05	Sunday	95	66	0	4.1	449
6/27/05	Monday	90	66	0	6.6	453
6/28/05	Tuesday	76	72	0.35	9.7	298
6/29/05	Wednesday	84	70	1.49	9.9	388
6/30/05	Thursday	84	69	0.01	8.9	505
7/1/05	Friday	83	60	0.14	8.2	405
7/2/05	Saturday	80	55	0	3.8	533
7/3/05	Sunday	80	53	0	3.8	564
7/4/05	Monday	83	54	0	1.2	535
7/5/05	Tuesday	83	50	0	7.6	501
7/6/05	Wednesday	81	65	1.44	10	256
7/7/05	Thursday	70	63	0	9.9	554
7/8/05	Friday	64	58	1.15	10	155
8/11/05	Thursday	92	66	0	7.9	395
8/12/05	Friday	90	65	0	8.4	411
8/13/05	Saturday	97	71	0.68	6.1	352
8/14/05	Sunday	89	69	0.36	9	286
11/4/05	Friday	69	41	0	6.4	339
11/5/05	Saturday	71	42	0	4	415
11/6/05	Sunday	59	46	0	10	261
11/7/05	Monday	59	35	0	1.7	252
11/8/05	Tuesday	59	35	0	7.7	331
11/9/05	Wednesday	46	30	0.2	9.7	189
11/10/05	Thursday	50	35	0	5.8	280
11/11/05	Friday	41	25	0	0	287
11/12/05	Saturday	51	19	0	0	291
11/13/05	Sunday	62	28	0.02	5.7	367
11/14/05	Monday	60	32	0	1.2	348
11/15/05	Tuesday	42	37	0.15	10	181