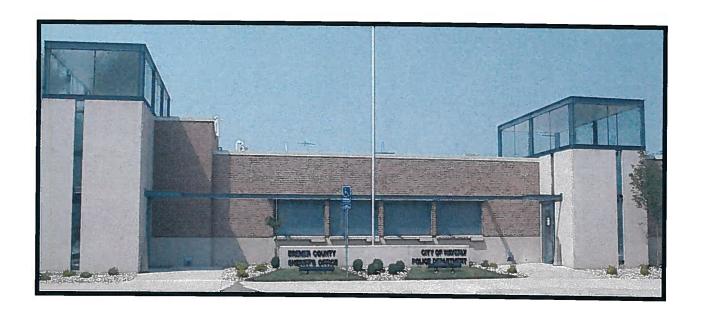
# Waverly Police Department

## Annual Report



2005 - 2006

### **Table of Contents**

Letter from Chief of Police

Organizational Chart and Mission Statement

Cover Letter

Goals and Objectives Achieved

Calls for Service Monthly Summary Chart

Calls for Service Trend Analysis

Uniform Crime Report Analysis

Arrest Trend Analysis: Adult and Juvenile

Arrestee Comparison Table

Statistical Comparison Summary

Reported Calls Time Line

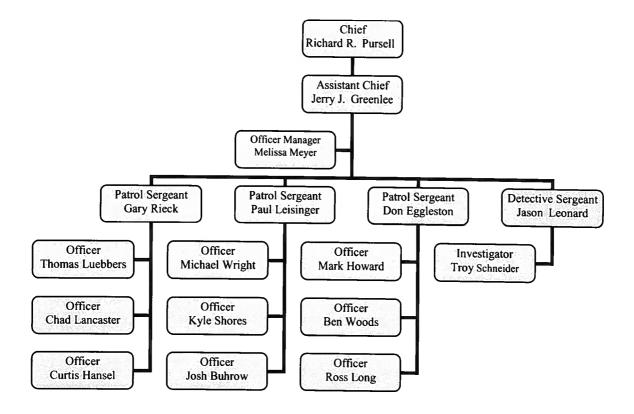
Projection of Future Needs

#### **WAVERLY POLICE DEPARTMENT**

#### **Mission Statement**

The Waverly Police Department is a service oriented, public safety organization that is dedicated to serving the citizens of Waverly through the maintenance of order, preservation of civil right and the impartial enforcement of laws. The Department will accomplish these mandates by requiring the highest professional standards of its officers while maintaining constant vigilance in order to balance its legislated powers with its constitutional responsibilities.

#### **Organizational Chart**





## **Police Department**

Richard R. Pursell Chief of Police

Jerry L. Greenlee Assistant Chief

111 4<sup>th</sup> Street NE Waverly, IA 50677

Administrative: (319) 352-5400

Fax: (319) 352-2708

31 October 2006

Mayor Ivan Ackerman Members of the City Council Citizens of Waverly

Mayor, City Council Members, and Citizens of Waverly,

I am pleased to submit my annual report as Chief of Police for 2005 – 2006. This report comes towards the end of my first year in this position. I would like to take this opportunity to sincerely thank each of you for instilling your confidence in me and your continued support of the Waverly Police Department. I would also like to thank my department for their tireless efforts and continued service; it is truly a privilege to work with these dedicated professionals.

In an ever changing world the public and police department must become involved with each other. The challenge of every person in our community is to make Waverly a better place to live. The Waverly Police Department is committed to providing the citizens of Waverly with the highest level of law enforcement service through community policing, proactive strategies and efficient emergency response.

As this year comes to an end, the prospects of the future are exciting. Please take an opportunity to review the report and should you have any questions or comments, do not hesitate to contact me.

Respectfully submitted,

Richard Pursell Chief of Police

Waverly Police Department

# 2005 - 2006

was a very busy year for the Waverly Police

Department. During this fiscal year, long time Chief Arthur Simpson retired from the force. Chief Simpson had dedicated 27 years

of service to the community and the Waverly Police Department. The Waverly Police Department would like to publicly thank him for his commitment and all that he

accomplished while he was here.

Officer Curtis Hansel and Officer Benjamin Woods joined the Waverly Police Department due to openings within the department. Officer Paul Leisinger was promoted to Sergeant and is currently working as the 2<sup>nd</sup> Shift Patrol Supervisor. Officer Troy Schneider was selected to fill a new Investigator position created this year.





Detective Sergeant Jason Leonard received an award for Law Enforcement Officer of the Year for 2005. The nomination comes from fellow law enforcement personnel from within Bremer County in recognition for outstanding service to the citizens of the community.

The Waverly Police Department hosted the First Annual Child Safety Day on Saturday April 8, 2006. There was a good turn out as the kids learned about the police department, dangers of drugs and alcohol, and filled out Child Identification Kits for their parents. The

officers volunteered their time to make this day a success.

The Waverly Police Department played a role in the inaugural Special Olympics USA National Games as the Law Enforcement Torch Run came through Waverly.

The Waverly Police Department began operating out of the new Law Enforcement Center in May 2006. The Law Enforcement Center is shared with the Bremer County Sheriff's Office and was funded by a 1 percent local option sales tax. A special thank you goes out to the citizens of Waverly for their support of this project.



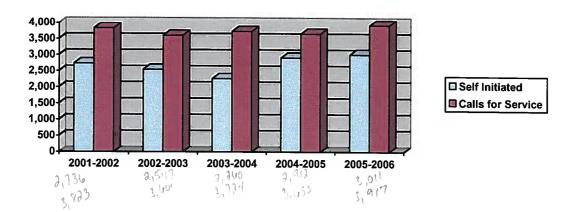
The Annual Report reflects the activities for the fiscal year 2005 - 2006. To better understand some aspects of the report a short explanation of terminology is indicated below:

Reported Calls are all the calls funneled through the Law Enforcement Communication Center. These calls could be a walk in, phone call or dispatched call to the department.

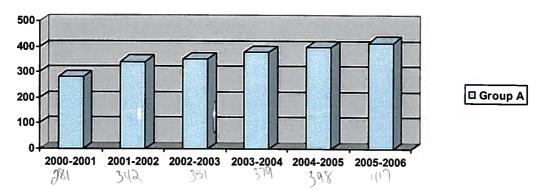
<u>Calls for Service</u> are those reported calls that required documentation for future reference.

<u>Self Initiated Calls</u> are the actions of the officers when they issue citations, warnings and parking tickets.

Not every reported call or call for service results in an arrest or prepared report, but they show the basic operations of the Waverly Police Department. During 2005 - 2006 there were 10,112 Reported Calls, 3,917 Calls for Service and 3,011 Self Initiated Calls. These calls may take anywhere from 15 minutes to several hours or days to complete at an average of 28 calls per day.



<u>Uniform Crime Report</u> reflects those calls for service that were serious enough for our officers to prepare a UCR report. The Uniform Crime Report is a nation wide reporting program facilitated by the Federal Bureau of Investigation. The FBI is tasked with collecting, publishing and archiving these crimes. UCR reports are broken down into group A and group B offenses. Generally speaking, group A offenses are more serious while group B offenses are less serious or more difficult to classify. During 2005 – 2006 there was an increase in each of these groups. Group A offenses have increased over the past six fiscal years.



We are proud of the ability of our Department and Officers to handle these demands. It is the goal of the Waverly Police Department to provide a safe community and respond to the needs of the citizens of Waverly.

#### 2005 – 2006 Goals and Objectives Achieved

#### 1. Grant Funded Equipment and Training:

During Fiscal Year 2005 – 2006 the Waverly Police Department received grants totaling over \$22,000 for equipment and training. The equipment includes five (5) Bullet Proof Vests that were partially purchased through a \$1,300 grant from the Bureau of Justice, one Python Radar valued at \$1,500 from the Governors Traffic Safety Bureau, one \$11,500 Night Vision Device from Technology Transfers, 2600 Child Safety Kits valued at \$1,300 from Radio Shack, three (3) Preliminary Breath Test devices for \$1,350 and one \$350 Tint Meter received from the Governors Safety Traffic Bureau.

The grant funded training courses include Protecting Children Online, Tactical Warrant School (3 Officers attended), Search & Seizure, Killology (3 Officers attended), and Law Enforcement Intelligence Network.

The Waverly Police Department received \$721.67 from the Governors Traffic Safety Bureau for reimbursement of overtime expenses.

#### 2. Training:

The Waverly Police Department continues to attend training to maintain technical and professional proficiency. Waverly Police Officers received training for Defensive Tactics, Firearms, Active Shooter, ASP Tactical Baton, Basic Criminal Investigation, Interviews & Interrogations, Basic Incident Command, National Incident Management System, First Aid and AED, OSHA, and Accident Investigation.

Waverly Police Officers maintain Instructor Certification through the Iowa Law Enforcement Academy in Firearms (pistol and rifle), Defensive Tactics, Tactical Baton, and Chemical Munitions. This allows training to be handled "in house" for these areas in an attempt to keep training costs down.

#### 3. K-9 Unit:

The K-9 Unit continues to be a valuable tool for the Waverly Police Department and asset to the community. The K-9 Unit has put on demonstrations throughout the year for several groups and functions.

In 2006 K-9 handler Officer Buhrow and partner Cindy competed in the United States Police Canine Association regional trials. Officer Buhrow was not only certified through U.S.P.C.A., but won the Rookie of the Year Award.

#### 4. **D.A.R.E.**:

Sgt. Leisinger had been the Waverly Police Department's D.A.R.E. officer until he was promoted in 2006 and moved to the second shift supervisor position. Officer Lancaster graduated from D.A.R.E. School in September 2006 and will be taking that responsibility over this school year. The Waverly Police Department feels D.A.R.E. is an important link between the schools, children, parents, and police.

Category	averly I	Jul	Aug	Sep	Oct	Nov	Dec				A	1.1	
AOA	107	4	14	2 2	10	12		Jan	Feb	Mar	Apr	May	
Accidents	298	18	24	24	24	27	10	5	6	10	10	19	_
Alarms	93	6	6				30	23	31	21	20	34	
Alcohol/Intox	_			8	7	7	4	5	10	11	6	13	
Animals	113	8	6	15	15	3	6	4	7	9	10	27	
BOMB	285	37	27	25	22	25	13	17	14	26	25	24	
	0	0	0	0	0	0	0	0	0	0	0	0	
Assault	69	5	7	9	3	4	7	2	8	5	12	3	
Bad Checks	96	10	9	18	2	9	4	6	7	6	15	0	
Bremwood	210	11	20	20	14	20	12	16	22	17	16	32	
Burglary	36	3	3	3	0	1	6	3	5	1	5	3	
Child Abuse/Neg.	9	0	0	0	1	0	2	0	1	2	1	2	
Civil Dispute	40	2	5	4	5	1	0	4	5	2	2	6	_
Criminal Mischief	101	8	9	7	15	5	4	6	8	7	9	11	_
Domestic/Custody	89	10	7	5	12	12	7	5	8	2	9	5	
DPQ/Disorderly	140	12	13	12	11	11	3	16	6	10	15	25	_
Driving Complaints	128	9	9	15	10	7	3	13	9	14	19	13	_
Drugs	51	3	5	4	4	7	3	4	2	4	11	1	_
DWLS/No DL	15	4	5	1	0	1	1	0	0	0	2	1	
E911 (false)	93	5	6	6	8	10	9	10	8	5	7	9	
EDP/Mental	40	1	3	2	1	6	2	2	5	5	4	5	-
Escorts	74	3	7	7	6	5	6	7	3	5	7	13	
Fight/Crowd Control	13	2	1	0	2	1	1	0	1	2	1	0	_
Fire/Smoke/Bomb	63	5	4	6	9	5	2	4	3	4	5	8	
Fireworks	9	2	1	1	0	1	0	1	0	0	0	1	_
Gas Drive-offs	9	0	2	Ö	1	0	1	1	0	2	1	-	
Harassment	111	19	13	7	7	4	6	10	7	9			
Illegal Dump/Litter	30	2	4	1	2	3	2	3	2	1	8	12	
Indigent	0	0	0	0	0	0	0	0			3	2	
Interviews	8	2	3	2	0	0	0	0	0	0	0	0	
Kidnapping	1	0	0	0	0	1	0		0	1	0	0	
Lost & Found	86	14	4	10	8	11	5	0	0	0	0	0	
Medical	143	10	9	11	13			4	8	3	7	8	
Miscellaneous	207	11	10			11	23	13	9	12	16	10	
Motorist Assist	75	7		20	11	20	16	14	15	15	13	29	
Open Door			10	7	4	1	11	3	6	4	9	5	
OWI	38	1	5	5	0	2	2	3	7	1	4	2	
	73	4	7	5	6	6	2	8	6	8	11	4	
Parking/Abnd Car	127	11	10	7	4	16	13	10	5	13	10	15	
Runaway/Missing	130	5	15	19	10	13	8	7	16	6	10	10	
Security Request	22	1	5	7	0	4	0	2	1	0	0	0	
Sexual Assault	17	1	2	3	1	0	0	1	0	3	1	1	
Shots Fired	10	0	3	2	1	0	1	0	1	0	1	1	
Stalking	1	0	0	0	0	0	0	0	0	0	1	0	_
Stolen Vehicle	6	0	1	0	1	0	0	1	1	0	1	0	
Suicide	7	0	0	3	0	0	0	1	0	0	0	3	
Suspicious Activity	150	12	25	14	5	11	4	8	6	18	13	20	
Thefts,Forgeries	193	19	21	23	25	14	7	13	8	21	11	8	
Traffic Hazard	53	4	5	2	2	8	7	5	3	2	6	5	_
Trespass	20	3	4	1	4	1	1	0	2	1	0	1	
Warrant	76	5	7	9	9	7	6	5	11	2	4	7	
Wartburg College Calls	21	0	0	0	4	2	3	0	2	3	4	2	_
Weapons	1	0	0	0	0	0	0	0	0	0	0	1	
Weather/Utilities	10	0	1	0	0	1	5	1	0	1	1	Ö	
Welfare/Em.Message	111	16	8	10	11	6	8	5	6	11	17	5	
Zero Tolerance/.02 Viol.	9	0	0	3	0	1	1	1	1	0	0	2	_
Total Calls	3917	315	365	365	310	323	267	272	292	305	<b>363</b>	409	
	3011	3.0	550	500	0.0	OLU	201	212	LJL	303	JUJ	403	

there are a profit in the con-

### Waverly Police Department Calls For Service Trend Analysis

Category	F/Y 04-05	<u>F/Y 05-06</u>	% Change
AOA Accidente	93	107	15%
Accidents	279	298	7%
Alarms	111	93	-16%
Alcohol/Intox	99	113	14%
Animals	262	285	9%
Assault	84	69	-18%
BOMB Bod Charles	5	0	-100%
Bad Checks	94	96	2%
Bremwood	122	210	72%
Burglary	20	36	80%
Child Abuse/Neg.	17	9	-47%
Civil Dispute	52	40	-23%
Criminal Mischief	87	101	16%
Domestic/Custody	71	89	25%
DPQ/Disorderly	113	140	24%
Driving Complaints	128	128	0%
Drugs	43	51	19%
DWLS/No DL	20	15	-25%
E911 (false)	62	93	50%
EDP (mental)	54	40	-26%
Escorts	68	74	9%
Fight/Crowd	20	13	-35%
Fire/Smoke	71	63	-11%
Fireworks	20	9	-55%
Gas Drive-offs	22	9	-59%
Harassment	80	111	39%
Illegal Dump/Litter	26	30	15%
Indigent	3	0	-100%
Interviews	7	8	14%
Kidnapping	0	1	100%
Lost & Found	86	86	0%
Medical	116	143	23%
Miscellaneous	158	207	31%
Motorist Assist	103	75	-27%
Open Door	47	38	-19%
OWI	71	73	3%
Parking/Abnd Car	148	127	-14%
Runaway/Missing	86	130	51%
Security Request Sexual Assault	32	22	-31%
	11	17	55%
Shots Fired	10	10	0%
Stalking Stolen Vehicle	1	1	0%
	2	6	200%
Suicide	6	7	17%
Suspicious Activity	175	150	-14%
Thefts, Forgeries Traffic Hazards	183	193	5%
	35 22	53	51%
Trespass	22	20	-9%
Warrant	49 33	76	55%
Waarburg College Calls	22	21	-5%
Weapons Weather/Utilities	1	1	0%
Weather/Utilities	17	10	-41%
Welfare/Em. Message	137	111	-19%
Zero Tolerance/.02 Viol.	<u>2</u>	<u>9</u>	<u>350%</u>
Total Calls	3653	3917	7%

### **Uniform Crime Report Trend Analysis**

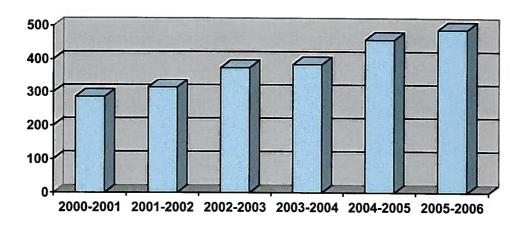
#### Group A

<u>Code</u>	<u>N</u> ame	F/Y 04-05	F/Y 05-06	% Change
09A	Murder	0	0	0%
11A	Forcible Rape	6	4	-33%
11B	Forcible Sodomy	0	0	0%
11D	Forcible Fondling	0	3	300%
120	Robbery	0	0	0%
13A	Aggravated Assault	26	50	92%
13B	Simple Assault	62	41	-34%
13C	Intimidation	5	10	100%
100	Kidnapping/Abduction	0	1	100%
200A	Arson	1	1	0%
220A	Burglary	17	39	129%
23B	Purse Snatching	2	0	-100%
23C	Shoplifting	3	6	100%
23D	Theft from Building	18	31	72%
23E	Theft/ Coin Machine	3	2	-33%
23F	Theft from Motor Veh.	15	10	-33%
23G	Theft of MV Parts	3	1	-67%
23H	Other Larceny	93	66	-29%
240A	Motor Vehicle Theft	4	4	0%
250A	Forgery	6	14	133%
26A	False Pretenses	3	4	33%
26B	ATM Fraud	3	4	33%
26C	Impersonation	1	1	0%
26E	Wire Fraud	1	1	0%
280A	Stolen Property	0	2	200%
290A	Vandalism	58	52	-10%
35A	Drug Violation	41	43	5%
35B	Drug Equipment Viol.	22	24	9%
36B	Statutory Rape	2	2	0%
370	Pornography	0	0	0%
520A	Weapons Violation	3	1	-67%
40 B	Assist. Prostitution	<u>0</u>	<u>0</u>	<u>0%</u>
	Total Group A	398	417	5%
	Group B			
90A	Bad Checks	105	99	-6%
90C	Disorderly Conduct	11	30	173%
90D	OWI	<b>72</b>	79	10%
90E	Public Intoxication	51	61	20%
90F	Nonviolent Family	1	1	0%
90G	Liquor Violations	35	10	-71%
901	Runaways	0	0	0%
90J	Trespass	5	5	0%
90Z	All Other Offenses	104	113	9%
90H	Peeping Tom	<u>o</u>	<u>0</u>	0%
	Total Group B	384	398	4%
	Total All Reports	782	815	4%

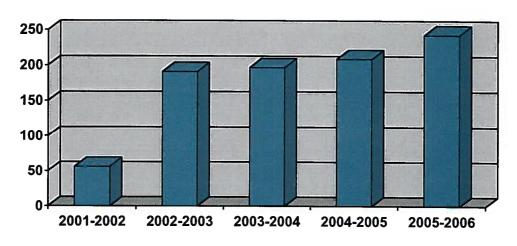
### Arrest Trend Analysis: Adult and Juvenile

		<u>F/Y</u>	04-05		<u>F/Y</u>	05-06	
Group	A Offenses	<u>Adult</u>	<u>Juvenile</u>	<u>Total</u>	<u>Adult</u>	<u>Juvenile</u>	<u>Total</u>
09A	Murder	0	0	0	•	•	
11A	Forcible Rape	0 0	0	0	0	0	0
11B	Forcible Sodomy	0	1 0	1	0	0	0
11D	Forcible Fondling	0	0	0	0	0	0
13A	Aggravated Assault	9	16	0 25	1	0	1
13B	Simple Assault	11	42	53	26 8	19	45 27
13C	Intimidation	2	0	2		29	37
100	Kidnapping/Abduction	0	0	0	4	1	5
200A	Arson	0	0	0	1 0	0	1
220A	Burglary	2	0	2	2	0 0	0
23B	Purse Snatching	0	0	0	0	0	2 0
23C	Shoplifting	0	0	0	2	1	
23D	Theft from Building	0	0	0	7	2	3 9
23E	Theft from Vending	3	0	3	ó	0	0
23F	Theft from Motor Vehicle	0	0	0	0	0	0
23G	Theft of MV. Parts	0	0	0	0	0	0
23H	Other Larceny	12	Ö	12	5	3	8
240A	Theft of Motor Vehicle	0	1	1	1	0	1
250A	Forgery	1	Ö	i	3	0	3
26B	Credit Card Fraud	Ò	Ŏ	0	0	0	0
280	Possession Stolen Property	Ö	Ö	0	Ö	1	1
290A	Vandalism	6	1	7	3	2	5
35A	Drug Violation	39	3	42	48	6	54
35B	Drug Equipment Viol.	21	Ō	21	23	3	26
36B	Statutory Rape	1	Ō	1	1	Ö	1
520A	Weapons Violations	<u>4</u>	<u>0</u>	<u>4</u>	<u>1</u>	<u>0</u>	1
Total G	roup A Arrests	111	64	175	136	<b>67</b>	203
-	3 Offenses						
90A	Bad Checks	3	0	3	9	0	9
90C	Disorderly Conduct	13	7	20	5	25	30
90D	OWI	68	2	70	76	2	78
90E	Public Intoxication	54	1	55	71	0	71
90F	Family Nonviolent	0	0	0	0	0	0
90G	Liquor Violations	59	4	63	3	20	23
901	Runaway	0	0	0	0	0	0
90J	Trespass	3	3	6	2	2	4
90Z	All Other Offenses	<u>52</u>	<u>15</u>	<u>67</u>	<u>60</u>	<u>10</u>	<u>70</u>
Total G	roup B Arrests	252	32	284	226	59	285
Total Al	I Arrests	363	96	459	362	126	488 6%

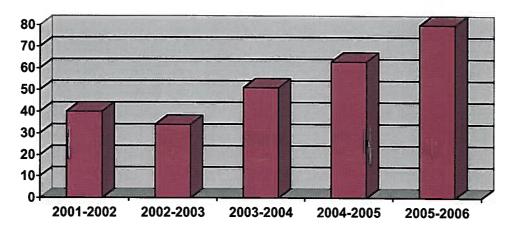
53 Uniform Citations were issued for Liquor Law Violations



**Arrest Comparison Table** 



**Liquor Law Violations** 



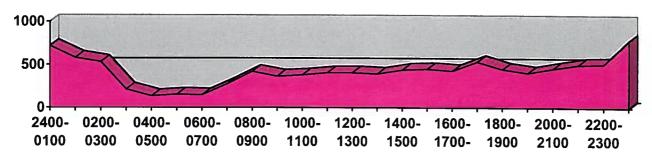
**Narcotics Law Violations** 

# Waverly Police Department Statistics Comparison Summary F/Y 01-02 through 05-06

Subject		F/Y 01-02	F/Y 02-03	F/Y 03-04	F/Y 04-05	F/Y 05-06
Number of Officers		15	15	15	15	15
Traffic Citations		827	917	934	935	1087
Warning Citations		1017	784	549	971	1013
Parking Tickets		892	846	777	1006	911
Accidents						
7.001001110	Fatalities	1	0	0	1	0
	Injuries	33	44	38	28	30
	Property Damage	5	0	15	10	9
	All Other	200	214	197	195	208
	Total	239	258	250	234	247
Adult Arrests		245	302	285	363	362
Juvenile Referrals		70	73	100	95	126
Animal Complaints		333	297	286	262	285
Escorts		112	105	104	68	74
Alarms		127	132	111	111	93
Vacation Watch		474	344	360	174	130
OWI Arrests		33	46	37	72	78
Public Intoxication Arrests		<b>.</b> 28	57	56	51	71
Liquor Law Violation Arrests		28	134	141	158	172
Narcotics Law Violation Arrests		40	34	51	63	80
Assault Arrests		29	59	53	88	82

# Reported Calls 2005-2006

Time	Total	% of Calls		
00 to 01	717	7%		
01 to 02	581	6%		
02 to 03	533	5%		
03 to 04	215	2%		
04 to 05	138	1%		
05 to 06	157	2%		
06 to 07	149	1%		
07 to 08	277	3%		
08 to 09	420	4%		
09 to 10	366	4%		
10 to 11	381	4%		
11 to 12	407	4%		
12 to 13	406	4%		
13 to 14	394	4%		
14 to 15	439	4%		
15 to 16	450	4%		
16 to 17	428	4%		
17 to 18	537	5%		
18 to 19	450	4%		
19 to 20	408	4%		
20 to 21	459	5%		
21 to 22	502	5%		
22 to 23	511	5%		
23 to 24	787	8%		
	10,112	99%		



3-D Area 10

# Projection

of Future Needs for the Waverly Police Department.

In the 2004/2005 Annual Report there were two projected areas of need that were not met. These two items include an additional vehicle for the second shift

investigator and a tactical shield for the department.

An additional vehicle is needed for the second shift investigator. Currently the second shift investigator has to wait until the first shift investigator ends his tour of duty before the vehicle is available. In this system, the second shift investigator is unable to respond to calls or has to utilize a personal vehicle. Each investigator has to respond to emergency situations as quickly as possible, sometimes from their own residences. Having an additional investigator vehicle would allow this to happen and make both investigators more efficient, not to mention safer. The vehicle considered is a Chevrolet Impala with a current state bid cost of \$18,500. This vehicle would need to be equipped with emergency lights, radio and rifle. The cost of these items is estimated at \$5,735.

The Waverly Police Department feels the need of a Tactical Shield for safety during search warrants and school shooting situations. The majority of search warrants are based upon drug related offenses or violent offenders.

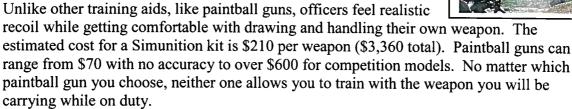
Training and experience show that these individuals usually maintain some type of weapon in their household. School violence has seen an increase over the past year alone. A tactical shield is needed for the officers to move down long corridors or hallways in a safe manner. It is a difficult thing requiring officers to enter these structures unprotected from these dangers. The estimated cost of a tactical shield with light through Gals is \$2,500.

Helping officers learn how to handle deadly force situations is a difficult task. It has been quoted, "Training that fails to duplicate the stress and tension of real life situations quite simply...fails!" In order to provide the most realistic training possible the Waverly



Police Department would like to move towards Reality Based Training. Realistic training helps improve officer's tactical skills and conditions their response to fear. One important tool for Reality Based Training is using a product called

Simunition. Simunition has developed conversion kits to allow the safe training while using your own duty weapon.



The increased activity of work for the uniformed officers has intern created increased work for the Administrative Office. The Administrative Manager must enter all the data generated by the Patrol and Investigative Division's. There is an average of 271 pieces of

data to process monthly between accidents and self initiated acts alone. These particular pieces have to be reported to the State of Iowa through their system. In most cases, someone else (County Attorney's office, defense attorney, insurance company or citizen) will require information from these pieces of data. Currently the Administrative Manager must look these items up by hand. If a request comes in and the offense date is not known, it requires a manual check which is very timely. These items could be entered into our current data system, Shield Technology, which would allow a search to be conducted to access this information. This would make the process of finding information more efficient, but it would require double entry on the part of the Administrative Manager, one to the State and one into our system. Shield Technology Corporation offers an Interface between the Sate of Iowa and our data system. This Interface would allow one entry and the quote from Shield Technology Corporation was \$1,475.

When a police officer stops a driver for speeding or other activity, they usually do not know exactly what kind of situation they are getting into. The person in the car could be a fleeing felon, a drug trafficker or merely a careless driver. Technology especially

designed for public safety agencies officers gain more information encounter before they have any with them. Linking officers in the available to dispatch helps keep them to check criminal histories

dealing with Department of computer other officers information information execute a a heads up.



can help law enforcement about the people they physical or verbal contact field with the same records officers safe because it allows prior to leaving their cars.

instead of finding out the next day from the Transportation that you were lied to. The mobile terminals can be used to communicate between and dispatch. This allows the releasing of sensitive without those with scanners to hear. The sensitive could be a death in the family or moving in to search warrant and not wanting to give the criminals Officers would be able to use existing report forms

and fill them out immediately after an incident while the information is still fresh in their minds. The reports would be filed electronically saving time by not having to return to the Law Enforcement Center. The estimated cost for hardware and software is \$2,500 (\$12,500 for 5 vehicles).