

Greenfield Police Department
Cost Projections Big Box Project French King Highway
October 2010

**Report to the Greenfield Planning Board from the
Greenfield Police Department on
Cost Projections Big Box Project French King Highway
October 2010**

FOR PUBLIC RELEASE

Chief David F. Guilbault

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In estimating the demand for police services for the proposed French King Highway Retail Center, I will make the following assumptions.

- The proposed store is of the nature and operation of a Wal-Mart or Target. This assumption is based on speculation by the opponents and seems to be the impetus for the greatest opposition to the proposed development.
- The operation will fall into a general nature of surrounding communities that have similar retail establishments and the site's effects on those police departments.
- The calls for service at the proposed site will be based on the closest comparison in the amount and type of calls for service site that I can find in Greenfield.
- That the officer's time spent answering a call for service is factored at the highest average time per call and rate of pay per hour that is double the highest rate with benefits of the officer calculated in to the hourly figure.

From the data generated in nine year period, not including 2010 an incomplete year, it appears the closest comparison in Greenfield that could be made to a proposed store would be the Big Y Plaza.

Located in the southwest section of Greenfield, the Big Y is a plaza of significant size with a variety of retail stores clustered around a large food outlet. The Big Y parking lot is busy and full most of the store opening periods. Differences do exist between the proposed French King Highway site and the Big Y lot but it is the closest to what I could reasonably project a maximum volume of police demand would be based on the size and

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scope of the project. This projection will be an over estimation of police demand for the site.

The major impact on police operation from a large retail site to consider would be the following general categories based on manpower related costs.

1. **Calls for Service**

This category would include the extent, nature and severity of the call for service at a given location and the overall cost to the agency to complete the call for service. Crime needs to be considered including the nature and extent of crime. In general a retail area's major criminal activity falls to the category of victimization to the individual retailer. Shoplifting is the major concern of retailers and can be a major demand on police services. However the crime of shoplifting is not always discovered or reported. Many retail stores do not have security and some expect loss within their operations and do not report the crimes to police departments. Many Greenfield stores do not utilize security, but several however are very active. This activity is sporadic and based upon the availability of security personnel. Even when shoplifting is observed by store personnel it does not always generate police activity as the store by policy may take action themselves by bringing complaints. In most case the police are called when the individual shoplifting is uncooperative or combative in nature.

Shoplifting Discussion-

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Data over a nine year period between 2000 through 2009 indicates that shoplifting was reported 697 times in Greenfield. Of that amount of calls Arrests were made in 13.9% of the cases¹ with an average of 22.16 minutes spent on the call for service. An additional 40 minutes could be added when an individual is charged and taken into custody to account for arrest procedures commonly referred to as Booking and report writing. Court expense in shoplifting cases is extremely rare due to per-trial processes that occur.

Other Criminal Offenses

Other criminal offenses do occur in these areas but the rate is small in the Greenfield area.

2. Traffic

Traffic flow to and from the site needs to be considered and the effect on the surrounding areas given the anticipate flow. Flow is regulated by amount and speed of the traffic and in the eyes of the routine traveler the ease in which they can reach a specific destination. The police department looks at a combination of accident demand and citizen complaints in an area relative to traffic. Frequency and severity of accidents are important. Costs to the department are mainly incurred in dealing with accidents and performing speed related complaint functions. Accidents response is determined by nature and severity of both property damage and personal injury. Response and enforcement of speeding

¹ The department's long standing policy is to arrest only if other charges exist, or the identity of the offender is in question.

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complaints is determined by the frequency of complaints and the availability of personnel.

3. Critical Incidents.

For the purpose of this the definition a critical incident as any event which has a stressful impact sufficient enough to overwhelm the usually effective coping skills of either an individual or an agency. Critical incidents are typically sudden, powerful events which are outside the range of normal experiences that place a burden on people and government services.

. Critical incidents can also be events which, by their nature, have the potential to leave lasting effects on those involved.

Some Critical Incidents that may affect a retail area of this nature include:

1. A death by accident, by suicide or the result of criminal behavior
2. A violent assault /kidnapping
3. significant damage to, or destruction of, part of the property, due to vandalism, accident, or fire, flooding or some other extreme of nature that includes bomb threat, explosion, gas or chemical hazard.

Calls for service

The Greenfield Police Departments logs on a ten (10) year average, over twenty-five thousand (25,000) calls for service a year. Calls for service vary in time and cost to the department. Many such calls range from just a log notation to document an occurrence or

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a call could lead to a complicated time consuming series of events that include arrests and court prosecution.

Over sixty percent (60%) of yearly departmental calls for service occur at specific residential locations. Many such calls to residential areas are often repetitive in nature. Specific to this discussion are calls that are also generated at special areas of interest known as SITES². Statistics at four such sites, in a period from 2000 to 2009, that include Big Y, Home Depot, Stop and Shop and BJ's Wholesale Club are referenced later in this document. Among this group, the Big Y Plaza on the Mohawk Trail demanded the most police response over the stated time frame. At this Site, in a nine (9) year period from 2000 through 2009, the Greenfield Police Department handled one thousand two hundred (1,200) calls for service or an average of one hundred thirty-three (133) calls per year. The one hundred thirty-three (133) calls included fifty-nine (59) Accidents, and a total of one hundred-seventeen (117) Arrests.

Location	Year	Calls	Calls/% Total	Acc	Acc/% Total	Arrests	Arr/% Total
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² Sites may be an individual business or may include a group of business clustered in a location. Site may also be residential areas clustered together but are not factored in to this estimation.

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BigY	2009	170	12840/.013	9	105/.086	23	490/.035
	2008	174	12587/.014	7	96/.073	20	477.042
	2007	145	10392/0.14	1	59/.017	14	397/.035
	2006	168	8846/.019	8	58/.013	12	276/.043
	2005	91	6531/.014	10	61/.016	8	214/.037
	2004	82	7850/.010	8	75/.107	8	258/.031
	2003	95	8382/.011	4	60/.067	10	326/.031
	2002	156	8940/.017	5	77/.065	9	316/.028
	2001	62	5799/.011	4	72/.056	5	355/.014
	2000	57	6865/.008%	3	73/.041	8	280/.029
Home Depot Plaza	2009	100	12840/.008	3	105/.029	4	490/.008
	2008	112	12587/.009	4	96/.042	1	477/.002
	2007	86	10392/.008	1	59/.017	3	397/.008
	2006	93	8846/.011	3	58/.052	1	276/.004
	2005	47	6531/.007	2	61/.033	0	214/.000
	2004	41	7850/.005	0	75//.000	0	258/.000
No HD	2003	40	8382/.005	0	60/.000	1	326/.003
	2002	50	8940/.006	2	77/.026	1	316/.003
	2001	51	5799/.009	1	72/.014	2	355/.006
	2000	41	6865/.006	11	73/.151	3	280/.011
Stop &Shop	2009	82	12840/.006	9	105/.086	5	490/.010
	2008	68	12587/.005	6	96/.063	8	477/.017
	2007	49	10392/.005	2	59/.034	6	397/.015
	2006	62	8846/.007	1	58/.017	7	276/.025
	2005	40	6531/.006	1	61/.016	1	214/.005
	2004	51	7850/.006	4	75/.053	7	258/.027
	2003	40	8382/.005	0	60/.000	1	326/.003
	2002	54	8940/.006	4	77/.052	6	316/.019
	2001	63	5799/.011	7	72/.097	44	355/.124
	2000	66	6865/.010	11	73/.151	4	280/.014
BJ's	2009	66	12840/.005	3	105/.029	0	490/.000
	2008	7	12587/.001	0	96/.000	0	477/.000
	2007	0	10392/.000	0	59/.000	0	397/.000
	2006	0	8846/.000	0	58/.000	0	276/.000
	2005	0	6531/.000	0	61/.000	0	214/.000
	2004	0	7850/.000	0	75/.000	0	258/.000

In 2009 at the BigY Plaza, one hundred seventy (170) Calls for Service were generated³.

The majority of calls were for shoplifting reports (27), Traffic stops initiated by Police Officers (19), Accidents (15) with (9) generating reports, medical problems (8) and

³ Calls for service may occur in the building, the building lot, or on adjacent streets to the building perimeter.

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premise checks (9). Also included were (2) reports of Domestic Disturbances and (2) misuses of Credit Cards within the stores. The remaining (16) calls were a variety of smaller offenses.

By way of comparison is the Downtown Business District⁴, a site with many more businesses that in the same period of time generated two thousand one hundred twenty four (2,124) calls for service. Calls for service in this area mirror the Big Y Plaza calls except for the proportional increase in calls. Because Main street is a high priority area many of the calls for service in the downtown business district involve officer initiated activity such as traffic stops, warrant arrests or directed patrol tactics.

Traffic

Looking at the effect on traffic is much harder than comparing calls for service involving crimes. The French King Highway Site cannot be compared to the area of Big Y.

French King Highway is not as densely populated and the closest retail outlet is the Stop and Shop Store. Current accident information below lists the total of accidents on French King Highway. The rate and severity of these accidents is relatively low given the width and the speed in which vehicles travel.

Accidents French King Highway 2000-2010

Street	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
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⁴ Downtown Business District – Cluster of business including buildings on Main, Miles, Bank Row, School, Hope, lower Federal, Davis, Chapman, Wells, Conway

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Adams								1				1
French King	13	18	16	10	16	10	9	8	14	17	7	138 ⁵
Loomis			1			1			2		1	5
Route 2 Bypass		1				1			1			3
Silver Pl						1						1
Stone Farm			1									1
Wildwood		1								2	1	4
Wunsch		1		1								2
Total												155

The rate of Accidents along the French King Highway is not significant. Some of this may be due to the area from Silver Street to the Route 2 Bypass having seen significant intersection improvement in the last several years. In general traffic travels to and from Stop and Shop and the Route 2 Bypass. In this area the department has recorded 155⁶ accidents with the majority being minor in nature. The incomplete year of 2010 shows a significant drop in accidents. Some of these accidents were also not investigated by a police officer, with a report being taken or information was exchanged and then filed. Traffic congestion does occur at the Wildwood Avenue intersection as traffic builds for vehicles attempting to exit to French King Highway.

Accident Analysis 2009-2009 French King Highway Time on Scene

⁵ Majority of Calls described as French king High not at an intersection occur in the Stop & Shop Lot. IE in 2009 7 were Hit & Run Minor accidents and 6 were minor accidents.

⁶ Including a partial year information on accidents received for 2010, through October 15th of 2010.

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Times are generated by the dispatch system and recorded by the officers as they arrive at a scene until they clear from the scene.

Call Reason	Total Calls	Average Time on Scene	Total Actual Time
Accident	155	15.89	51hr 33 min
Accident with Injuries	8	25.79	10hr 19 min
Hit & Run	70	15.57	18hr 23 min
Total	233	16.16	80 hr 23 min
Average per year over a 9 year period	8.91 hours per year		

Accident Analysis 2009-2009 Mohawk Trail Time on Scene⁷

Call Reason	Total Calls	Average Time on Scene	Total Actual Time
Accident	1225	17.67	457 hr 11 min
Accident with Injuries	108	30.71	136 hr 51 min
Hit & Run	226	18.31	79 hr 51 min
Total	1560	18.72	673hr 57 min
Average per year over a 9 year period	75 hours		

In looking at the comparison between the Mohawk Trail and the French King Highway accidents you can see similar characteristics regarding time on scene for officers for each category, however because of the different in area density the Mohawk Trail has a much greater accident rate with a slightly higher time on scene rate.

⁷ This is for example only and includes every location of the Mohawk Trail in Greenfield from Route 2a through the town line.

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Critical Incidents

There are no examples to draw on locally to estimate critical incidents that may occur in this area. In the police departments that I questioned using Wal-Mart as an example they had no major incidents to report that were either catastrophic or drawn out in nature to form a burden on resources. The general consensus was that major issues have to do with shoplifting and minor accidents. In most of these areas surrounding intersections were included in site planning with changes improving or lessening traffic flow issues. As with all modern building codes many of the dangers of older structure have been eliminated by building and site design. However a cost saving measure for our community would include a video system that is capable of being accessed by public safety both for the interior and exterior lot security. It would be preferable if remote access was provided and the lot cameras be high resolution capable of distinguishing license plates and facial characteristics. Security lot lighting and perimeter barriers should be designed to keep foot traffic from entering through all but designated entrances. Adequate alarm systems for building security should be in place with zone designators to identify building detection areas.. Clear paths around the building should be maintained to enable rapid assessment of all front, rear and sides by public safety. If possible sidewalks around the building should be designed with bollards in place to prevent accidental or purposeful vehicle intrusion through entrance areas. Sidewalks should also have interruption patterns to keep skateboards and rollerblades from endangering pedestrians..

Police Department Information on Communities with similar sites

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I looking at the issues surrounding this development site and utilizing the assumption that the store will be the type of a Wal-Mart I spoke to the following police department who have a Wal-Mart in their community.

Northampton Ma

The Northampton store is no more or less burdening on the police department then other retail centers in the community. They work well with the department providing access to security video. They made major intersection changes to improve traffic flow. The major crime is shoplifting and no critical incidents have occurred.

Keene NH

The police have a good working relationship with the store in their town. It mimics other plazas for demands for service. They have an excellent surveillance system and give the police access to video whenever it is needed. The police report no major incidents in that store.

Epping NH

Epping had initial problem as the store opened with shoplifting complaints. That situation has leveled out and the store and the police department have a good working relationship. They are generous supporting programs in the community. The store gave the police department access to an office in the building with furniture and a computer. The police did not use the office but the department asked for and received designated parking. They are of no major problem shoplifting being the most demanding. They provide video

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access to the police, but the department utilizes the Lowe's Stores next door as their system has greater capabilities to read license plates in the lot.

Orange Ma

The Orange Police describes them as a good neighbor. They are generous to the community and no major problems or incidents have occurred at the site. Shoplifting is a main issue but the store provides assistance to the department through their security system.

Hadley Ma

Hadley police report a good working relationship with the store. They have shoplifting and some stolen vehicles, but not out of proportion to other similar plazas. They have a good security system and the police have access to the system as they need it. The store also provides monetary community support.

Hinsdale NH

The Hinsdale store is cooperative to the police department with an excellent video system. The Hinsdale store reduces costs to the department by holding evidence of shoplifting crimes. The major crime is shoplifting and they reported no major incidents. The department will have an office space with a separate entrance in the new Super Walmart being built. They are generous to the community.

Summary

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I will caution that this information is provided on a speculative basis and is based upon estimates of projected call that are arbitrarily inflated so as to not understate service demands.

The police department also has seen cuts to its fiscal resources and as such has adopted policies dealing with call answering priorities. To provide adequate resources to answer emergency calls the department may delay responding, investigating and preparing reports on low priority responses. Shoplifting the major focus of what is projected to be demand at this site is normally a low priority call. And as such these calls will wait until emergency responses have been finished. Assaults, robberies and direct victim crimes are immediate response issues, but are of very low statistical significance in this example as the comparisons within Greenfield and exterior communities show.

Much of the current expense the department deals in with such sites concerns opportunistic⁸ crimes. Retail store area opportunistic crimes can be minimized by good site security planning. However when a crime is committed and the police are called a quality video system reduces police investigative and court costs.

Traffic flow and accidents can also be reduced by appropriate design. This has occurred in examples in Greenfield and cited by officials in area police departments that I spoke to while looking at the effects of Big Box outlets. As a side benefit enhanced surveillance systems can assist the police with traffic accident investigations When an accident does occur video is of great value to police in reducing investigative and court costs. Video can also point out inherent problems with intersection design and several stores have

⁸ Someone who commits a crime because they have a chance to because of conditions present, and not because they planned to commit a crime

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video capabilities that cover adjacent intersections. Video has also been shown to assist in crimes committed in surrounding business and residential areas by identifying vehicles and suspects passing by locations traveling to or from a crime.

Projected Costs for Police Services

French King Highway Big Box Project

The following table shows projected costs for maximum police services if a large scale Big Box retail outlet such as a Wal-Mart is built on the French King Highway Site. The data represented is overestimated by projected call volume as well as costs per hour. It also projects a greater percentage of calls for service and accidents than the closest representative example in Greenfield the Big Y Plaza. This projection is to maximize costs associated but may not be representative of actual occurrences of crimes or accidents.

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Call Type	Yearly projected	Factor ⁹	Hours projected	Rate Per Hour ¹⁰	Total Cost
911	9	.5	4.5	\$100.00	\$450.00
Abandoned MV	1	.5	.5	\$100.00	\$50.00
Animal problem	3	1	3	\$100.00	\$300.00
Accident	25	2	50	\$100.00	\$5,000.00
Accident Injury	3	6	18	\$100.00	\$1,800.00
Ambulance Request	2	.5	2	\$100.00	\$100.00
Alarm	15	2	30	\$100.00	\$3,000.00
Assault	1	6	6	\$100.00	\$600.00
Assist Citizen	3	.5	1.5	\$100.00	\$150.00
Business Check	9	.5	4.5	\$100.00	\$450.00
Despondent person	1	2	3	\$100.00	\$300.00
Breaking and Entering	3	5	15	\$100.00	\$1,500.00
Disabled MV	3	1	3	\$100.00	\$300.00
Indecent A&B	1	5	5	\$100.00	\$500.00
Fire	3	1	3	\$100.00	\$300.00
Forgery	3	3	3	\$100.00	\$300.00
Hate Crime	3	5	15	\$100.00	\$1,500.00

⁹ Factor is a number that denotes a times by number for the call which that call may impose additional costs by having additional officers or additional report writing time.

¹⁰ Rate per hour is set by taking highest paid Officers salary rounding up to \$50.00 per hour which includes proportional benefits paid and doubling to take in administrative and ancillary costs.

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Hazardous Condition	1	1	1	\$100.00	\$100.00
Hit & Run	3	3	9	\$100.00	\$900.00
Larceny	3	3	9	\$100.00	\$900.00
Medical	3	1	3	\$100.00	\$300.00
Missing person	2	3	5	\$100.00	\$500.00
Traffic Stop	3	1	3	\$100.00	\$300.00
Parking Problem	5	1	5	\$100.00	\$500.00
Lost property	5	.5	2.5	\$100.00	\$250.00
Restraining Order Violation	3	3	3	\$100.00	\$300.00
Runaway	1	3	3	\$100.00	\$300.00
Sex Crime	1	5	5	\$100.00	\$500.00
Suspicious Person	4	.5	2	\$100.00	\$200.00
Shop Lifting	40	2	80	\$100.00	\$8,000.00
Trespass	1	3	3	\$100.00	\$300.00
All others	15	1	15	\$100.00	\$1,500.00
Total	183				\$29,650.00

Summary

At maximum the proposed project may result in a cost of \$29,650.00 bases on overstated projections of calls for service at such a site.

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I have read numerous speculative assessments of costs associated with calls and crimes surrounding projects such as these while looking at the project proposed in Greenfield. However in these examples missing was comparative data on crime and demographic rates within the community. I would caution and refer anyone using numbers solely as a basis to read the brief explanation from the Federal Bureau of Investigation on the website located at <http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2009> .

Costs may be overstated in this report depending on the nature of the business and variability's of the nature of crime and accident rates.

Recommendations

I would make the following recommendations based on this project or projects like this for the Town of Greenfield as it applies to police resource expenditures. They are recommendation to reduce as much as possible expense to the Department.

1. Parking Lot- The lot should be designed to limited or impede high speed traffic by channels and islands placed to impede uninterrupted flow leading to higher speeds.
2. Pedestrian areas where they access store entrances should be well marked and lighted.
3. Lots should be well lighted at night, eliminating dark spots or hidden areas.

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4. Lots should be posted to prevent overnight parking or engine idling.
 - a. Developers should present a plan for notifying vendors and staging delivery vehicles that may arrive before store is available to accept goods to minimize disruption during overnight hours.
5. Parking Lots including entrance exit and all perimeter building areas should be viewable by a CCTV security system that is capable of distinguishing details of persons and vehicles including license plates in all lighting conditions.
 - a. CCTV system should be recorded and accessible to law enforcement.
 - b. Recording should be stored for a period of no less than (60) sixty days.
 - b. CCTV system should have remote accessibility to law enforcement.
6. Building perimeter main customer entrance areas should be protected by bollards or similar devices designed to prevent criminal or accidental vehicle intrusion.
7. Interior entrances and/or exits be recorded by CCTV security system
8. Interior entrances and/or exits have personnel or point of sale cashier stations.
9. Interior of building customer sale areas be recorded by CCTV system including entrances to bathrooms and changing rooms and security offices.

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10. Store has a security office located on a first floor level and accessible to law enforcement personnel.

11. Store security develop a plan for coordination and interaction with law enforcement personnel

12. Store have a plan approved by the Town of Greenfield for store evacuation and/or including critical incidents such as fires, bombs, missing or abducted children, barricaded subjects and similar incidents..

13. The site has clear and unimpeded access through the parking lot and the entire perimeter of the building for random visual checks by law enforcement.