Staffing Study Report
For the Tinley Park, Illinois
Police Department

**Prepared by the
Northwestern University
Center for Public Safety
Evanston, Illinois
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Contents

Introduction

To promote quality of life and ensure both operational effectiveness and cost effectiveness in serving the community, the Village of Tinley Park contracted with the Northwestern University Center for Public Safety (NUCPS) in November, 2017 to conduct an objective assessment of the adequacy of headcount and deployment of police department patrol resources

The project started with an extensive series of interviews to identify key issues and needs:

- One-on-one interviews with the Mayor, Village Manager, Assistant Manager, Public Safety Trustee and Chief of Police
- Group interviews with sworn staff at all rank levels, as well as relevant civilian staff

Next, calls for service data for 2015, 2016 and 2017 were obtained from the computer-aided dispatch (CAD) records management system (RMS) and carefully analyzed. In addition, a brief survey was sent to comparable suburban Chicago police departments to "benchmark" current staffing practices. Finally, relevant human resource records for 2014 – 2017 and other Village records and documents were reviewed and added to the analysis where appropriate.

This report conveys the results of our analysis of the quantitative and qualitative analysis in six major sections: (1) Application of Quantitative Analysis to Define Patrol Headcount; (2) Analysis of Patrol Deployment; (3) Analysis of Span of Control and Other Organizational Factors; (4) Training; (5) Other Observations; and,
(6) Summary of Recommendations.

Application of Quantitative Analysis

The Center for Public Safety's resource allocation study process is based on quantitative analysis of calls for service. This process has been proven and applied to law enforcement agencies throughout the United States and is taught to command level personnel during NUCPS's School of Police Staff and Command. Our process provides accountability for workload of the department and accounts for all time spent on patrol activities.

The Tinley Park Police Department utilizes a computer aided dispatch (CAD) system to account for the workload of the police officers. This records management system (RMS) captures each activity officers perform along with important dates and times including dispatch times, arrival times and cleared times for each officer involved in an activity which provides the total time for each activity or call for service. This time includes the time spent by back up officers, school resource officers, detectives and sometimes a sergeant.
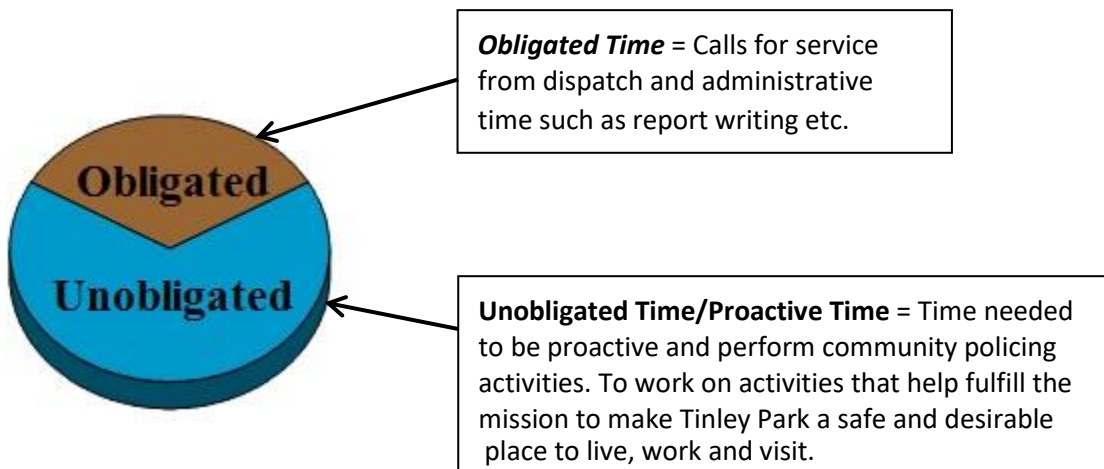
We requested and received the Tinley Park CAD data for 2015, 2016 and 2017. We also received another category of activity called "Out of Service". It should be noted that the police department switched some activity from "Out of Service to CAD activity in 2016. This includes activity such as Administrative Duties, Business and Premise Checks, Foot Patrol and School Resource Officer data. Both the CAD and "Out of Service" data was analyzed to forecast a predicted rate of calls for service and develop a staffing level recommendation for the patrol section of the police department.

Analysis of Tinley Park Activity Needed

To define total staff size for the patrol section of the police department, law enforcement best practice is to determine how much time officers will spend on obligated and unobligated time and then set staff numbers to meet desired levels of service. ***TOTAL PATROL TIME*** is the sum of obligated and unobligated time. Obligated time is time officers spend handling calls for service. Unobligated or proactive time is that time that is available for officers to be proactive and perform community policing activities. By reviewing data sets collected from the Tinley Park Police Department, we determine how much total time is needed and utilize that data to develop a recommendation for staff size.

Total Patrol Time (TPT) =Total obligated time (TOT) + Total unobligated time (TUT)

What does an average patrol hour look like?

Obligated Time = Calls for service from dispatch and administrative time such as report writing etc.

Unobligated Time/Proactive Time = Time needed to be proactive and perform community policing activities. To work on activities that help fulfill the mission to make Tinley Park a safe and desirable place to live, work and visit.

A. <u>Establishing Obligated Time Requirements</u>

The first step in our analysis was to determine Tinley Park's *TOTAL OBLIGATED TIME.* To make this determination, we reviewed the activity for the Tinley Park Police Department in 2015, 2016, and 2017. This recent three-year history presents the best basis for predicting future calls for service received by the Tinley Park Police Department. The following tables summarize the Tinley Park Police Department three year calls for service history and the three-year history for "Out of Service" activity that must be accounted for in obligated time.

1. **Tinley Park Police Department 2015, 2016 and 2017 Computer Aided Dispatch (CAD) Activity**

The following data is categorized by the number of incidents by category. The number of units represent the actual number of units that responded to the incident. Many incidents are handled by a single police officer. However, there are many incidents that require multiple units to respond, including investigations. The time is the actual time for the entire incidents and includes time for all of the units involved.

Data Source: Tinley Park CAD data from Tom Boling

Code Description	2015			2016			2017		
	Incident #	Units	Time in Minutes	Incident #	Units	Time in Minutes	Incident #	Units	Time in Minutes
Crimes against Persons	1331	3391	181986	1402	3685	210151	1471	4068	232368
Property Crimes	1871	3081	209312	1997	3459	307983	1904	3296	246119
Traffic / Accident Related	8974	16096	391081	9449	17083	457174	9310	17111	436531
Disorderly / Disturbance Calls	8413	16034	281524	8582	16620	356713	8765	17507	358091
Service Type Calls	5230	7725	209434	10819	13840	315397	14712	17745	323109
Medical / Amb Calls	2395	3323	81409	3186	4423	108942	3200	4468	104644
Administrative Type Calls	397	580	52799	1648	2259	254000	1343	1946	225643
Other Types	429	525	19130	370	456	17757	350	457	20517
Total	29040	50755	1426675	37453	61825	2028117	41065	66598	1947022

2. Tinley Park Police Department 2015, 2016, and 2017 Out of Service Activity

The following data represents activity that takes officers "Out of Service". This data needs to be accounted for because the officers are obligated to perform these activities. There are a few important things to note with out of service activities:
1. Activities such as Business Checks, Premise Checks and Administrative Duties were listed in this table in 2015 but are now accounted for in the CAD data.
2. The data for "Off Duty Assignments" were removed from the data.
3. The data for "Training" was removed from this table and will be accounted for when calculating the Shift Relief Factor.
4. Activities such as Traffic Control, Escorts and Follow Ups are part of the patrol function and even though officers are out of service, they are still working in the community.
5. Activities such as Court and Prisoner Transports take the officers out of the community and they are truly "Out of Service".
6. While activities such as Roll Call, Meal and Personal Breaks indicate that the officers are not working, they are still available for emergency calls.

Data Source: Tinley Park Out of Service data from Tom Boling

	2015		2016*		2017*	
Description	**Count**	**Minutes**	**Count**	**Minutes**	**Count**	**Minutes**
ESCORT	269	4897	299	7093	231	5018
ACO DUTIES	69	1708	0	0	0	0
ADMIN DUTY	796	78381	604	62433	749	103999
ON THE AIR	7	290	1	19	1	126
AUTO MAINTENANCE	212	7029	217	5705	189	5389
BACK UP	60	409	0	0	0	0
BIKE PATROL	1	359	0	0	0	0
BONDING	4	157	0	0	0	0
BOOKING DUTIES	23	4613	11	1398	10	1374
BUSINESS CHECK	1877	20753	11	106	0	0
CANINE TRAINING	8	2365	10	3369	4	977
COURT	154	34762	228	48512	259	57865
DARE	88	22410	0	0	0	0
ESCORT	143	8888	0	0	0	0
EVIDENCE TECH	106	3700	63	2370	123	7517
FINGERPRINTING	38	3951	0	0	0	0
FOLLOW UP	918	48866	995	75768	1904	194920
FOOT PATROL	67	1033	0	0	0	0

Description	2015 Count	2015 Minutes	2016* Count	2016* Minutes	2017* Count	2017* Minutes
FIELD TRAINING PROGRAM	69	5247	146	9626	191	11624
INVESTIGATIONS	381	54281	1	53	0	0
JAIL DUTY	233	16836	249	16062	295	22723
LIQUOR CHECKS	696	8534	0	0	0	0
MEAL BREAK	6610	235686	6366	538474	6659	208127
MEETING	818	39296	820	40091	663	34520
METRA CHECK	19	1646	0	0	0	0
OUT OF THE CAR	2596	86481	3333	131402	3225	154271
PERSONAL BREAK	2937	47495	2749	42540	3191	52048
PICK UP	1802	32423	1920	46103	1732	43576
PREMISE CHECK	148	1518	0	0	0	0
PRISONER TRANSPORT	136	12282	0	0	0	0
GAS PUMP	232	1370	233	1390	201	1495
RADAR	69	1991	4	83	0	0
RANGE DUTIES	138	7953	138	11211	112	12468
REPORT WRITING	998	69037	870	63119	828	55314
ROLL CALL	3947	109541	3917	97367	4096	107611
SCHOOL DETAIL	129	2250	0	0	0	0
SEX OFFENDER TRACKING TEAM	195	2075	0	0	0	0
SPECIAL DETAIL	582	103030	6	1231	0	0
SCHOOL RESOURCE OFFICER	30	5861	0	0	0	0
TELEPHONE CALL	194	4151	242	6370	305	5910
CAR WASH	518	4848	498	4590	497	4192
Total	**28,317**	**1,098,403**	**23,931**	**1,216,485**	**25,598**	**1,123,761**

*It should be noted that the activities reporting "0" in 2016 and 2017 are now represented elsewhere in the CAD data because of new reporting standards.

A. <u>Establishing Obligated Time Requirements (cont.)</u>

Analysis of Computer Aided Dispatch (CAD) Activity and "Out of Service" Activity by Year

<u>Tinley Park (CAD) Activity by Year</u>

<u>2015</u>	<u>2016</u>	<u>2017</u>
29,040	37,453	41,065

<u>Tinley Park Out of Service Activity by Year</u>

<u>2015</u>	<u>2016</u>	<u>2017</u>
28,317	23,931	25,598

<u>Total Tinley Park Total Activity by Year</u>

<u>2015</u>	<u>2016</u>	<u>2017</u>
57,357	60,844	66,663

Tinley Park shows a dramatic increase in the (CAD) patrol activity between the years of 2015 and 2016. Activity increased by 29% or 8,413 activities in one year from 29,040 in 2015 to 37,453 in 2016. However, the same year showed a 15% decrease in the amount of "Out of Service" Activity. Much of this can be attributed to the way the data is collected and categorized. There was a change in the way Tinley Park accounts for activity like Foot Patrol, Business and Premise Checks. They previously were considered out of service contacts but now they are considered CAD activities. There was another increase in CAD activities in 2017 with the majority of the increase (36%) occurring in the "Service Type Calls".

Tinley Park is showing a consistent year-over-year increase in overall activity. Activity increased by 6% from 2015 to 2016 and it increased another 9.5% from 2016 to 2017. The national trend in law enforcement is for the police to spend more time on community related problem-solving activities. The officers no longer simply arrive and make an arrest or write a ticket. They are more inclined to communicate with the community in order to be more effective. Likewise, most communities are seeing a decrease in the number of traffic tickets written as law enforcement continues to move from "Warrior" to "Guardian." If this trend continues Tinley Park will continue to see the amount of activity increase at an annual rate of approximately 5%.

Forecast of Activity by Year

Anticipated Total Activity by Year

2018	2019	2020	2021
69,996	73,496	77,171	81,029

CALCULATING OBLIGATED TIME

Tinley Park Time for (CAD) Activity by Year

Data Source: Tinley Park CAD data

2015	2016	2017
23,778 hours	33,802 hours	32,450 hours
49.1 minutes per call	54.1 minutes per call	47.4 minutes per call

As outlined above, Tinley Park Police Department data evidenced that the three-year average time for each activity including the time spent by all officers involved is 50.2 minutes.

Tinley Park Time for "Out of Service" Activity by Year

Data Source: Tinley Park data from Tom Boling

2015	2016	2017
18,307 hours	20,275 hours	18,729 hours

Tinley Park Total Time by Year

Data Source: Tinley Park data from Tom Boling and (CAD) data

2015	2016	2017
42,085 hours	54,007 hours	51,179 hours

Total estimated Obligated Time for Tinley Park P.D. in 2017 = 51,179 hours

Supervisor and Investigations time included in the data

Tom Boling advised that the time from CAD and Out of Service data includes responses from both supervisors and investigations. Time from tactical officers and school resource officers are also included in this time. Therefore, obligated time must be adjusted to account for this. According to interviews, with the Sergeants, Investigations and the Deputy Chiefs this is estimated to account for approximately five percent of the time. Estimated obligated time for the entire police department is 51,179 hours and 95% of this is 48,620 hours.

Total estimated Obligated time for the Tinley Park Police Department is 48,620.

B. <u>Establishing Unobligated Time Requirements</u>

The next step in our analysis was to determine how much unobligated time Tinley Park police officers need on patrol. Unobligated time is also referred to as proactive time. While obligated time evidences the level of reactive policing which is required to respond to calls for service, the Tinley Park Police Department also needs unobligated time to:

- ➢ Be visible
- ➢ Improve the quality of police service
- ➢ Establish and maintain relationships
- ➢ Ensure safe roadways
- ➢ Reduce officer burnout
- ➢ Attend mandated training
- ➢ Enable spontaneous training
- ➢ Allow time for follow-ups
- ➢ Decrease response times
- ➢ Provide officer breaks
- ➢ Allow time for Community and/or Problem Oriented Policing

Determining how much unobligated time a patrol officer needs is a strategic decision based upon both quantitative and qualitative factors. Based on our interviews with key stakeholders, including Tinley Park Police Department personnel and other city personnel, providing a high level of professional services and establishing and maintaining both positive and effective relationships with residents and visitors is essential to the quality of life in Tinley Park. Many of the officers mentioned in the interviews that they are not only employees, but they also live in Tinley Park.

In its resource allocation work, NUCPS recommends unobligated patrol officer time to range from 25 to 35 minutes of each patrol hour. In order to provide a safe and desirable environment for the residents and visitors of Tinley Park, we recommend that patrol officers must have at minimum of at least 30 minutes of unobligated time during each patrol hour. This will provide sufficient staff to properly serve the public, maintain police visibility in the community, reduce the likelihood of harm to citizens and police, and help protect the Village from potential liability claims related to police activities.

To determine the amount of unobligated/proactive time we must first establish the performance factor for patrol. The performance factor will be used to create additional time to improve performance on patrol.

The performance factor is calculated using the following NUCPS formula.

Data Source: NUCPS recommendation of unobligated time

NUCPS Performance Factor formula

$$Performance\ Factor\ (Fperf) = \frac{Mu}{60 - Mu}$$

If the Unobligated time per hour is estimated at 30 minutes per hour.

$$Performance\ Factor\ (Fperf) = \frac{30}{60 - 30}$$

$$Performance\ Factor\ (Fperf) = \frac{30}{30} = 1$$

Calculation of Unobligated Time

Data Source: Performance Factor (F$_{perf}$) = 1

Total Obligated Time = 48,620 hours

Total Unobligated Time = F$_{perf}$ X TOT (Total Obligated Time)

= 1 X 48,620 hours

= 48,620 hours

Tinley Park Police Total Unobligated Time when 30 minutes per hour has been designated = 48,620 hours

C. Establishing Total Required Patrol Time

The goal for the Tinley Park Police Department is to meet its enforcement and service level goals and fulfill its mission in an efficient and effective manner. Our analysis to this point has established that the Tinley Park Police Department has a Total Obligated Time of 48,620 hours. Total Unobligated Time is 48,620 hours when 30 minutes is designated per hour. Total Patrol Time is determined by adding obligated and unobligated time together.

Total Patrol Time (TPT) = Total Obligated Time (TOT) + Total Unobligated Time (TUT)

Total Obligated Time (TOT) = 48,620 hours

Total Unobligated Time (TUT) = 48,620 hours

Total Patrol Time (TPT) = 97,240 hours

Tinley Park Police Annual Total Patrol Time with 30 minutes of Unobligated time = 97,240 hours

Therefore, the Tinley Park Police Department must have staffing adequate to cover 97,240 hours. Now, knowing how many hours of total patrol time we need to cover, we can examine staffing levels and time off from work considerations to determine specific headcount requirements.

Determining Specific Headcount Requirements

A. Determining Shift Relief Factor

Having determined the current effective daily staffing level for patrol officers, the next step in determining specific headcount requirements is to analyze the number of total hours needed to cover one shift position in relation to the average amount of time off per officer. This is needed because officers do not work every day of the year. The Shift Relief Factor (SRF) is a multiplier that defines the number of officers required to staff one shift position every day of the year. The SRF for agencies is affected by the amount of time off patrol duties which is given to each officer.

It is important to understand that SRF is based on averages calculated on the data collection period. Using the SRF does not guarantee that the appropriate number of officers will appear for duty each day. The number of officers that will be on duty each day can vary due to both scheduled and unscheduled time off. This section will present the quantitative analysis and calculations needed to define the Tinley Park Police Department Shift Relief Factor.

To determine the Shift Relief Factor (SFR) for the police department, data was collected from 2014, 2015, 2016 and 2017 and an average was determined for the police officers.

Shift Relief Factor Formula

The formula for achieving the Shift Relief Factor is:

$$SRF = \frac{365 \text{ x Shift Length}}{(365 \text{ x Shift Length}) \ - \ (\text{Average Hours Away from work per year per Officer})}$$

The Tinley Park Police Department patrol shift length is 10 hours. Therefore, we need to calculate the *AVERAGE HOURS OFF PATROL PER YEAR PER OFFICER*. This is accomplished by utilizing the following data:

1. Regular Schedule Time Off (RSTO) – Normally scheduled days off work
2. Benefit Time Off (BTO) – Benefit time such as vacation, personal days, sick, etc.
3. Non-Patrol Time (NPT) – Time for scheduled training and Military leave, etc.

1. Regular Schedule Time Off (RSTO): The duty cycle of the Tinley Park police officer is 4 days working with 3 days off every week. The following formula is used to find the regular schedule time off:

RSTO = Total time period X Number of off Duty Days
     Duty Cycle Length Days

RSTO = 365 X 3   = **156.4 days off a year**
    7

Tinley Park Police Department RSTO = *156.4 days*

2. Benefit Time Off (BTO): Benefit time off is based on analysis of vacation and sick leave used in 2014, 2015, 2016 and 2017. The data is time that is actually taken off and not the time earned by employees. Based on the data collected the following benefit use levels reported below were found.

3. Non-Patrol Time (NPT): Training and Administrative Time is based on the activities that take officers away from their normal work. These include administrative assignments such as training.

Benefit Time Off and Non-Patrol Time

	Benefit Time Off (Average Days per officer)				
	2014	2015	2016	2017	Average
Sick Leave	7.5	9	9	7	8.1
Vacation	13.7	14.5	15	11.9	13.8
Compensatory	7	8.4	9	7	7.9
Other (Admin, Holidays, Jury Duty, Bereavement, etc.)	2.8	2.6	2.5	2.9	2.7
Personal Days	2.5	2.9	2.8	2.7	2.7
Training	22.1	23.1	22.5	22.8	22.6
Total	55.6	60.5	60.8	54.3	57.8

As evidenced in the above table,Tinley Park police officers have an average of 57.8 days of benefit time off and training time each year.

Calculating the Shift Relief Factor

The Shift Relief Factor (SRF) formula requires establishment of the average hours off work per year for officers. This average is the sum of the two factors established in the prior sections:

1. Regular Schedule Time Off (RSTO) = 156.4 days
2. Benefit Time Off (BTO) and Non-Patrol (NPT) Time = 57.8 days
   Average Time Off Patrol = 214.2 days

Based on the data collection and calculations the average time away from normal work per year per officers is 214.2 **days or 2142 hours.** This means that officers are working an average of 150.8 days, or at 1508 hours each year of their annual 2080 hours.

Shift Relief Factor (SRF) formula =

$$SRF = \frac{365 \text{ x Shift Length}}{(365 \text{ x Shift Length}) - (\text{Average Hours Away from work per year per Officer})}$$

Data Source: Shift length = 10 hours
Average time off taken = 214.2 days

$$SRF = \frac{365 \text{ x Shift Length}}{(365 \text{ x Shift Length}) - (\text{Average Hours Away from work per year per Officer})}$$

$$SRF = \frac{365 \text{ x } 10}{(365 \text{ x } 10) - (214.2 \text{ x } 10)} \qquad SRF = \frac{3650}{1508} \qquad SRF = 2.42$$

Tinley Park Police Department Shift Relief Factor (SRF) = 2.42

This is the multiplier that is used to determine the number of officers required to effectively staff the department and is equal to the number of officer required to staff one shift position every day.

B. Determining Total Number of Officers Needed

The determination of the total number of officers needed is made by taking the Shift Relief Factor and multiply it by the actual number of shift positions needed per day.

TOTAL NUMBER OF OFFICERS = (SRF) X # of Shift Positions per day.
Date Source: Shift Relief Factor (SRF) = 2.42
Shift Length (SL)= 10 hours

Total Patrol Time = 97,240 hours with 30 minutes of unobligated time

Shift Positions per day = $\frac{1}{10(SL)}$ x $\frac{97,240}{365}$ annual hours
annual days

Shift Positions per day = 1/10 x 266 hours of work per day

The Tinley Park Police Department averages 266 hours of work every day. The Tinley Park Police Department police officers work 10 hour shifts. The average number of hours of daily work is divided by the number of hours worked daily and this means the Tinley Park Police Department needs 26.6 positions to get the work done every day.

Date Source: Shift Relief Factor = 2.42
        Number of officers per day = 26.6

TOTAL NUMBER OF Officers = (SRF) X # of Shift Positions per day.

TOTAL NUMBER OF Officers = (2.42) X 26.6 = 64.372 Officers, or at least 64 Officers, to provide 30 minutes (50 per cent) of unobligated patrol time

Tinley Park Police Department Required Number of Officers for Patrol Calls for Service = 64 officers

To provide context, the following chart provides an overview of the impact of alternative levels of unobligated patrol time on patrol section staffing, given the current staffing level of 51 officers assigned to patrol. The detailed calculations in support of this chart are presented in the Appendix.

Recommended Patrol Staffing for Various Unobligated Time Alternatives

Unobligated Minutes per Hour	Per Cent Of Hour	Total Patrol Time Hours	Patrol Hours Per Day	Number of Officers Needed
24	40%	81,033	222	54
25	42%	83,349	228	55
26	43%	85,800	235	57
27	45%	88,400	242	59
28	47%	91163	250	60
29	48%	94,103	258	62
30	50%	97,240	266	64

Recommendation One: Increase number of officers assigned to patrol from the current level of 51 to 64, a total of thirteen (13) officers, to meet the demands of calls for service as well as the amount of time strategically set for unobligated patrol time in the Village.

Section Two

Analysis of Patrol Deployment

The Village of Tinley Park Police Department currently has 51 patrol officers assigned to two squads, either A squad or B squad. The A squad works Sunday through Wednesday and the B squad works Wednesday through Saturday. The officers are deployed at different levels depending on the time of the day and overlapping during the busiest times of the day. The majority of the officers start at either 4:00am, 2:00pm or 6:00pm.

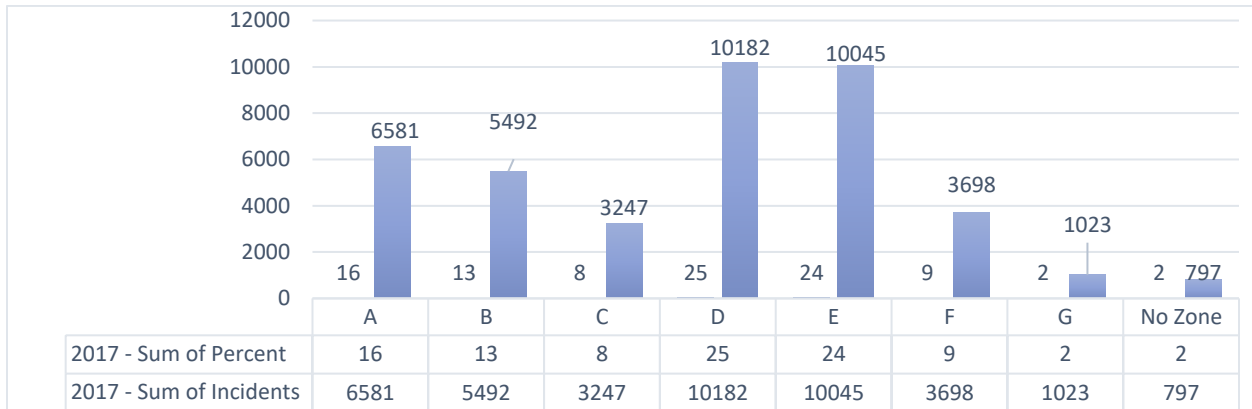| Time of day	Minimum Number of Officers
4:00am to 8:00am	*
8:00am to 2:00pm	*
2:00pm to 6:00pm	*
6:00pm to midnight	*
Midnight to 4:00am	*

(* - redacted to maintain operational security)

The calls for service activity in the Village of Tinley Park is fairly consistent by day of the week, as shown in following chart:
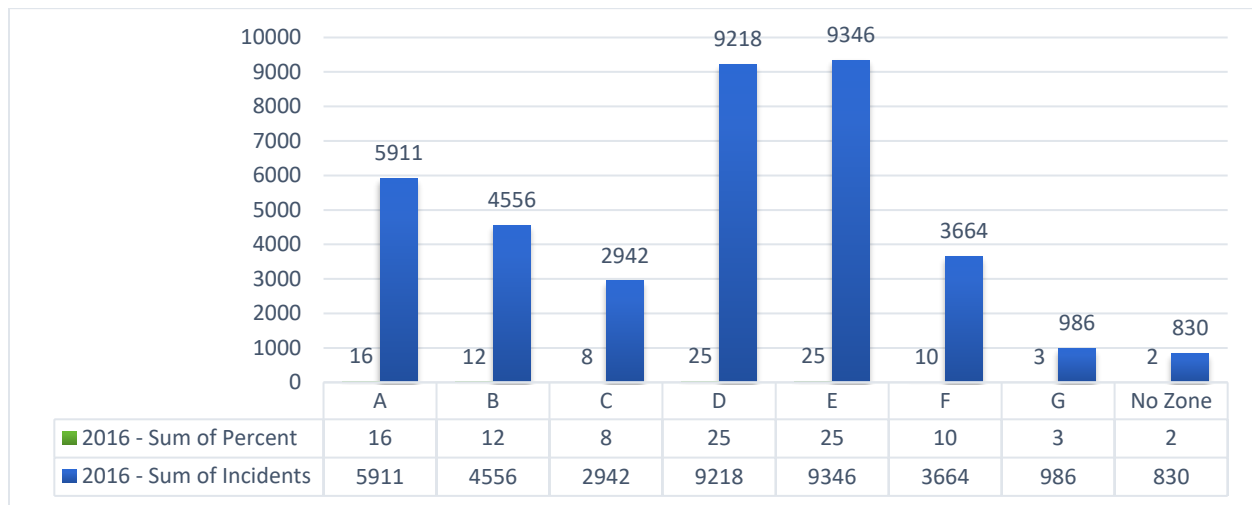
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2017 Activity	5,421	5,687	6,060	5,662	5,869	6,293	6,037
Percent	13%	14%	15%	14%	14%	15%	15%

The Village of Tinley Park is currently divided into seven police zones (A through F). By deploying the officers in police zones, the police department attempts to deploy personnel in the most effective and efficient manner. The Tinley Park Police Department deploys one officer in each zone. When staffing is less than seven patrol officers, Zones F and G are combined, with one officer responsible for both Zones. When staffing is greater than seven, officers are doubled up in Zones D and E. Zones D and E consistently represent approximately half of the activity occurring in Tinley Park. The following charts show the number of incidents and the percentage of annual activity for each zone.
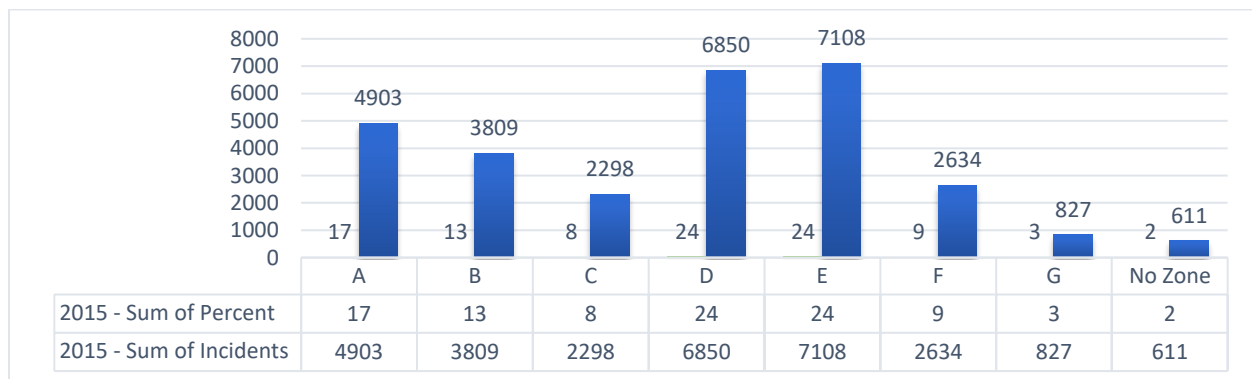
2017

	A	B	C	D	E	F	G	No Zone
2017 - Sum of Percent	16	13	8	25	24	9	2	2
2017 - Sum of Incidents	6581	5492	3247	10182	10045	3698	1023	797

2016

	A	B	C	D	E	F	G	No Zone
2016 - Sum of Percent	16	12	8	25	25	10	3	2
2016 - Sum of Incidents	5911	4556	2942	9218	9346	3664	986	830

2015

	A	B	C	D	E	F	G	No Zone
2015 - Sum of Percent	17	13	8	24	24	9	3	2
2015 - Sum of Incidents	4903	3809	2298	6850	7108	2634	827	611

The Tinley Park Police Department is clearly very busy, with a world class music theatre, convention center and a busy interstate highway. The village is set in two different counties (Cook and Will), each with their own requirements which impact police activities. For example, Cook County requirements are particularly difficult with respect to transporting prisoners. The amount of activity and the time spent on the activities suggest that additional staffing is necessary. The village also hosts approximately 50 special events during the year that require security. Most of the security provided by the village for these events comes from paying the officers overtime or by supplementing with officers that are supposed to be policing the village. As explained in previous sections, the analysis of department activity shows a need for 64 patrol officers.

 The current schedule does an excellent job deploying officers by time of day and day of week. However, the permanent patrol zone design is extremely inefficient. Two of the Zones account for 50% of all of the activity in the village, while one of the Zones only accounts for approximately 3%. We understand that supervision and management make assignments and adjustments on a day-by-day and continuous basis that take into account the actual situation evolving in the community, but recommend that staff will be better deployed to where the activity is occurring by adjusting the beat design.

Recommendation Two: Based upon historic call activity data, Zones F and G should be permanently combined in Will County. To further equalize the activity both Zones D and E should be split into two which will put call for service activity levels of approximately 12.5 % in 6 of the 8 new Zones.

Section Three
Analysis of Span of Control and Other Organizational Factors

<u>Span of Control</u>

Interviews with not only the patrol sergeants but also the patrol officers suggest that the sergeants are responsible for too many tasks and are not able to spend sufficient time properly supervising. Each sergeant is responsible for a managing a specialty activity (e.g., Field Training, Tasers and Bicycle). In addition, when officers call in sick or ask to use compensatory time off, it leaves the shift short. As a result, a significant of time is spent by the sergeants filling the vacancies. It was noted in the interviews with staff that sergeants are paid overtime to come in to work on preparing the work assignment schedule. Two sergeants are supervising at the same time for only six hours a day which means that only one sergeant supervises up to 10 or 15 officers during the rest of the day. Clearly, it is difficult for one sergeant to supervise that many officers.

To provide a relevant benchmark for shaping our recommendations, NUCPS sent out a brief survey to a total of ten Chicago suburban police agencies, requesting information on their patrol division organization structure and staffing. Participating agencies were guaranteed anonymity, so none are named. All these communities are in the population size range of 50,000 to 75,000 inhabitants, and have major shopping, commercial and residential areas comparable to Tinley Park. Five agencies responded in time to be included in this report. Findings are presented in the table on the following page.

Staffing and Span of Control

In Suburban Chicago Police Departments

	Southwest Suburban Dept. #1	Southwest Suburban Dept. #2	Southwest Suburban Dept. #3	North Suburban Dept. #1	North Suburban Dept. #2	Overall Average (Tinley Park not Included)	Tinley Park Police Dept.
Rank							
Chief/Director Of Public Safety	1	1	1	1	1	1	1
Deputy Chief	1	3	1	2	1	1.6	2
Patrol Commander	1	6	3	6	3	3.8	0
Patrol Captain	0	0	0	0	0	0	0
Patrol Lieutenant	4	3	4	0	0	2.2	0
Patrol Sergeant	8	14	8	14	11	11	6
Police Officer	50	85	83	95	68	77	52
Span of Control Ratios							
Officers to Sergeant	6.2	6.1	10.4	6.8	6.2	7	8.7
Officers to Sergeant and Lieutenant	4.2	5	6.9	6.8	6.2	5.8	8.7
Officers to Sergeant, Lieutenant & Commander	3.8	3.7	5.5	4.8	4.9	4.5	8.7

Several important observations concerning these findings:

- <u>All</u> these departments have an additional level of supervision(Commander) between sergeant and deputy chief; and sixty (60) percent of these departments have two additional levels of supervision (Lieutenant and Commander) between sergeant and deputy chief
- Looking solely at the span of control of sergeants, only one department has a span of control larger than Tinley Park (10.4 vs. 8.7 officers per sergeant); and, this specific department has two additional levels of supervision (Lieutenant and Commander), which Tinley Park does not have
- The bottom line of the chart conveys the most significant finding: the departments in the survey have nearly double the level of supervision to the level of supervision currently operating in Tinley Park (an average of 4.5 officers per supervisor in the survey sample vs. 8.7 officers per supervisor currently in the Tinley Park Police Department)

Based on the above findings, as well as our own experience in leading and consulting with police agencies, we recommend that an additional level of supervision be immediately implemented in the department. An additional level of supervision should be created in patrol to allow sergeants more time to supervise the officers on the street, vs. being caught up in office-based administration.

We recommend the creation of the exempt rank of Commander, and adding two patrol Commanders, one for squad A and one for squad B. In addition, given the extent and complexity of investigative work in the village, it is desirable to have a Commander rather than a sergeant oversee these activities. This would provide a consistent level of management and supervision across the patrol and investigative functions. Commanders would focus on management and administration and sergeants would focus on supervision and coaching. These positions would be in addition to the thirteen patrol officers identified in Recommendation One.

Recommendation Three: Create an exempt rank of Commander, and immediately add two Patrol Commanders in order to free up Sergeants to provide more direct supervision of patrol officers. In addition, consider adding a Commander to manage investigations.

Section Four
Training

The police department provides on average approximately 225 hours of training annually to each officer, facilitated by having full staffing on every Wednesday. This allows the department to consistently address the professional development of officers as well as meet the increasing amount of state mandated training.

In addition to using outside instructors, the department prepares their staff experts by sending them to "train the trainer" classes so they can come back and train the rest of the police department. The Tinley Park Police Department also sends officers to other agencies for training in order to keep up with current trends and best practices in the profession. In 2017, many officers attended training conferences such as, the Illinois Juvenile Officers Association annual training conference, the Elderly Service Officer training conference, K9 training conference and the Illinois Association of Technical Accident Investigators annual training conference. Finally, two officers attended Crisis Intervention Team (CIT) training in May of 2017 in Urbana Illinois. This is a program that is a priority for law enforcement agencies and is important in a village with a community crisis center (Crisis Center for South Suburbia). During interviews, officers commented on issues like mental health that are a strain on resources. It is clear that Tinley Park needs to continue an aggressive training schedule in order to meet state mandates and to remain current in law enforcement trends.

Recommendation Four: Continue the current level of in-service training for all officers, in order to meet state mandates and to be prepared to properly address emerging high priority areas of need and service as well to remain current in professional developments and trends in law enforcement.

Section Five
Other Observations

We interviewed representatives of other sections of the police department. Based on these interviews, we identified two other areas with opportunities for improvement.

<u>Records Management System</u>

The police department has a Records Management System designed to save time and make the agency more efficient. One component is the electronic crash reporting system. Most crash reporting systems are self-auditing and help the officer automatically fill data fields. When the reports are completed and approved by the supervisor they are automatically uploaded into the Records Management System and transmitted to the state. Reports can be purchased on-line by both citizens and insurance companies.

Tinley Park police officers write crash reports on their computer in the squad car. This actually takes more time than a handwritten report, because the fields do not automatically populate. The reports appear more professional because they are typed, however the officers are spending more time working on the reports and the records staff still has to do the auditing of the reports. Furthermore, the reports are not available for purchase on line. Thus, we believe the utility of the electronic reporting system is underutilized at this time.

It appears that there is considerable opportunity to leverage currently available technology to save sworn and civilian staff time, provide more up-to-date service to the public and also generate revenue for the Village.

<u>Twenty-four Hour Records Section Operation</u>

The police department records section is open for 24 hours. The department is staffed with part-time records personnel overnight. Records staff reports that the overnight employees spend their time entering traffic tickets, checking crash reports and filing. They also are available 24 hours a day at police headquarters to accept payments for water bills, and sell village stickers and tokens for the train station parking lots.

The cost/benefit analysis of this arrangement is outside the scope of this project, but it again appears that better utilization of technology will results in cost savings and enhanced service.

Recommendation Five: A study needs to be conducted to find more efficient ways to utilize technology which supports police-related activities. Records Management Systems can provide more efficient methods in areas such as electronic citations and electronic crash reporting. The village could also find more efficient ways for citizens to pay for commuter parking. Finally, online payments and other methods to collect money from the public could allow the police department lobby to close overnight and save on personnel costs.

Section Six
Summary of Recommendations

Based upon our interviews and review of agency records and documents, we developed five (5) major recommendations to improve the efficiency and effectiveness of police operations:

Recommendation One: Increase number of officers assigned to patrol from the current level of 51 to 64, a total of thirteen (13) officers, to meet the demands of calls for service as well as the amount of time strategically set for unobligated patrol time in the Village.

Recommendation Two: Based upon historic call activity data, Zones F and G should be permanently combined in Will County. To further equalize the activity both Zones D and E should be split into two which will put call for service activity levels of approximately 12.5 % in 6 of the 8 new Zones.

Recommendation Three: Create an exempt rank of Commander, and immediately add two Patrol Commanders in order to free up Sergeants to provide more direct supervision of patrol officers. In addition, consider adding a Commander to manage investigations.

Recommendation Four: Continue the current level of in-service training for all officers, in order to meet state mandates and to be prepared to properly address emerging high priority areas of need and service as well to remain current in professional developments and trends in law enforcement.

Recommendation Five: A study needs to be conducted to find more efficient ways to utilize technology which supports police-related activities. Records Management Systems can provide more efficient methods in areas such as electronic citations and electronic crash reporting. The village could also find more efficient ways for citizens to pay for commuter parking. Finally, online payments and other methods to collect money from the public could allow the police department lobby to close overnight and save on personnel costs.

Section Seven
Appendix

Recommended Patrol Staffing for Various Unobligated Time Alternatives

(detailed data and calculations)

Minutes Unobligated	%/hr	Perf Factor	Obligated Time	Unobligated Time	Total Patrol Time	Patrol Hours per Day	Shift Position per Day	Number of Officers Needed (fractional)	Number of Officers Needed (rounded)
24	40	0.67	48620	32413.33	81033.33	222.0091	22.201	53.72621	54
25	42	0.71	48620	34728.57	83348.57	228.3523	22.835	55.261245	55
26	43	0.76	48620	37180	85800	235.0685	23.507	56.886575	57
27	45	0.82	48620	39780	88400	242.1918	24.219	58.610411	59
28	47	0.88	48620	42542.5	91162.5	249.7603	24.976	60.441986	60
29	48	0.94	48620	45483.23	94103.23	257.8171	25.782	62.391728	62
30	50	1.00	48620	48620	97240	266.411	26.641	64.471452	64