MEMORANDUM

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

TO: **Honorable Mayor & City Council** **FROM:** **Vice Mayor Dave Cortese**
Councilmember Forrest Williams

SUBJECT: **Police & Fire Disability Study** **DATE:** **March 13, 2007**

APPROVED: DATE: 3/13/07

RECOMMENDATION

It is recommended that the City Council:

1) Approve staff's recommendation to pursue a study of how work conditions and work environment in both the Police Department and the Fire Department may contribute to the number of disability retirements in the Police and Fire Department Retirement Plan.
2) Incorporate any relevant findings and conclusions of the "Evaluation of Worker Injuries & Safety" study conducted by the City of San Jose in 2003 into the new study, so as to avoid redundancy in scope and findings.
3) Direct the City Clerk to make the 2003 report available to the Mayor, City Council and other interested parties.

BACKGROUND

City staff, supported by the Police and Fire Retirement Board (P&F), is recommending a second phase of study into disability issues amongst Police Department and Fire Department employees in the City of San Jose. This study is intended to better understand how the City can assist in creating a safe and healthy work environment for our rank and file, thereby potentially lowering the disability and early retirement rate. In developing the scope of this study, city staff should draw from the arsenal of information already collected on this subject, namely a similar study conducted in 2003 entitled "Evaluation of Worker Injuries & Safety". In September 2002 at Vice Mayor Cortese's request via a council referral, city staff in cooperation with P&F, conducted a joint study to identify a nexus (if any) between work environment and employee disabilities for our rank and file. Subsequently a steering committee comprised of city staff (Finance, Retirement Services, Employee Services, Fire Administration), council staff and SJPOA and IAFF representatives was formed to provide input on purpose, scope and methodology for this study, which comprehensively reviewed several years' data across a spectrum of factors including:

- Nature of injury
- Equipment or item involved in injury
- Types of injury (affected body part)
- Disability claims in other jurisdictions
- Staffing and workload trends
- Safety improvement and training including equipment, vehicles and technologies

We wholly support pursuing a second study as outlined by staff and augmented by the City Manager however in order to avoid redundancy, broaden the opportunity to study additional factors not previously covered and judiciously utilize the funding allocated for this study, it is wise to build upon work already conducted and perhaps involve those members of city staff previously associated with this matter.

EVALUATION OF WORKER INJURIES & SAFETY

City of San Jose

May 2003

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY


CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY

Table of Contents

INTRODUCTION

The report is a joint effort between the Police and Fire Retirement Board and the Administration to study any possible relationship between safety enhancements and technologies and worker disabilities for public safety employees. The report discusses the following:

1 Purpose of the Study: As defined by the Steering Committee consisting of members from the Police and Fire Retirement Board, Council Member Dave Cortese's Office, Police, Fire, Finance, Retirement Services, and Employee Services Departments.
2 Scope of the Study: Areas to examine to meet the purpose of the Study.
3 Methodology: How the Study was conducted.
4 Analysis: Review of relevant data as specified by the scope.
5 Findings: As supported by the analysis.
6 Recommendations: To improve safety, reduce injuries, and control cost.

Background

In a memorandum dated September 5, 2002, Council Member Dave Cortese requested the Police and Retirement Board conduct a joint study with the Administration regarding the historical nexus (if any) between work related safety enhancements and technologies and worker disabilities for city public safety employees. This request also expresses an interest from the Mayor, the City Council, and the City Manager to conduct such a study.

On October 18, 2002, Mark Skeen, the Chair of the Police and Fire Retirement Board wrote a letter to the City Manager to express a desire to participate in the Study and to suggest additional issues the Board would like to be included as follows:

1 Review of staffing levels in relation to disabilities (staffing per 1,000 population).
2 Correlation of required overtime to disabilities.
3 Relationship of years of service and age to disabilities.

Subsequently, a Steering Committee was established with members from the following:

1 Mark Skeen, Police and Fire Retirement Board
2 Don DeMers, Police Officer Association
3 Scott Johnson and Mark Burton, Finance Department
4 Ed Overton, Retirement Services Department
5 Mark Danaj, Employee Services Department
6 Amoroso Adona, Police Department
7 Dan Reed, Fire Department
8 Don Rocha, Office of Council Member Dave Cortese

The role of the Steering Committee is to provide guidance and oversight to a working group of staff from Police, Fire, and Employee Services Departments in conducting the Study. The Steering Committee held a meeting on March 13, 2002. The purpose, scope,

and study approach was approved at that meeting.

PURPOSE OF THE STUDY

To identify how recent developments with regard to safety training, equipment, staffing levels, and workload have affected worker injuries and cost, in order to develop recommendations for reducing future injuries and disabilities and to control cost.

SCOPE OF THE STUDY

To meet the purpose of the study, the following areas were evaluated:

M. Injury trend for the last five years
N. Workers' Compensation costs trend for the last five years
O. Comparison with other large cities in California with regard to number of injuries
P. Staffing and workload trend in the last five years
Q. Safety improvement and training in the last five years or beyond if appropriate including improvement in equipment, vehicles, and technologies
R. Workers' compensation cost drivers, which are driving up the costs.

STUDY METHODOLOGY

The Study follows a specific methodology designed to meet the purpose and scope as approved by the Steering Committee. The methodology is as follows:

1 Define purpose
2 Define scope
3 Gather data as specified by the scope
4 Analysis of data
5 Findings
6 Recommendations

ANALYSIS

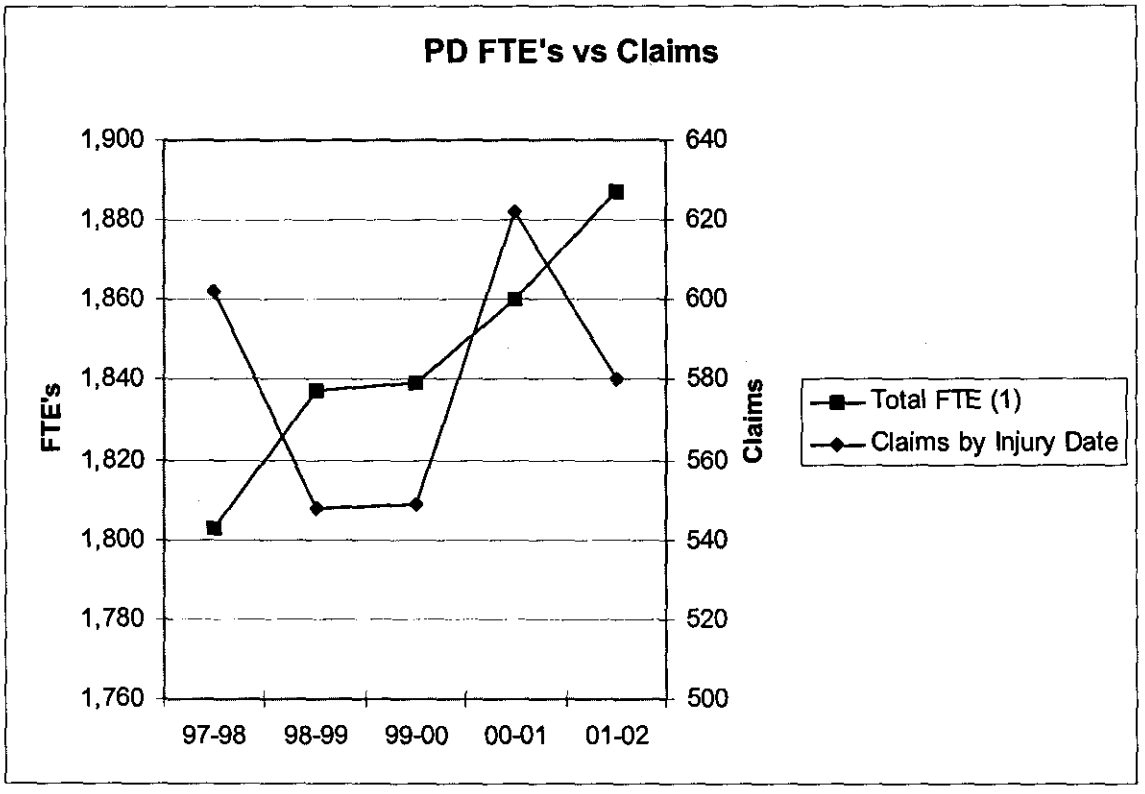
A. INJURY TREND

1) Number of claims for the last five fiscal years Police, Fire, and Citywide (FY 97-98 to FY 01-02):

a) **The full time PD workforce** grew steadily over the last five fiscal years. Claims for that workforce have not demonstrated a clear pattern of growth or decrease.

Year	Total # of PD Claims for that FY	Total # of PD FTE's	# of Claims/ 100 PD FTE's	% Change
FY 97-98	602	1,803	33.4	
FY 98-99	548	1,837	29.8	-12%
FY 99-00	549	1,839	29.9	0%
FY 00-01	622	1,860	33.4	11%
FY 01-02	580	1,887	30.7	-9%

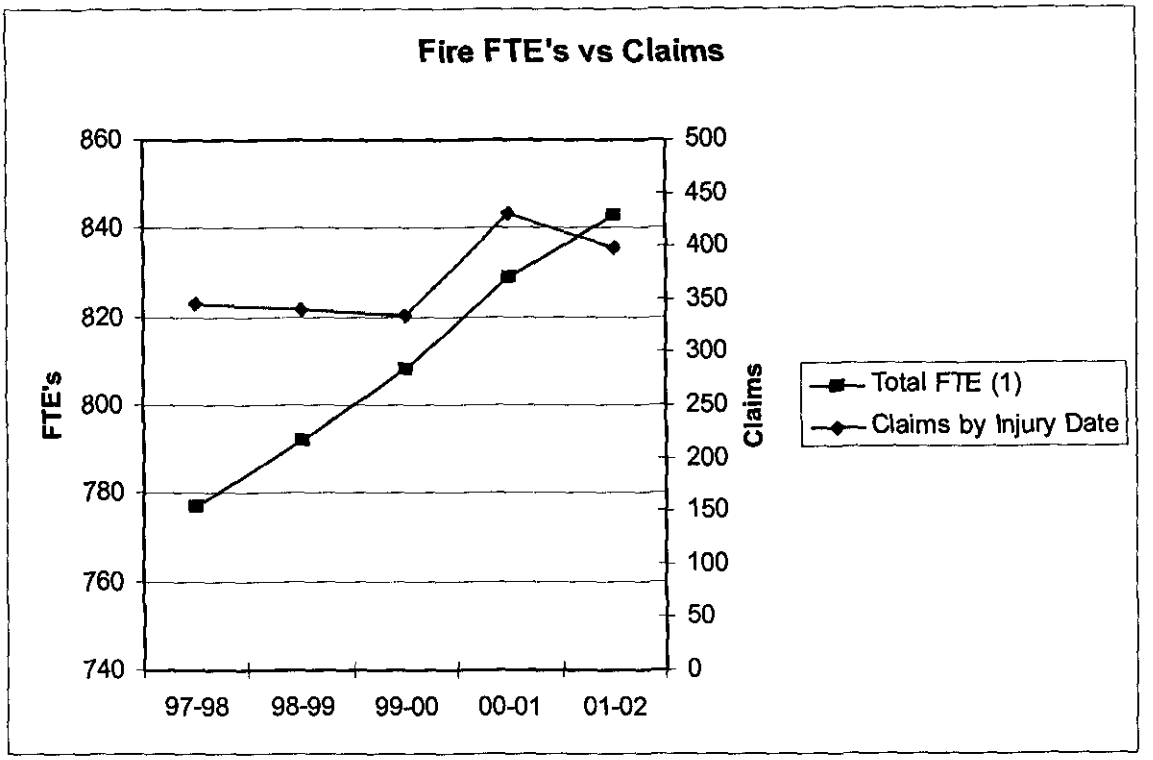
Table 1- PD FTE's and Claims 5 year history including both sworn and non-sworn budgeted FTE's. (David System Report)



b) **The full time FD workforce** grew steadily over the last five fiscal years. Claims for that workforce have also grown consistently with the average number of claims per 100 FTE's climbing from 44.5-47.2 in the period.

Year	Total # of FD Claims for that FY	Total # of FD FTE's	# of Claims/ 100 FD FTE's	% Change
FY 97-98	346	777	44.5	
FY 98-99	340	792	42.9	-4%
FY 99-00	334	808	41.3	-4%
FY 00-01	430	829	51.9	20%
FY 01-02	398	843	47.2	-10%

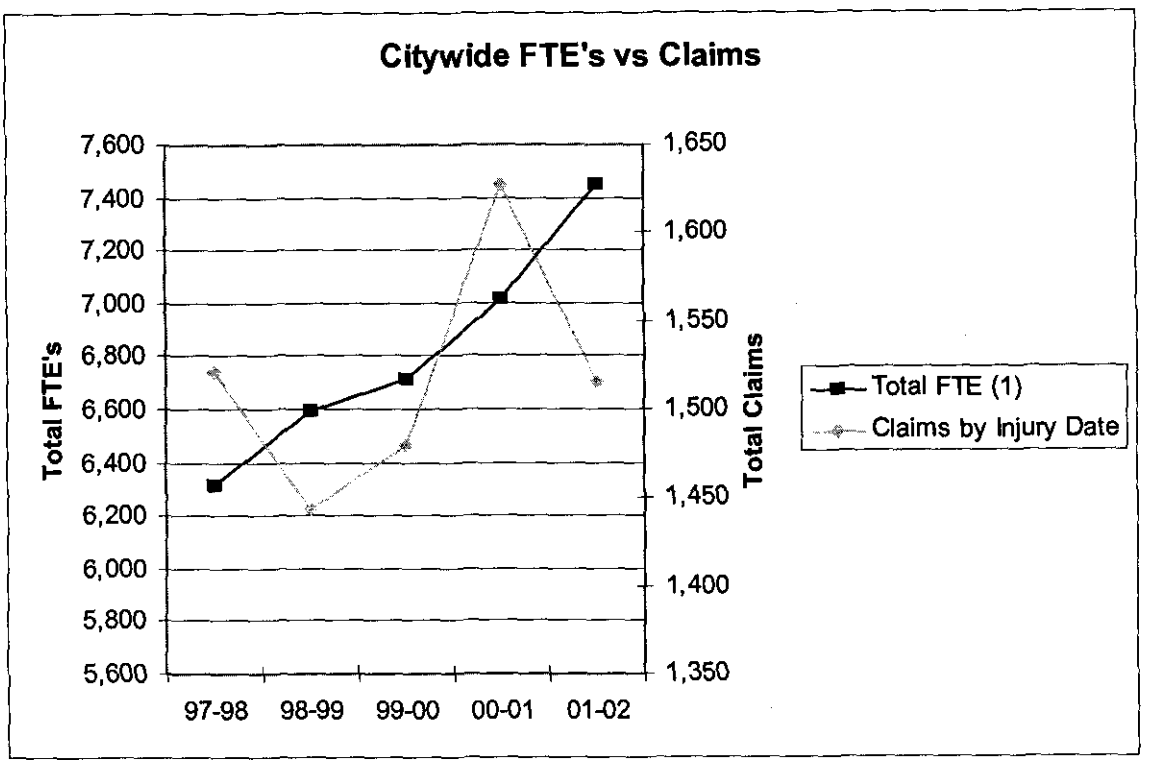
Table 2- FD FTE's and Claims 5 year history including both sworn and non-sworn budgeted FTE's. (David System Report)



c) **The full time Citywide workforce** grew steadily over the last five fiscal years. Claims for that workforce have fluctuated dramatically. Claims per 100 Citywide FTE's decreased in that period from 24.1-20.3.

Year	Total # of Citywide Claims for that FY	Total # of Citywide FTE's	# of Claims/ 100 Citywide FTE's	% Change
FY 97-98	1521	6,311	24.1	
FY 98-99	1444	6,605	21.9	-9.3%
FY 99-00	1480	6,723	22.0	0.7%
FY 00-01	1627	7,025	23.2	5.2%
FY 01-02	1516	7,465	20.3	-12.3%

Table 3- Citywide FTE's and Claims 5 year history including both Police and Fire employees (David System Report); budgeted FTE's.

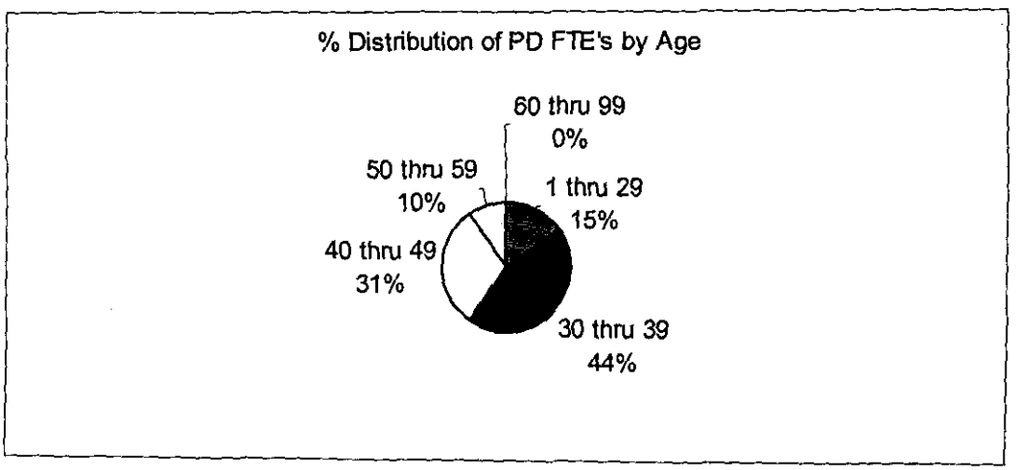


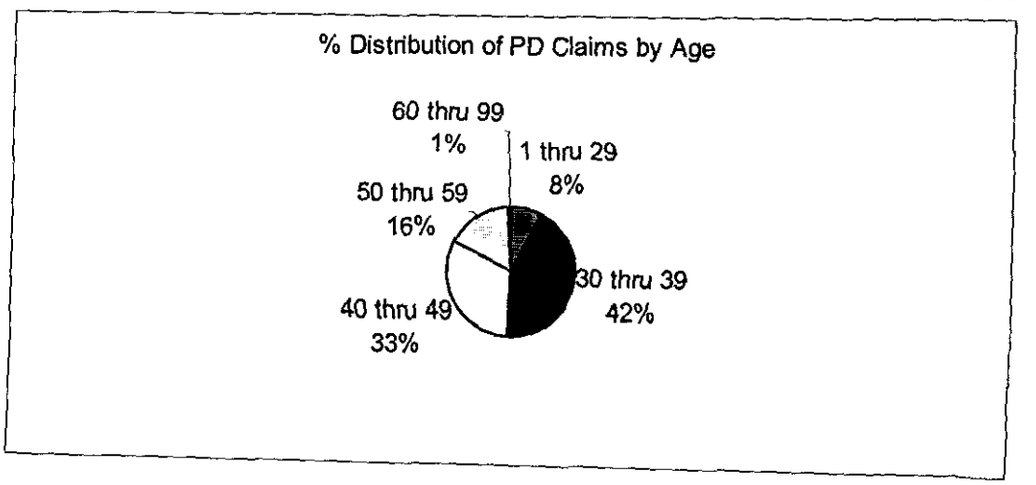
2) **Number of FTE's Claims for Fiscal Year 2001-2002 Distributed by Age Bracket:**

d) **PD FTE's and claims** distributed by age Bracket for FY 01-02. Age class 1-29 years of age represents 15% of all FTE's but only 8% of total injury claims for that year. Age class 50-59 represents only 10% of the FTE's for that year, but accounts for 16% of the claims.

Age of Claimant	# of PD FTE's	% of Total PD FTE's	PD Claims	% of Total PD Claims
1 thru 29	207	15%	44	8%
30 thru 39	591	44%	244	43%
40 thru 49	415	31%	186	33%
50 thru 59	131	10%	93	16%
60 thru 99	1	0%	5	1%
Total	**1345**		**572**	

Table 4- Distribution of PD FTE's and Claims for FY 2001-2002 by Age. Actual FTE's on Jan.1, 2002. (PeopleSoft report) Claims information based on full fiscal year. (David system report)



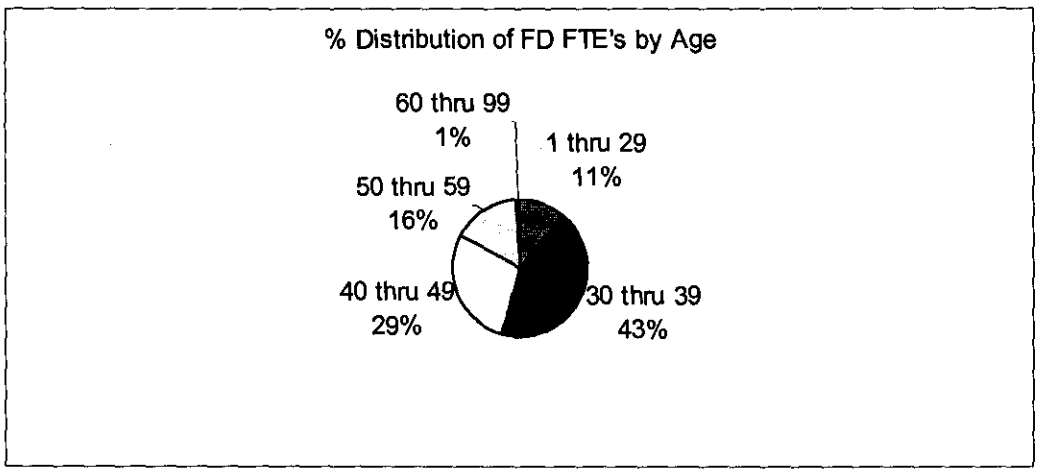


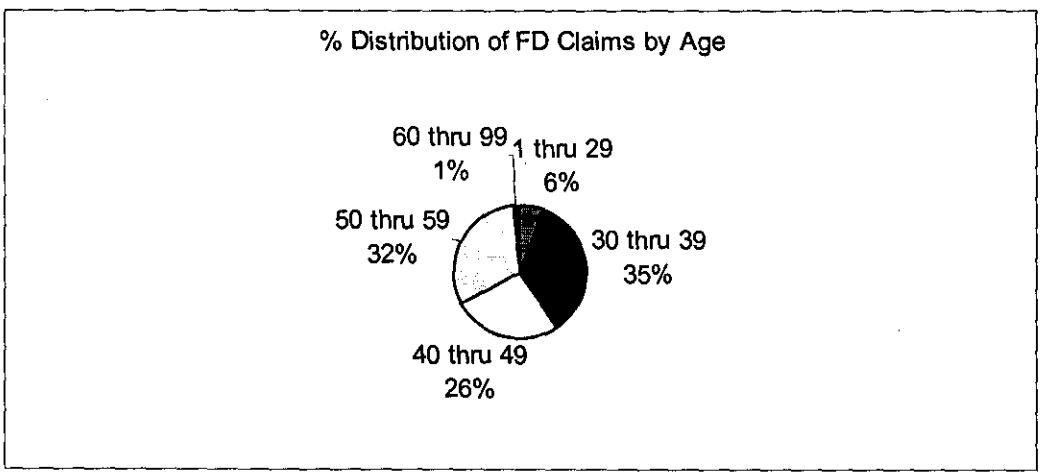
e) ***FD FTE's and claims*** distributed by age bracket for FY 01-02. Age

class 30-39 represents 43% of all FTE's but only 35% of total injury claims for that year. Age class 50-59 represents only 16% of the FTE's for that year, but accounts for 32% of the claims.

Age of Claimant	# of FD FTE's	% of Total FD FTE's	# of FD Claims	% of Total FD Claims
1 thru 29	74	11%	25	6%
30 thru 39	291	43%	145	35%
40 thru 49	194	29%	110	26%
50 thru 59	111	16%	133	32%
60 thru 99	5	1%	6	1%
Total	**675**		**419**	

Table 5- Distribution of FD FTE's and Claims for FY 2001-2002 by Age. Actual FTE's on Jan.1, 2002 (PeopleSoft report); Claims information based on full fiscal year. (David System report)

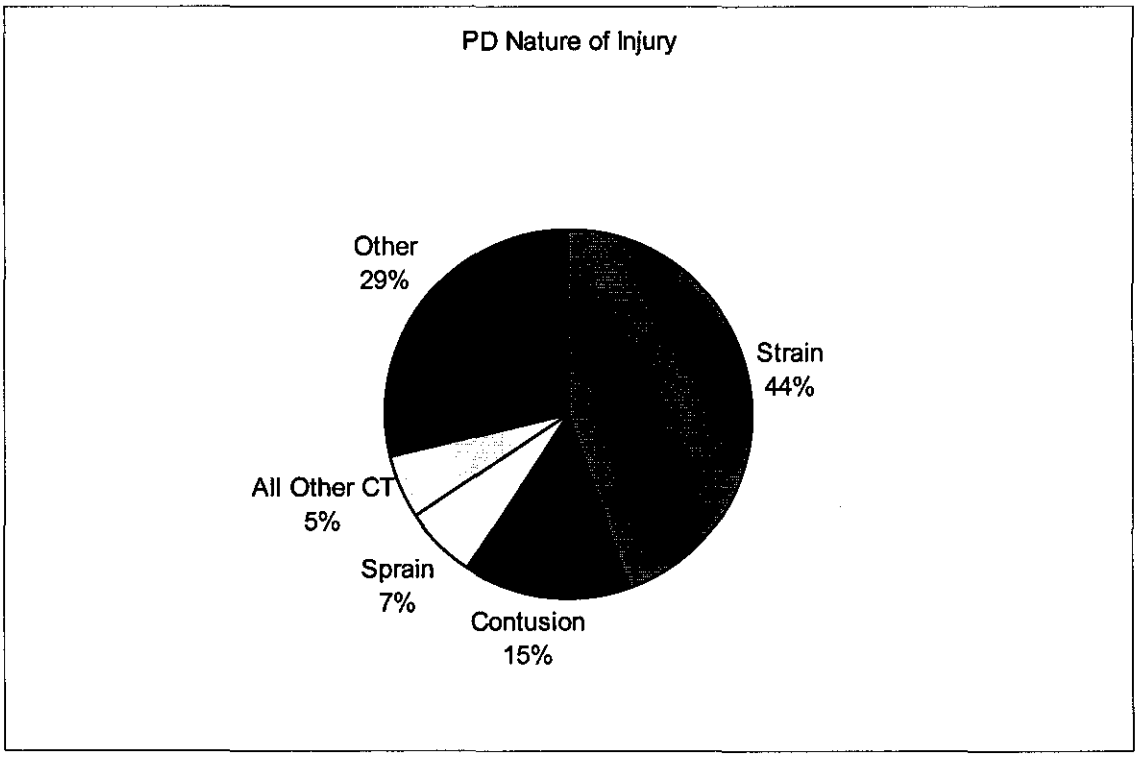




g) **PD type or nature of injury** for fiscal year 2001-2002. Strain leads all types of injury at 44%. The Police Department also suffered 90 contusions defined as bruises or bumps.

Type of Injury	PD Nature of Injury	% of Total PD Injures
Strain	271	44%
Contusion	90	15%
Sprain	40	7%
All Other CT	33	5%
Laceration	26	4%
Angina Pectoris	11	2%
Mult. Phys. Injuries	10	2%
Fracture	9	1%
Carpal Tunnel	8	1%
Respiratory Disorder	8	1%
Other	105	17%
Total	**611**	

Table 7- Distribution of PD injuries by type or class of injury for FY 2001-2002. (David system report)

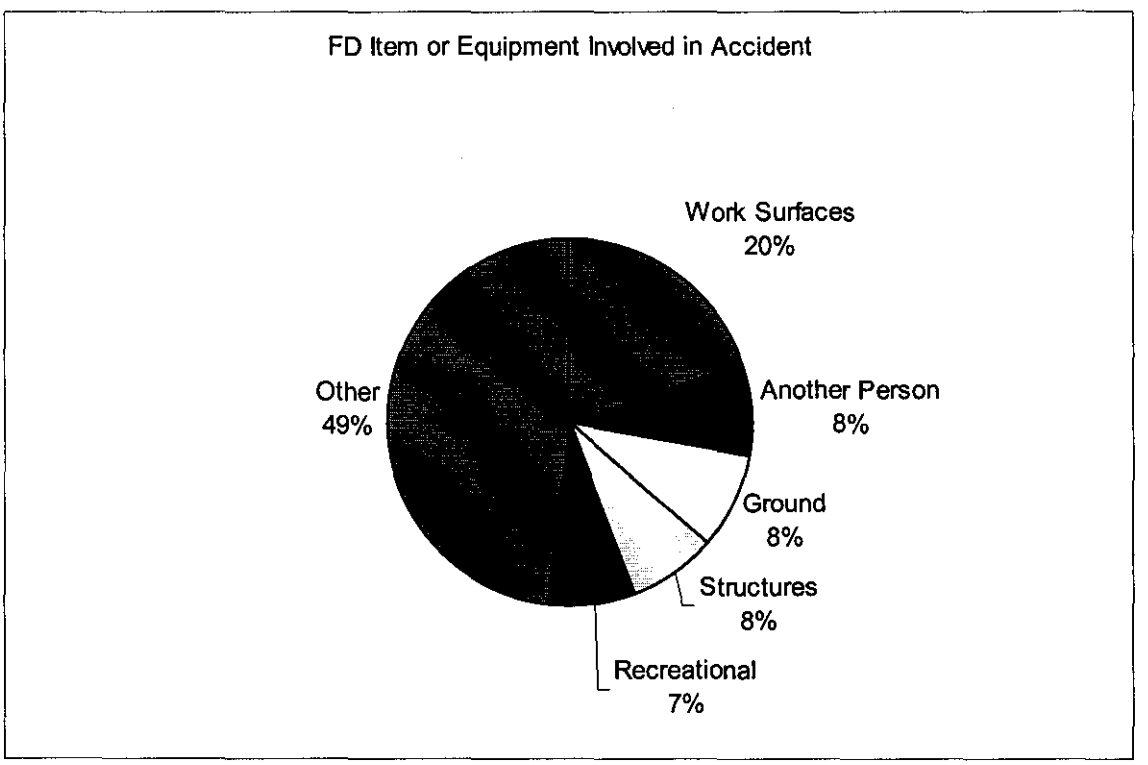


4) **Item or Equipment Involved in all Claims fiscal year 2001-2002.**

h) **FD item, equipment, or object** involved in all claims for fiscal year 2001-2002. Work surface related accidents (such as slips and falls, stepping in holes, etc) account for 20% of FD claims.

Item	FD FY 01-02	% of Total
Work Surfaces	84	20%
Another Person	34	8%
Ground	34	8%
Structures	33	8%
Recreational	31	7%
Hoisting Equipment	28	7%
Containers	20	5%
Vehicles	19	5%
Hand Tools	14	3%
Unknown	13	3%
Other	109	26%
Total	**419**	

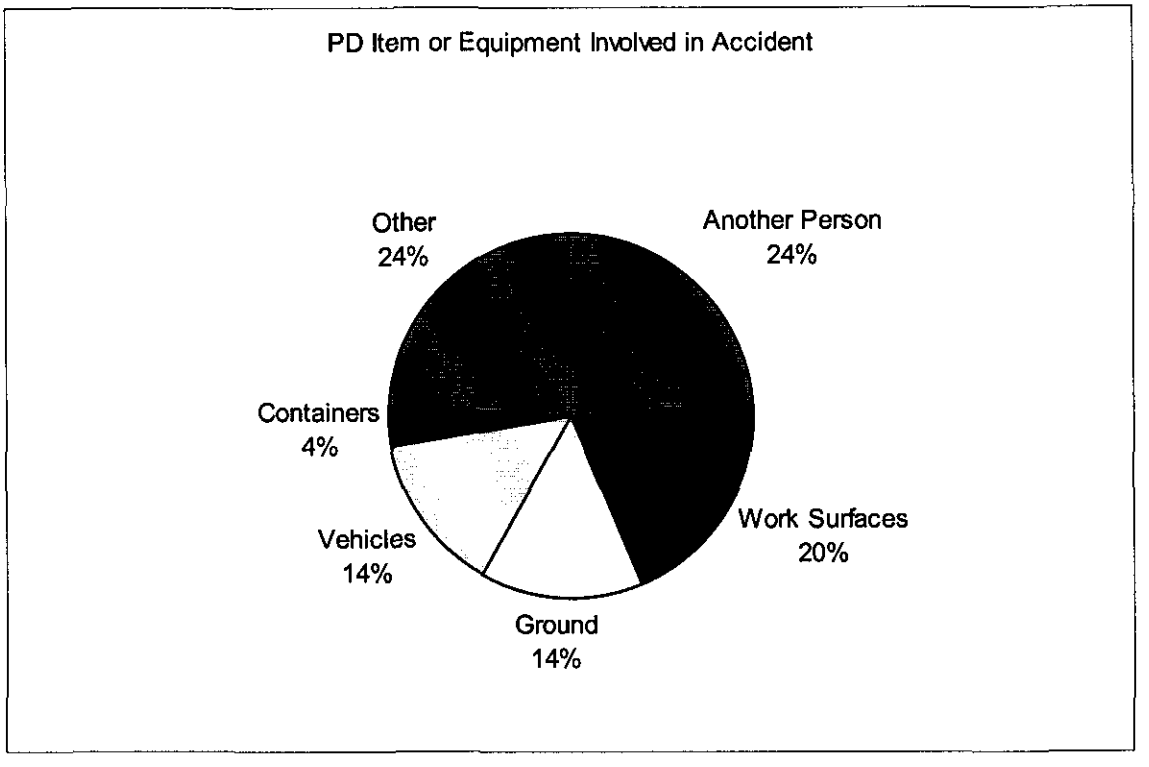
Table 8- Distribution of FD injuries by item, equipment, or object involved in injury for FY 2001-2002. (David system report)



i) **PD item, equipment, or object involved in all claims for** fiscal year 2001-2002. Another person (most likely in altercations) accounts for 24% of all PD Claims.

Item	PD FY 01-02	% of Total
Another Person	146	24%
Work Surfaces	121	20%
Ground	88	14%
Vehicles	86	14%
Containers	22	4%
Structures	19	3%
Fence	16	3%
Machines	15	2%
Chemicals	11	2%
Hand Tools	11	2%
Other	76	12%
Total	**611**	

Table 9- Distribution of PD injuries by item, equipment, or object involved in injury for FY 2001-2002. (David system report)

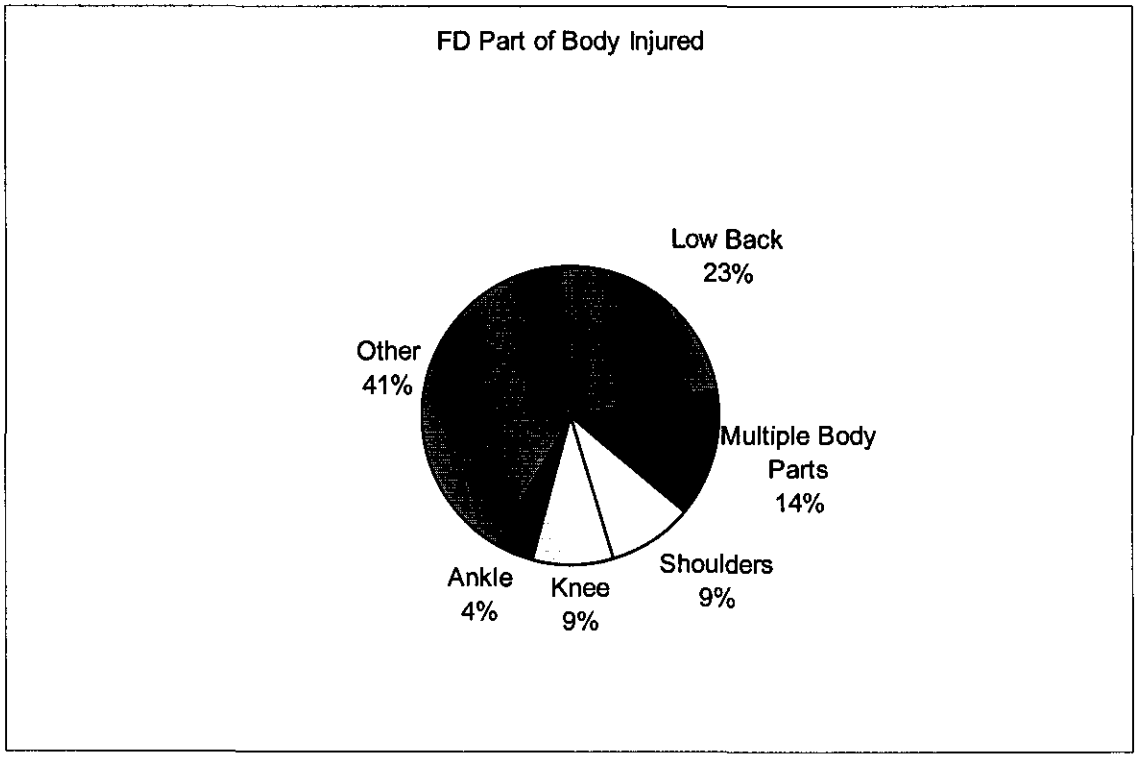


5) Part of Body Injured in all Claims Fiscal Year 2001-2002.

j) **FD part of body injured** in all claims occurring during fiscal year 2001-2002. Low back injuries account for 23% of the Department's total injury accidents. Back neck, and shoulder injuries account for a combined 38% of all FD injuries in FY 01-02.

Part of Body	FD FY 01-02	% of Total
Low Back	90	23%
Multiple Body Parts	54	14%
Shoulders	36	9%
Knee	35	9%
Ankle	16	4%
Neck Soft Tissue	13	3%
Mid Back	13	3%
Eye	11	3%
Abdomen	10	3%
Fingers	9	2%
Other	111	28%
Total	**398**	

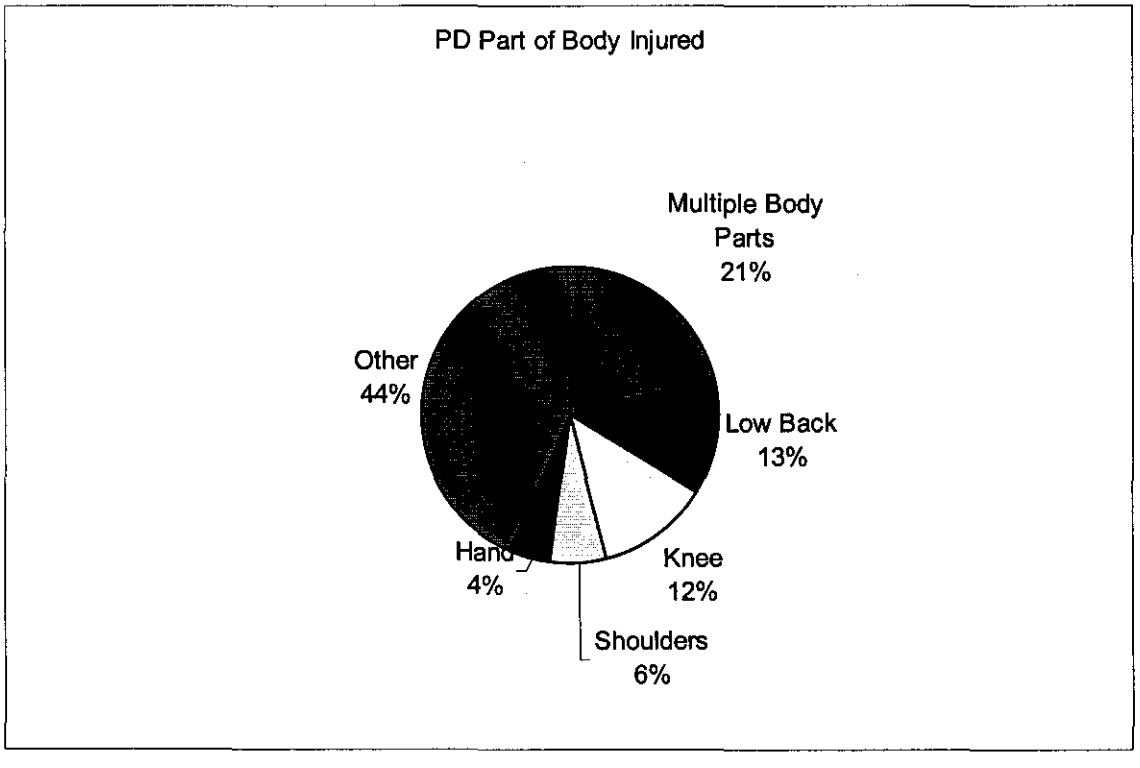
Table 10- Fire Department Distribution of injured body parts for FY 2001-2002. (David system report)



k) **PD part of body injured** in all claims occurring during fiscal year 2001-2002. Costly multiple body part injuries account for 21% of the year's total. Back neck and shoulder injuries account for a combined additional 21%.

Part of Body	PD FY01-02	% of Total
Multiple Body Parts	122	21%
Low Back	73	13%
Knee	71	12%
Shoulders	36	6%
Hand	25	4%
Heart Cardio	21	4%
Multiple Upper Extrem	20	3%
Fingers	17	3%
Wrist	15	3%
Neck Soft Tissue	13	2%
Other	167	29%
Total	**580**	

Table 11- Police Department Distribution of injured body parts for FY 2001-2002. (David system report)



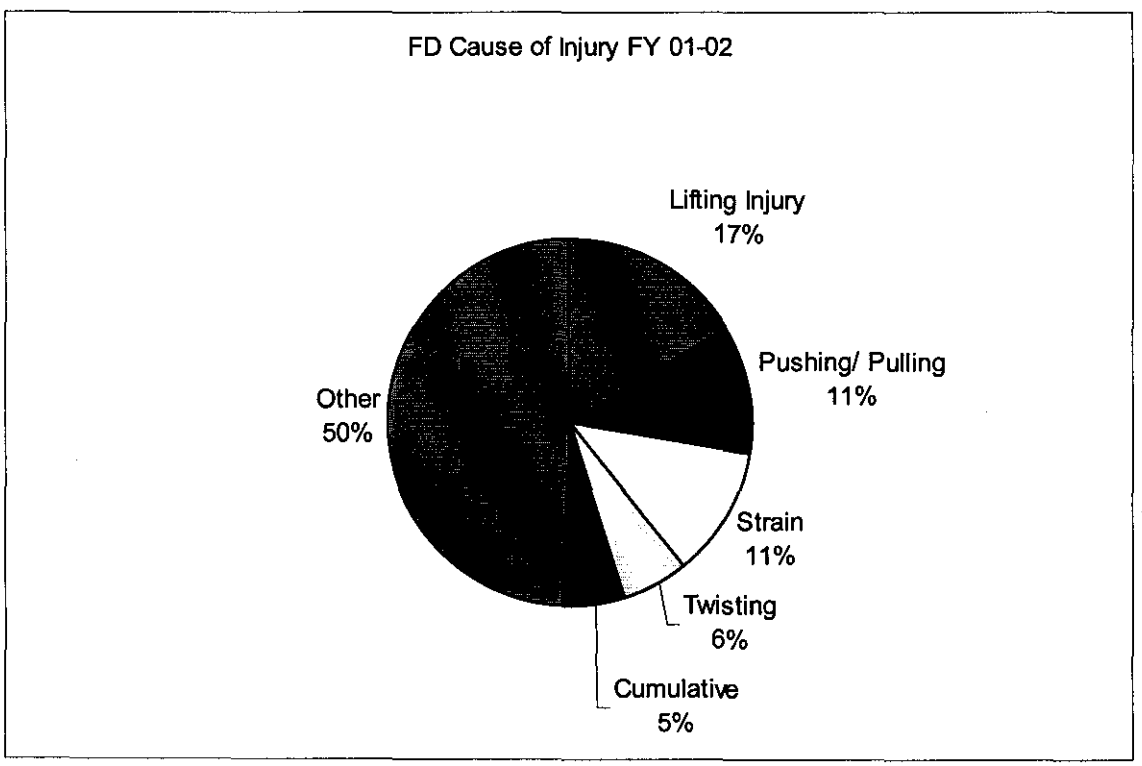
6) Cause of Injury resulting in all claims Fiscal Year 2001-2002

l) **FD cause of injury resulting** in all claims occurring during fiscal year 2001-2002. Lifting injuries account for 17% of all injuries in the Fire Department. Lifting, pushing/ pulling, strain, and carrying injury all

relate to over-exertion and account for a combined 43% of FD injuries.

Cause of Injury	Total #	% of Total
Lifting Injury	70	17%
Pushing/ Pulling	47	11%
Strain	47	11%
Twisting	25	6%
Cumulative	23	5%
Carrying Injury	18	4%
Fire or Flame	11	3%
Not Physical	11	3%
Dust/ Gas/ Fumes	10	2%
Slip/ Fall/ Trip	9	2%
Other	149	35%
Total	**420**	

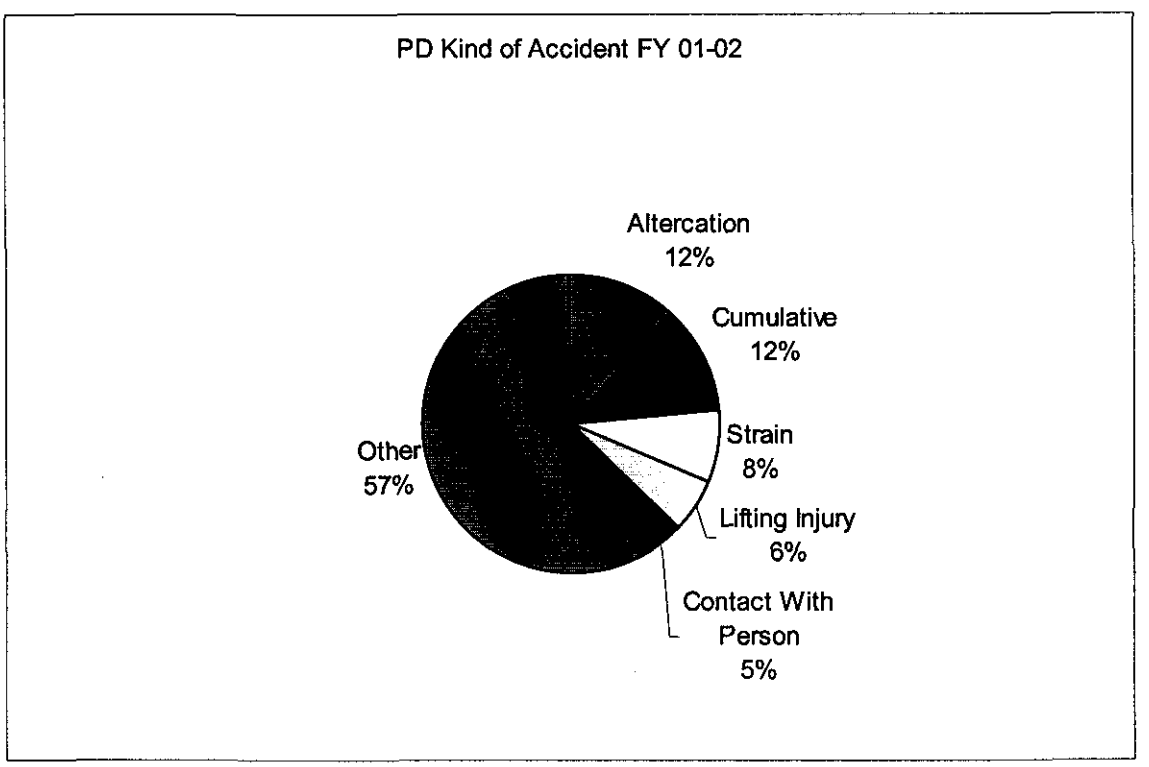
Table 12- Fire Department distribution of accident types for FY 2001-2002. (David system report)



m) **PD cause of injury** resulting in all claims occurring during fiscal year 2001-2002. Altercation and cumulative trauma each account for 12% of all PD accident types. Cumulative claims generally are not the result of a specific incident, but instead the result of general wear and tear over the course of a career. For that reason, they are often serious and costly WC claims.

Cause of Injury	Total #	% of Total
Altercation	73	12%
Cumulative	71	12%
Strain	48	8%
Lifting Injury	35	6%
Contact With Person	33	5%
Pushing/ Pulling	23	4%
Twisting	23	4%
Collision Vehicle	21	3%
Fall/ Same Level	20	3%
Running	20	3%
Other	245	40%
Total	**612**	

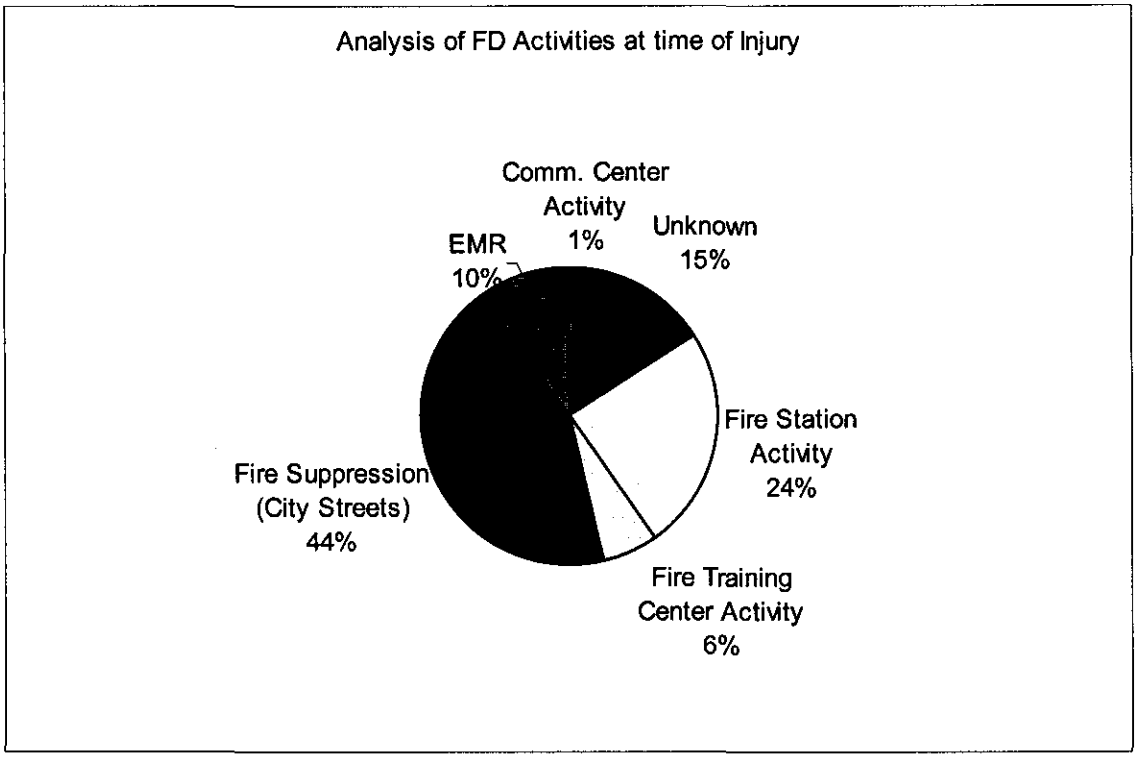
Table 13- Police Department distribution of accident types for FY 2001-2002. (David system report)



7) **Detailed analysis of FD accident locations/ activities** July 1, 2002- Dec 31, 2002. Analysis based on in depth review of activity descriptions from DAVID system accident reporting.

FD Activity	# of Incidents	% Breakdown
Fire Communications Center Activity	2	1%
Unknown	33	15%
Fire Station Activity	54	24%
Fire Training Center Activity	13	6%
Fire Suppression (City Streets)	100	44%
EMR	23	10%
Total FD Claims	**225**	

Table 14- Detailed 6 month FD accident and preventability analysis. (David system report)

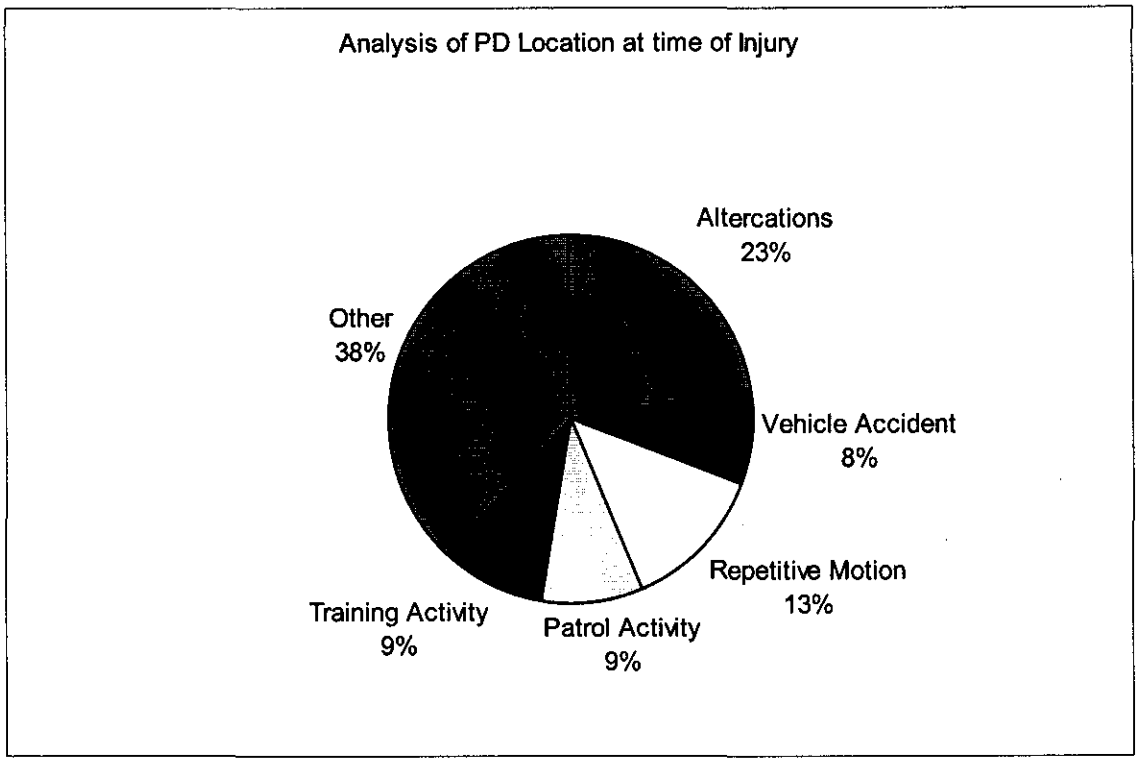


8) **Detailed analysis of PD accident related activities** July 1, 2002-Dec 31, 2002. The analysis is based on in depth review of accident descriptions from the 5020 accident reporting forms and reporting for that period.

PD Activity	# of Incidents	% Breakdown
Altercations	60	23%
Foot Pursuit	16	6%
General Stress	5	2%
Maintenance Activity	19	7%
Medical Response	5	2%
Patrol Activity	25	9%
Repetitive Motion	34	13%
Training Activity	23	9%

Vehicle Accident	21	8%
Other	58	22%
Total PD Claims	**266**	

Table 15- Detailed 6 month PD accident and preventability analysis. (David system report)



9) **FY 02-03 (A Third Quarter Progress Update)** - A nine month analysis of the current fiscal year, highlighting a comparison of injury claims in July-March FY 02-03 to July-March FY 01-01 for both the Police and Fire Departments. Both departments register fewer claims in FY 02-03 than in the same period the previous year.

   n) There was a 25% reduction in PD claims in the first 3 quarters of FY 02-03 as compared to the same period in FY 01-02. Claims in that nine month period dropped from 475 during July-March FY 01-02 to 375 July-March FY 02-03.

Claims Made July-March 01-02	Claims Made July-March 02-03	% Change
475	375	-25%

Table 16- Three quarter analysis of total PD claims July-March 01-02 vs. July-March 02-03 (Health and Safety Report July-March 2002-03)

   o) Consistent with the large decrease in overall claims, specific body part injuries in the PD also decreased, with lower back injuries going down

29% dropping from 58 during July-March FY 01-02 to 41 during July-March FY 02-03. The injury total for other commonly injured body parts is documented in the chart below.

Part of Body Injured	Claims Made July-March 01-02	Claims Made July-March 02-03	% Change
Lower Back	58	41	-29%
Knee	57	49	-14%
Shoulder	26	22	-15%
Lower Arm	3	4	+33%
Multi Body Parts	103	83	-19%

Table 17- Three quarter analysis of selected PD injury claims July-March 01-02 vs. July-March 02-03 (Health and Safety Report July-March 2002-03)

p) There was a 7% reduction in FD claims in the first 3 quarters of FY 02-03 as compared to the same period in FY 01-02. Claims in that nine-month period dropped from 311 during July-March FY 01-02 to 290 during July-March FY 02-03.

Claims Made July-March 01-02	Claims Made July-March 02-03	% Change
311	290	-7%

Table 18- Three quarter analysis of total FD claims July-March 01-02 vs. July-March 02-03 (Health and Safety Report July-March 2002-03)

q) The injury rates for specific body parts in the FD has varied widely in the first nine months of fiscal year 02-03. Back (-16%), knee (-13%), and shoulder (-52%) claims all decreased as compared with the same nine month period from FY 01-02 while lower arm (+43%) and multiple body part (+70%) claims increased significantly.

Part of Body Injured	Claims Made July-March 01-02	Claims Made July-March 02-03	% Change
Lower Back	69	58	-16%
Knee	24	21	-13%
Shoulder	27	13	-52%
Lower Arm	7	10	+43%
Multi Body Parts	40	68	+70%

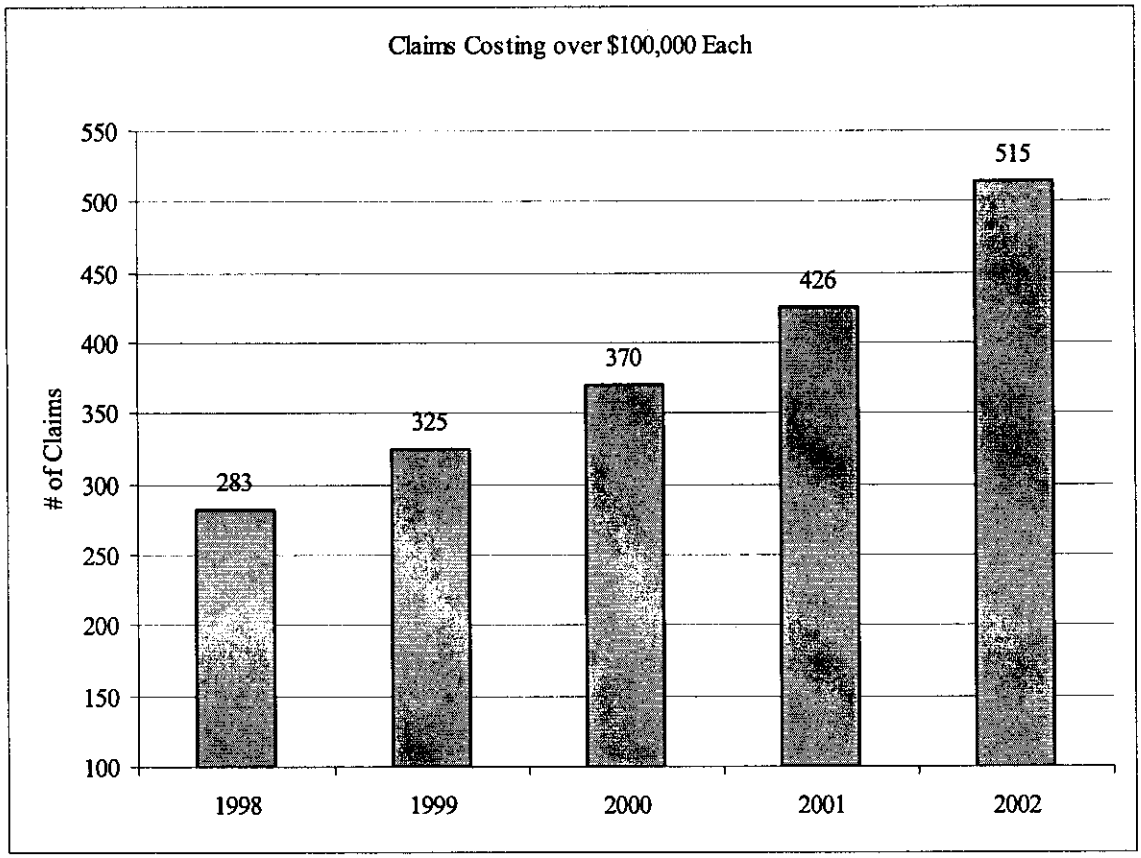
Table 19- Three quarter analysis of selected FD injury claims July-March 01-02 vs. July-March 02-03 (Health and Safety Report July-March 2002-03)

B. WORKERS COMPENSATION COST TRENDS

1) **High Cost Claims: Claims with an incurred value of $100,000 or higher.** Analysis of large claims reveals that the number of high cost claims filed each of the last five years has increased substantially each year. The rate of increase also appears to grow larger each year growing from 42 in 2000 to 89 in 2003 yielding a 45% increase in total claims for the period.

As Of Date	Open Claims	Total Claims	New Claims Within Year	% Change in Total Large Claims Annually
February 19, 2003	398	**515**	89	17%
February 19, 2002	318	**426**	56	13%
February 19, 2001	278	**370**	45	12%
February 19, 2000	238	**325**	42	13%
February 19, 1999	206	**283**		

Table 20- High Cost claims: claims encumbered for over $100,000 a year. Claims encumbered as of Feb 19 for each of last five years. (DAVID system)



2) **Distribution of High Cost Claims:** A percentage distribution of claims as they occur in three categories including type of injury, part of body, and cause. The analysis reveals that strain is the most common type of injury as classified by the City's workers compensation system accounting for 36% of all high cost claims. The body part classification "multiple body parts" accounts for the highest percentage of injured body parts with 29%, followed by "back" at 23% and "heart" at 16%. 26% of high cost claims are the result of cumulative trauma, rather than a specific incident.

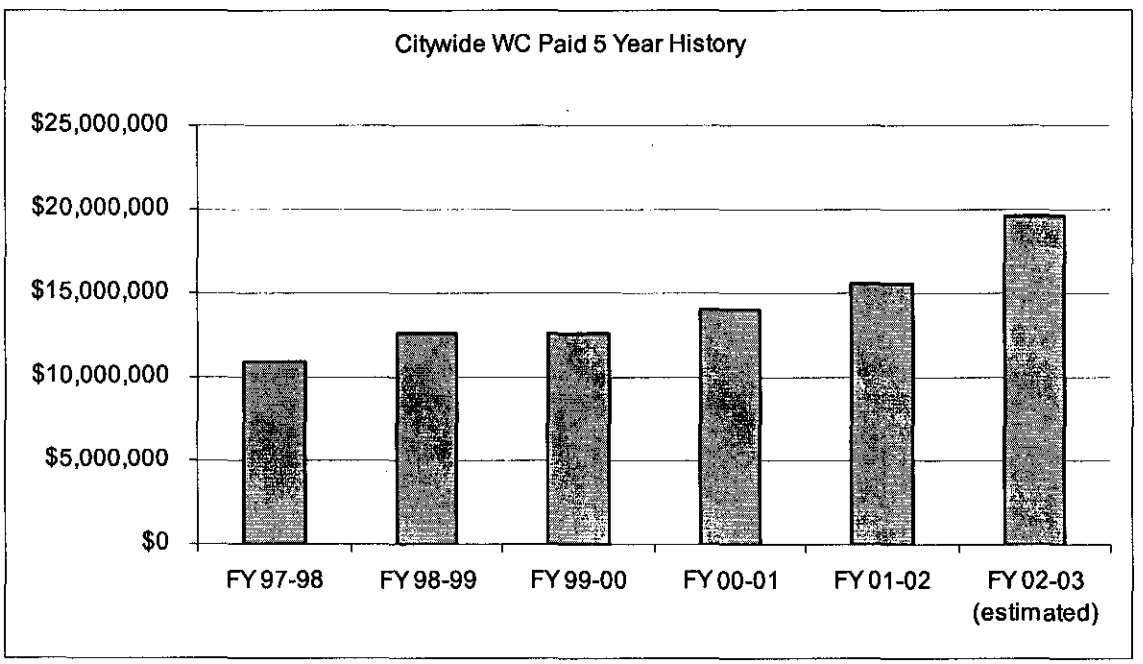
Type of Injury	#	% of Total	Part of Body	#	% of Total	Caused by	#	% of Total
Strain	187	36%	Multiple Body Parts	149	29%	Cumulative	132	26%
Pain	61	12%	Back	119	23%	Lifting	52	10%
Sprain	35	7%	Heart Cardio	81	16%	Fall	38	7%
Angina	26	5%	Knee	35	7%	Strain	27	5%
Myocard Infar	22	4%	Neck	26	5%	Vehicle Collision	26	5%
Contusion	18	3%	Shoulders	20	4%	Rep Motion	17	3%
Mental Stress	12	2%	Arm	10	2%	Pushing/ Pulling	16	3%
Fracture	10	2%	Other	53	10%	Altercation	15	3%
Inflammation	9	2%	Psyche	8	2%	Slip no Fall	14	3%
Other/ Unkown	135	26%	Other	14	3%	Other/ Unknown	178	35%

Table 21-Distribution of High Cost Claims logged in Calendar Year 2002 (DAVID System Report)

Citywide dollars paid. Figure excludes departmental costs. The cost history reveals and annual increase in total costs of 9.4% each year. Three major reasons for the cost increase include medical inflation, changes in workers' compensation laws, and higher utilization of medical services. Medical costs through out California continue to increase in double digit. Hospital bills for the first nine months of this fiscal year total $3.7M as compared to $1.6M in the same period last fiscal year (an increase of $2.1M). Changes in workers' compensation laws such as AB 749, which raises the benefits to injured employees and AB 1177, which requires the City to pay the prevailing medical PPO rates, have significantly contributed to increasing costs. Furthermore, the utilization rate of medical services has also increased approximately 20% so far this fiscal year as reported by Workers' Compensation managers of large cities in California.

Year	Total Paid Citywide	% Change
FY 97-98	$ 10,920,718	
FY 98-99	$ 12,628,556	15.6%
FY 99-00	$ 12,596,527	-0.3%
FY 00-01	$ 14,048,639	11.5%
FY 01-02	$ 15,558,399	10.7%
FY 02-03 (estimated)	$ 19,917,229	22.7%
	Average Annual Increase:	**9.4%**

Table 22-Citywide Workers' Compensation five year cost history. (David system report)

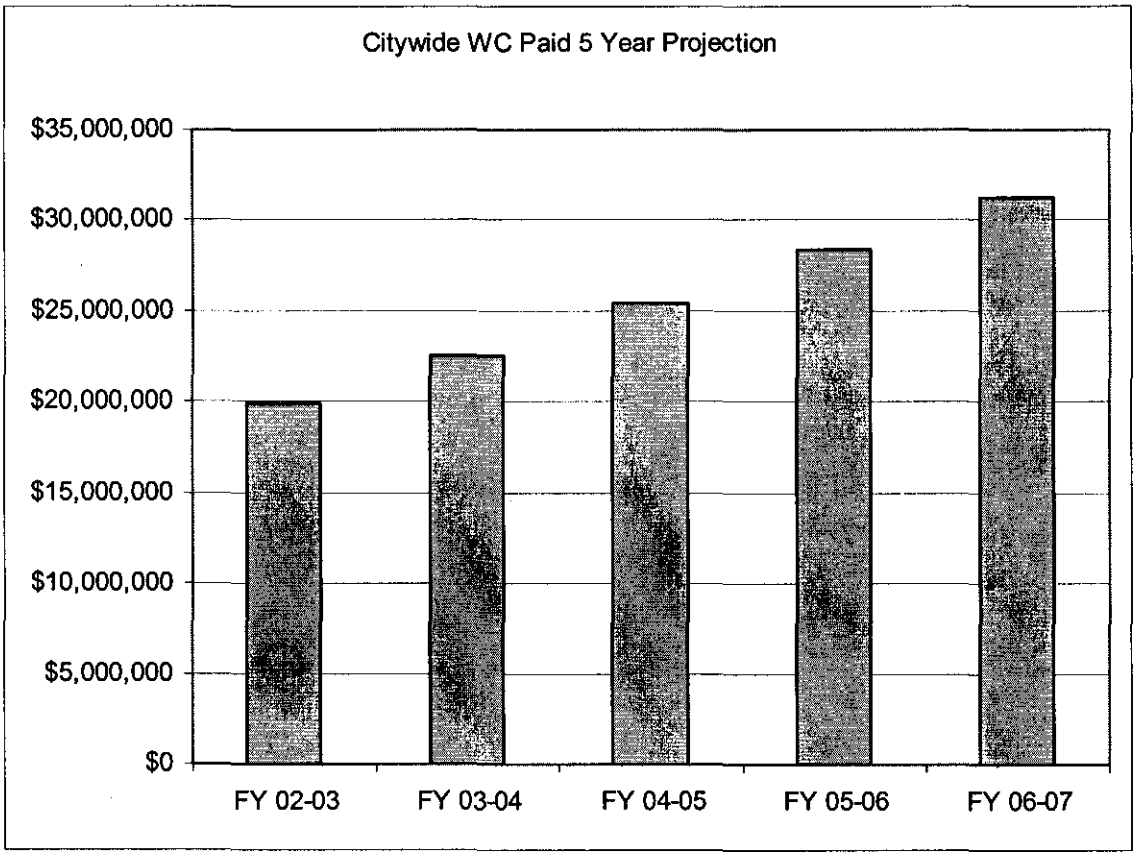


4) **Projected Citywide Workers' Compensation:** A five-year projection of expected Citywide costs. Chart is based on actuarial projections for total

Citywide dollars paid, excluding departmental costs. Costs are projected to increase at a rate of 11% annually over the next 5 years.

Year	Total Paid Citywide	% Change
FY 02-03 (estimated)	$19,917,229	
FY 03-04 (estimated)	$22,519,840	12%
FY 04-05 (estimated)	$25,370,616	11%
FY 05-06 (estimated)	$28,379,538	11%
FY 06-07 (estimated)	$31,305,005	9%
	Average Projected Annual Increase:	11%

Table 23- Citywide Workers' Compensation five year cost projection. (Actuarial study performed by ARMTECH Actuarial Firm, April 2003)

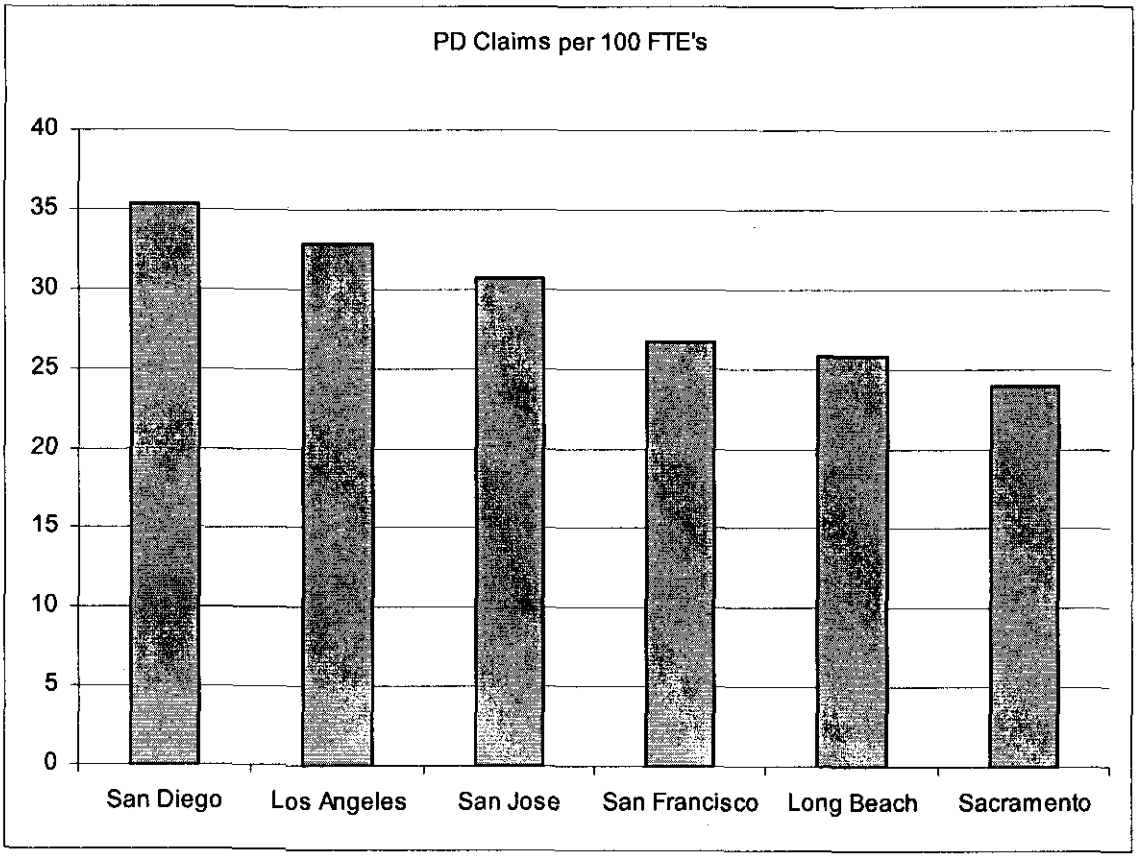


C. COMPARISON WITH OTHER CITIES

1) **Comparison of PD claims per 100 FTE's:** City of San Jose is 3rd among surveyed cities with 30.7 claims per 100 FTE's.

City	PD FTEs	New PD Claims 01-02	PD Claims per 100 FTE's
San Diego	2765	979	35.4
Los Angeles	13663	4500	32.9
San Jose	**1887**	**580**	**30.7**
San Francisco	2639	705	26.7
Long Beach	1460	377	25.8
Sacramento	1111	265	23.9

Table 24- Comparison of Police Department claims per 100 FTE's. Department figures refer to budgeted FTEs'. (internal study conducted by Employee Services staff)

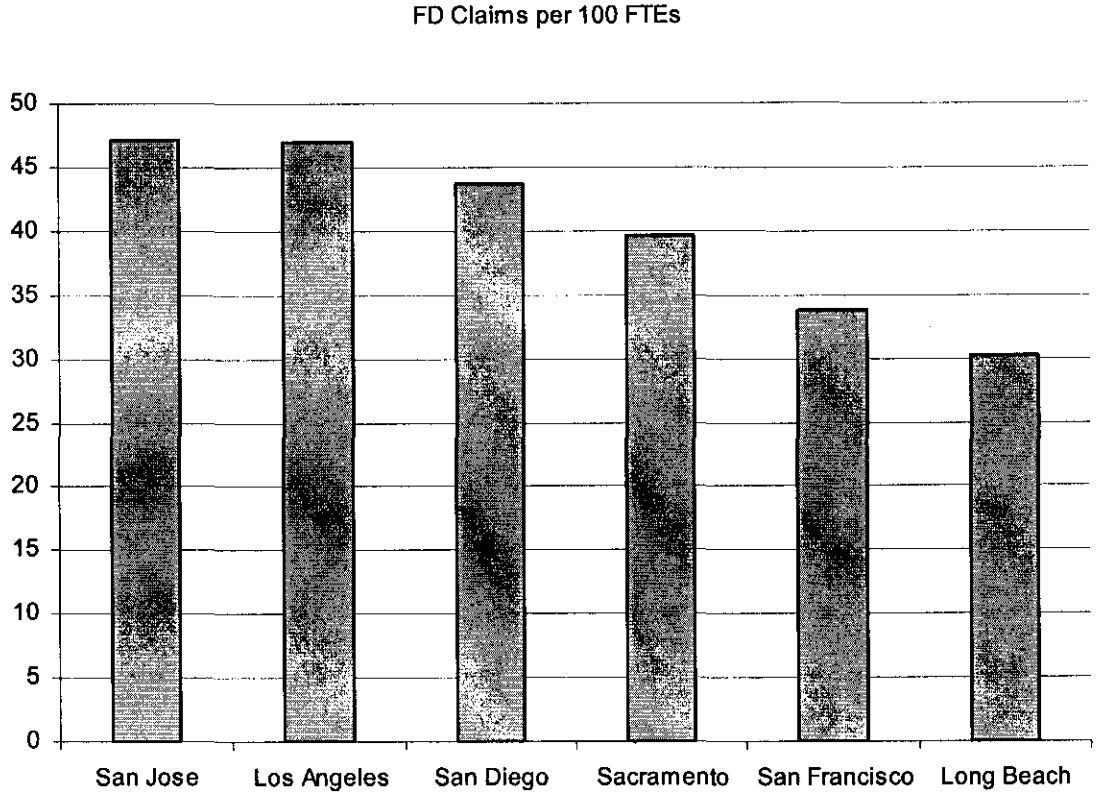


2) **Comparison of FD claims per 100 FTE's:** City of San Jose FD is 1st among surveyed cities with 47.2 claims per 100 FTE's.

City	FD FTE's	FD Claims 01-02	FD Claims per 100 FTEs
San Jose	**843**	**398**	**47.2**

Los Angeles	3496	1647	47.1
San Diego	1255	550	43.8
Sacramento	586	232	39.6
San Francisco	1910	645	33.8
Long Beach	582	176	30.2

Table 25- Comparison of Fire Department claims per 100 FTE's. Department figures refer to budgeted FTEs'. (internal study conducted by Employee Services staff)

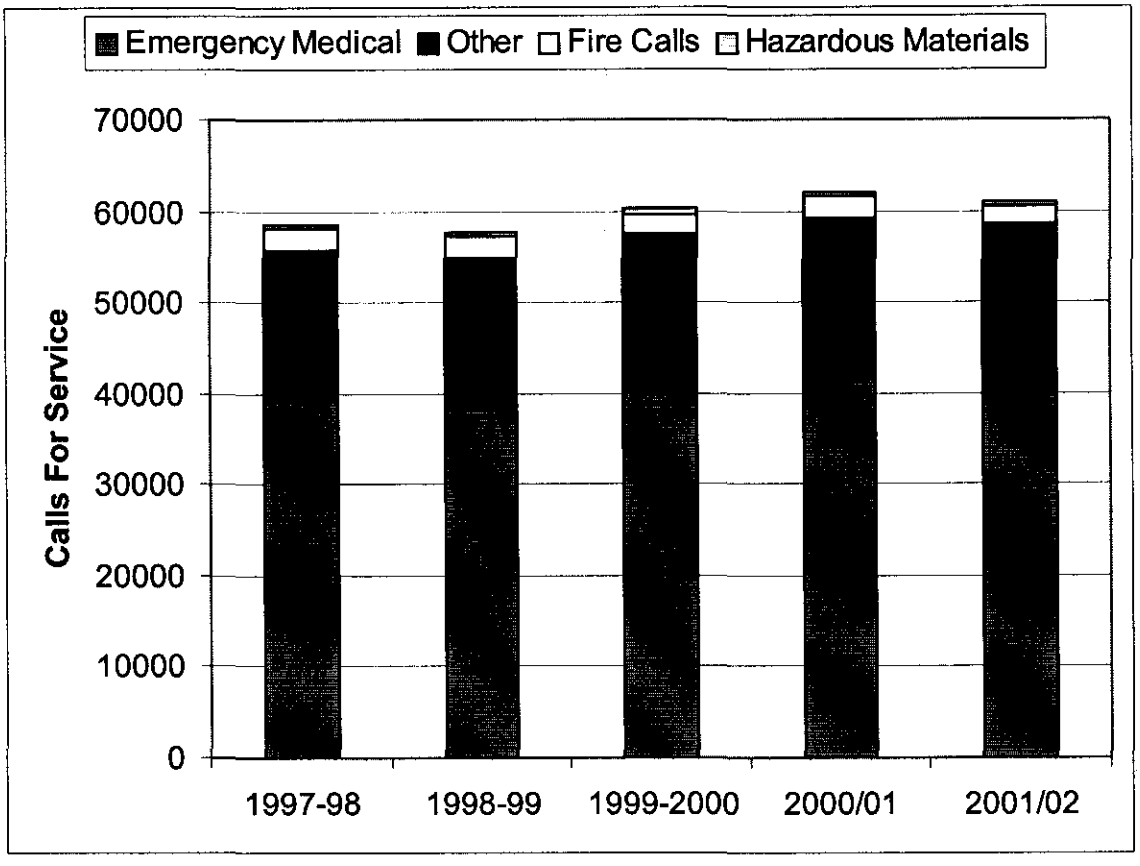


D. STAFFING AND WORKLOAD TREND

1) **FD Calls for Service:** A five-year history of fire service distribution by work type. In the Five year period, overall Fire Service demand has increased from 58572 calls to 61110 a 4% increase.

Type of Service	**FY 97-98**	**FY 98-99**	**FY 99-00**	**FY 00-01**	**FY 01-02**
Emergency Medical	39184	38426	40087	41479	40158
Other	16453	16449	17375	17857	18388
Fire Calls	2466	2297	2275	2245	2062
Hazardous Materials	469	514	507	466	502
Total	**58572**	**57686**	**60244**	**62047**	**61110**
Total Service Demand % Change		**-2%**	**4%**	**3%**	**-2%**
	Average Change in Service Demand: .75%				

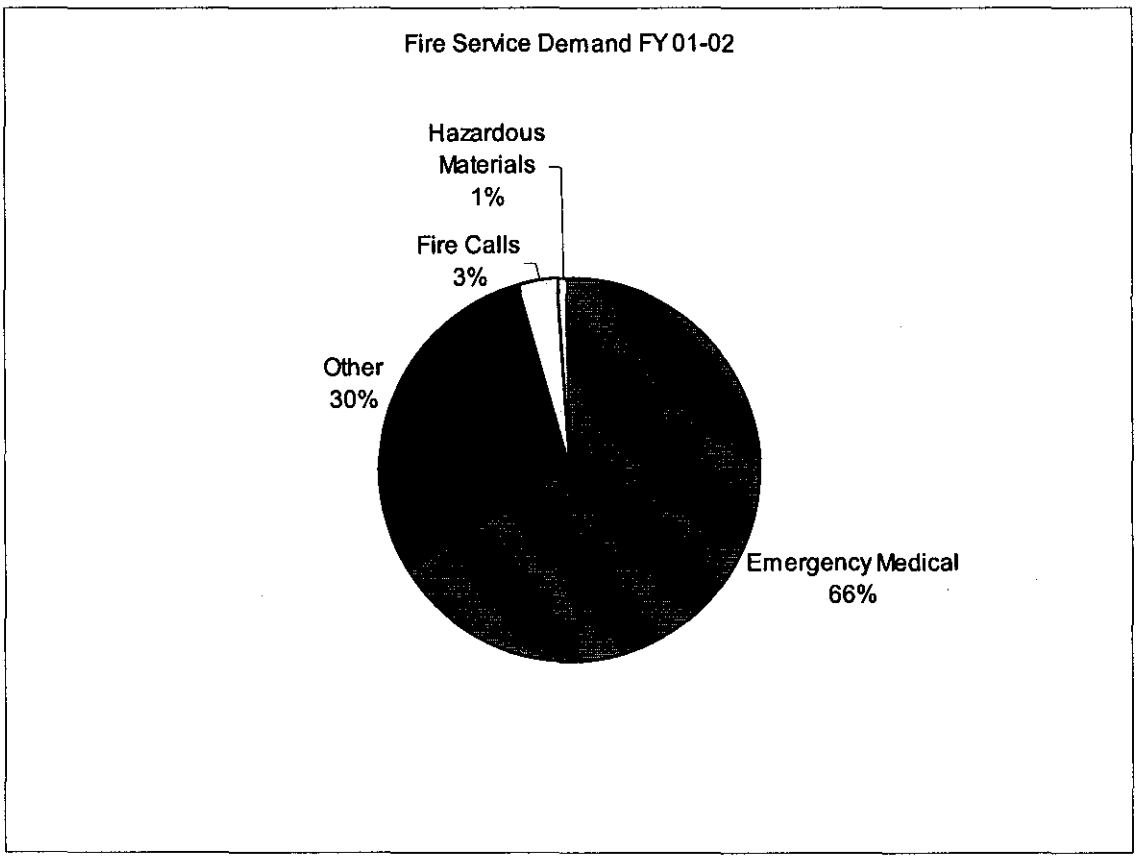
Table 26- Fire Service provision five-year history. (figures provided by Fire Administration)



2) **FD Distribution of Work Type:** Services for Fiscal Year 2001-2002. 66% of services are related to emergency medical response. The category "other" includes a variety of services including response to downed power lines, alarm reset, lift assist, etc.

Type of Service	FY 01-02	% Of Total Calls
Emergency Medical	40158	66%
Other	18388	30%
Fire Calls	2062	3%
Hazardous Materials	502	1%
Total	**61110**	

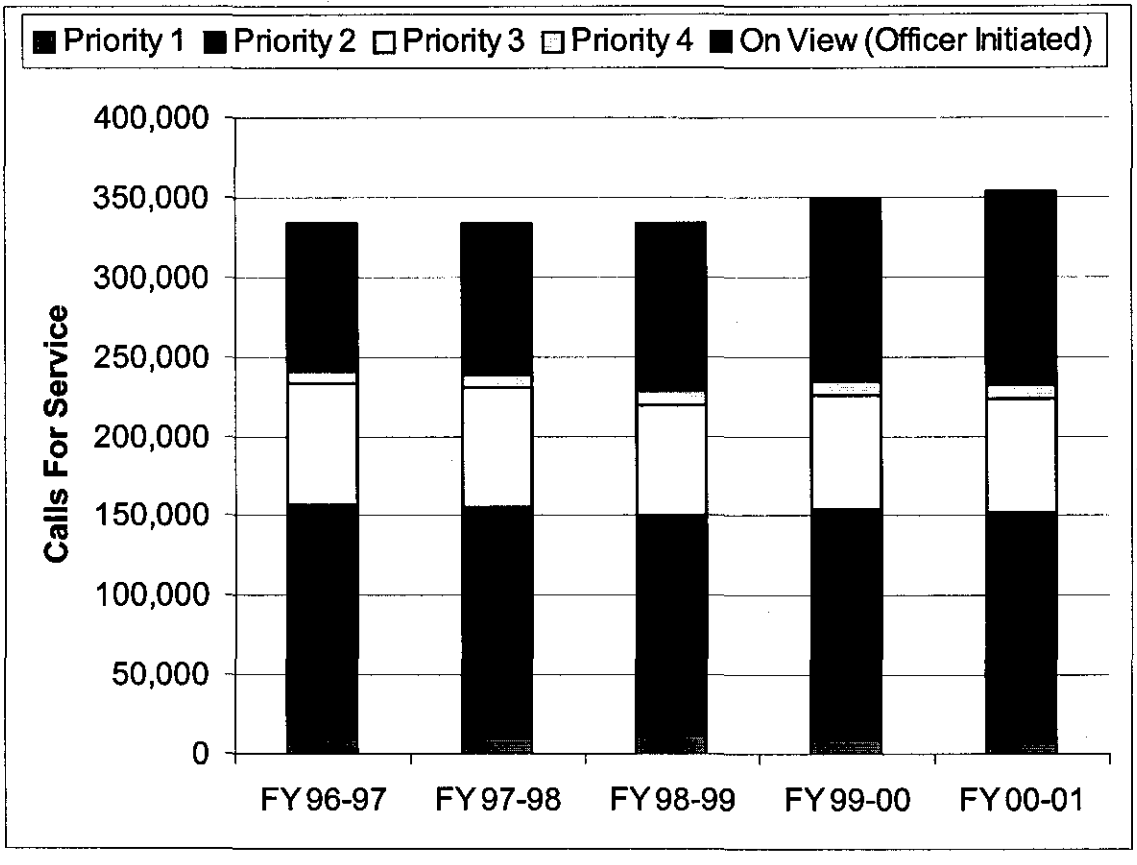
Table 27- Fire Department Distribution of Work Type Fiscal Year 2001-2002. (figures provided by Fire Administration)


Fire Service Demand FY 01-02
Hazardous Materials 1%
Fire Calls 3%
Other 30%
Emergency Medical 66%

3) **PD Calls for Service:** A Five-Year History of Police Department distribution of work type. Demand for PD service grew from 333,661 in FY 96-97 to 353,312 in FY 00-01.

Type of Service	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01
Priority 1	10190	9779	10977	9060	7535
Priority 2	146648	145947	139135	145055	144399
Priority 3	76302	74450	69760	71115	70976
Priority 4	7214	7907	8428	9139	9026
On View (Officer Initiated)	93307	95668	105232	114184	121376
Total	**333661**	**333751**	**333532**	**348553**	**353312**
Total Service Demand % Change		**0%**	**0%**	**4%**	**1%**
	Average Change in Service Demand: 1.25%				

Table 28- Police Service Provision five-year history (SJPD Fiscal Unit)

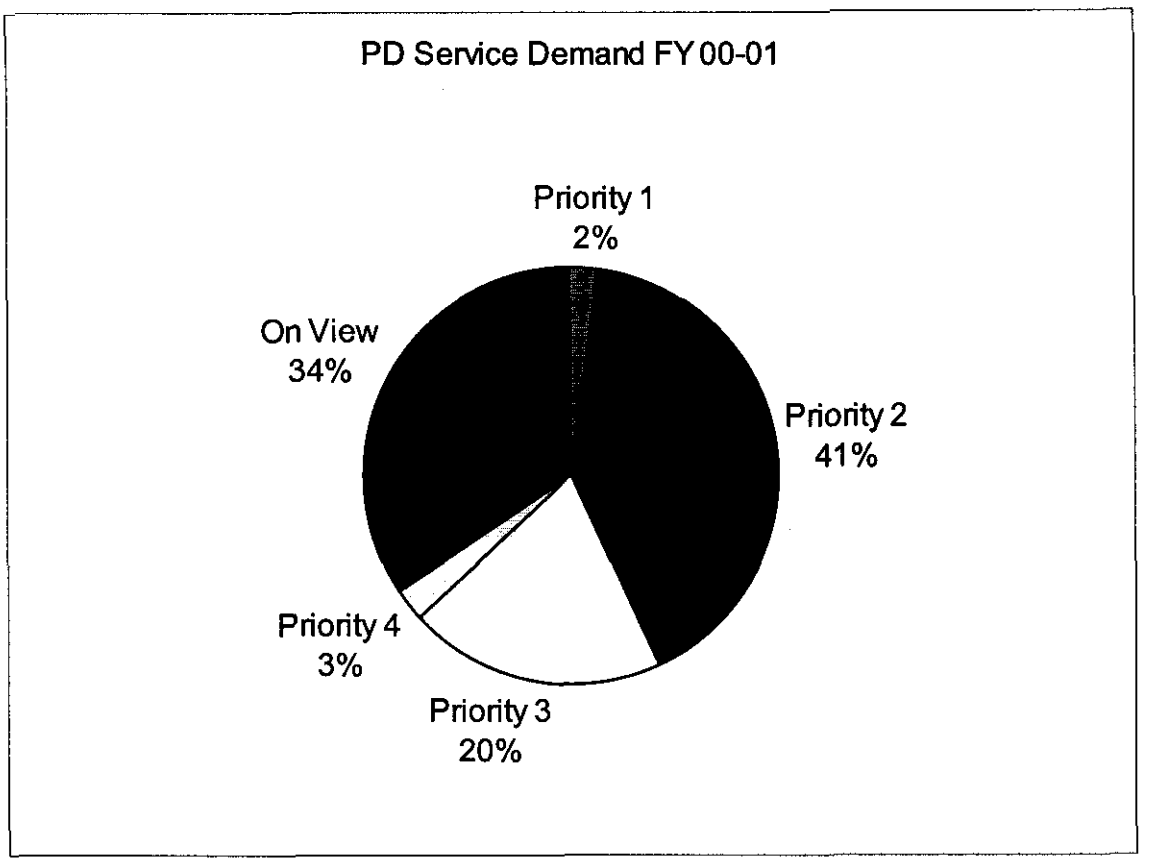


4) **PD Distribution of Work Type:** Services for fiscal year 2001-2002. Priority 2 calls represent the bulk of PD service demand and constitute 41% of calls for service in FY 2000-2001.

Type of Service	FY 00-01	% of Total Calls
Priority 1	7535	2%

Priority 2	144399	41%
Priority 3	70976	20%
Priority 4	9026	3%
On View (Officer Initiated)	121376	34%
Total	**353312**	

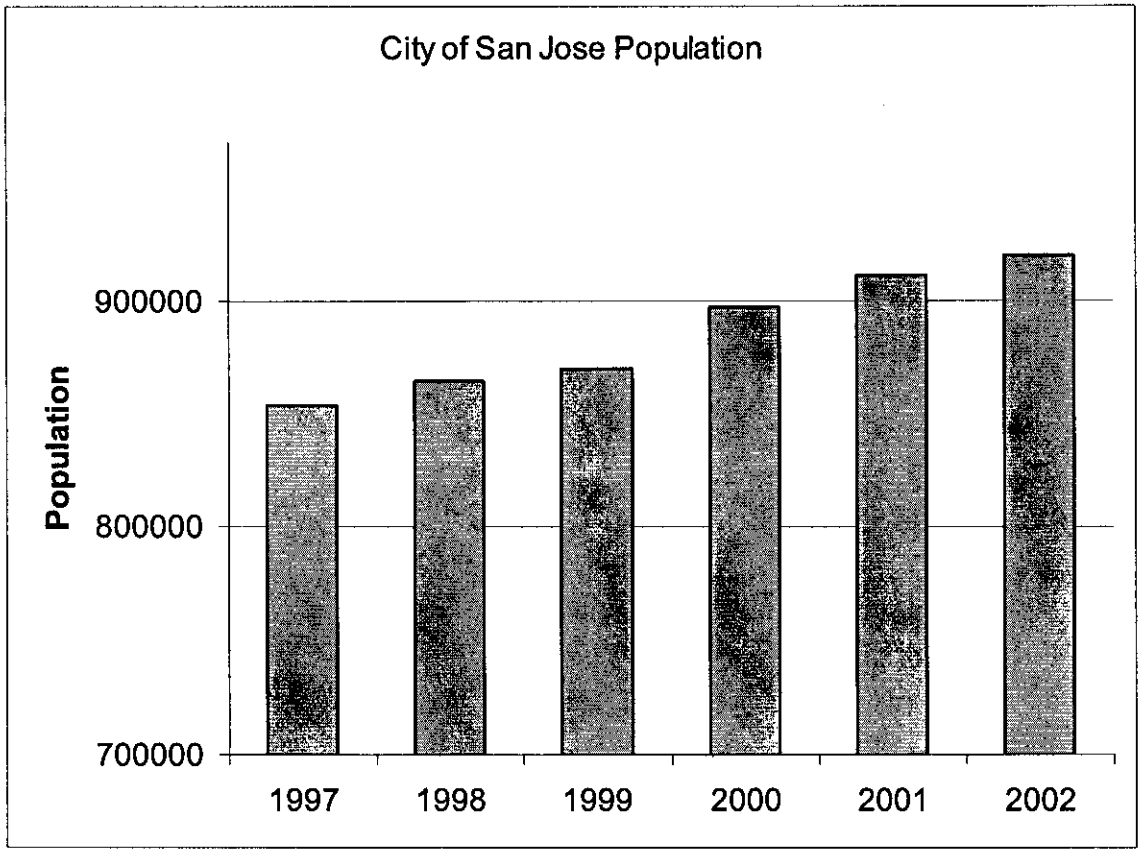
Table 29- Fire Department Distribution of Work Type Fiscal Year 2001-2002. (figures provided by Fire Administration)



5) **Population in San Jose in the last six years: The City of San Jose has grown by nearly seventy thousand residents within the last six years.**

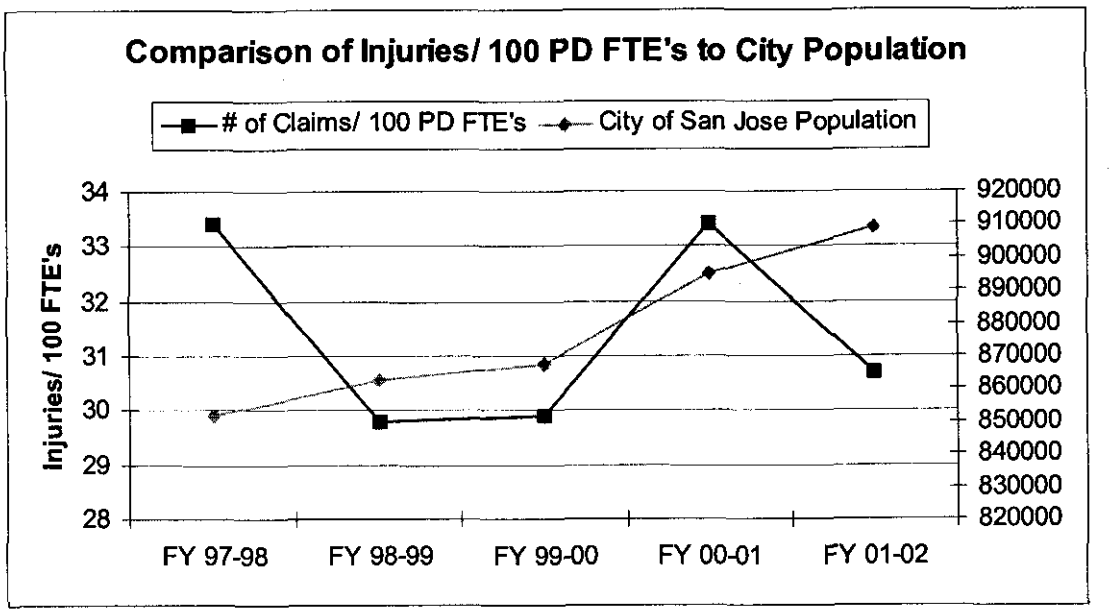
YEAR	1997	1998	1999	2000	2001	2002	% Increase
City of San Jose Population	851,528	862,637	867,675	894,943	908,800	918,000	7%

Table 30- City of San Jose General Population. (All figures from the US Bureau of Census with the exception of 2001 in which only households were surveyed. 2001 is a SJ Chamber of Commerce Estimate)

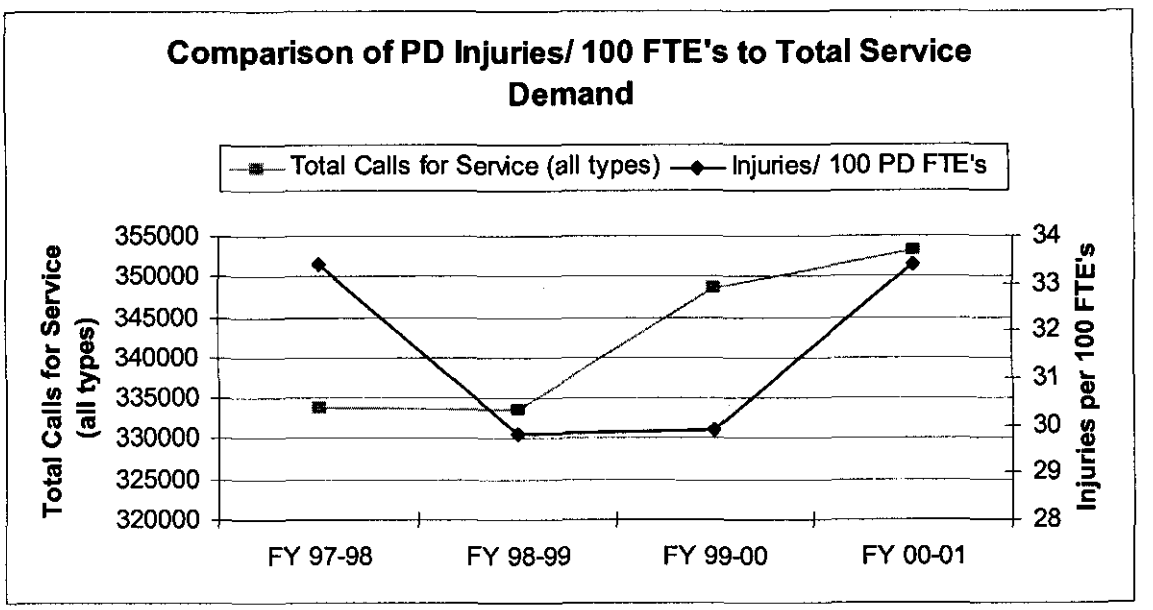


6) **Workload to FTE Comparison:** An analysis of overall workload demand, City Population, staffing levels, and injuries for the Police and Fire Departments.

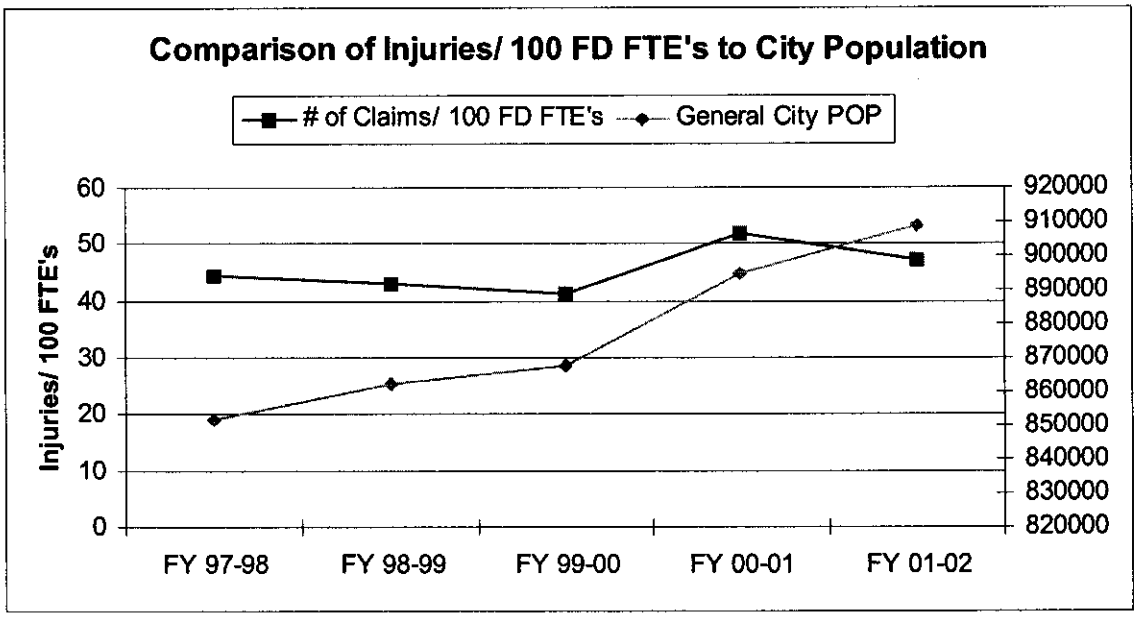
a) A comparison of the **general population** of the City of San Jose and **PD injuries/100 FTE's**. While the City's population grows steadily, FD injuries per 100 FTE's fluctuate independently.



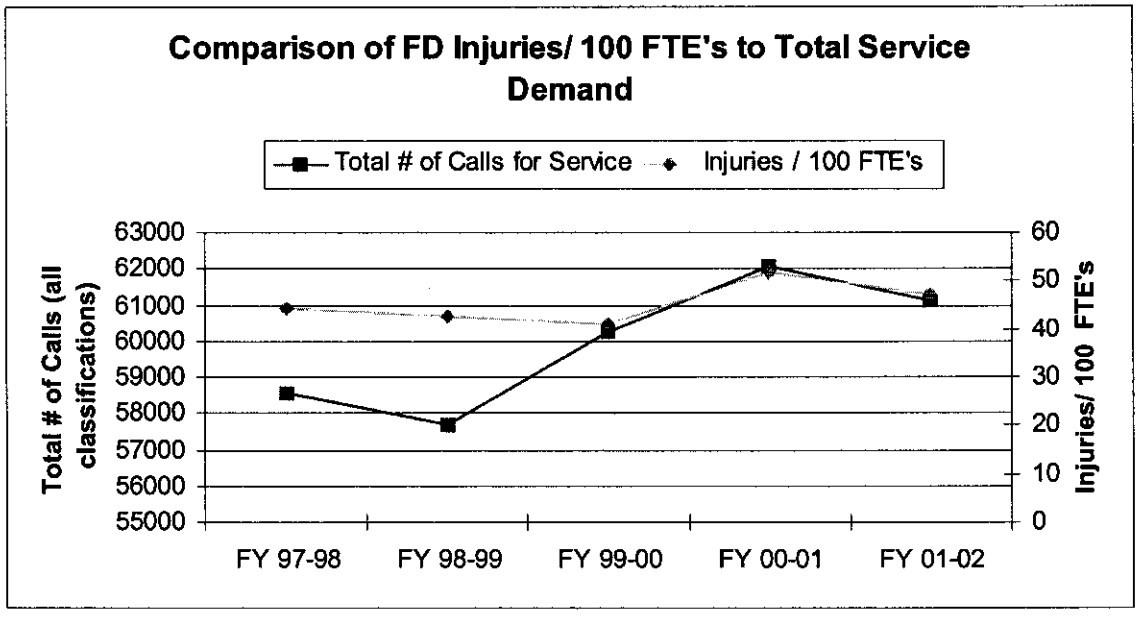
b) A comparison of **PD service demand** to **injuries per/100 FTE's**. PD injuries appear to track closely with total service calls after 1999.



c) A comparison of the **general population of the City of San Jose** to **FD injuries/100 FTE's**. Both appear to be steadily rising at an even pace.



d) A comparison of **FD service demand** to injuries **per 100 FTE's**. Injuries per 100 FTE's appears to rise and fall in sync with total service demand after 1999.



E. SAFETY IMPROVEMENT AND TRAINING

1) **Safety Related PD Equipment:** Equipment brought on line or with an estimated impact within the last five years.

Equipment	Date Instituted
Widely available lap tops for report writing	**1999**
Less-lethal weapons IE- (stun bag, taser, etc.)	**1995** (UHP Grant)
General chair, desk and office layout changes	**1998** (started)-**2003** (Fiscal Permits completed)
Duty weapon changes- (they now support more ammo)	**1996** (Sig-Sauers)
Introduction of telescoping metal baton	**1998** (Special Ops) **2000** (General)
Changes to the BP Vest (generally lighter)	**2001** (New NIJ Certification)
Radios/ Ear piece radios	**1998** (gradually over last 5 yrs – officers buy them on their own)
Gradual increase in amount of equipment moved in and out of vehicle (lap top, *less lethal projectile launchers, assault style weapons, special rifles, crime scene kits, PAS devices, radar guns,* etc.)	**1993-present** (Gradual changes over the past 10 years from Special Operations personnel only to general Patrol Officers)

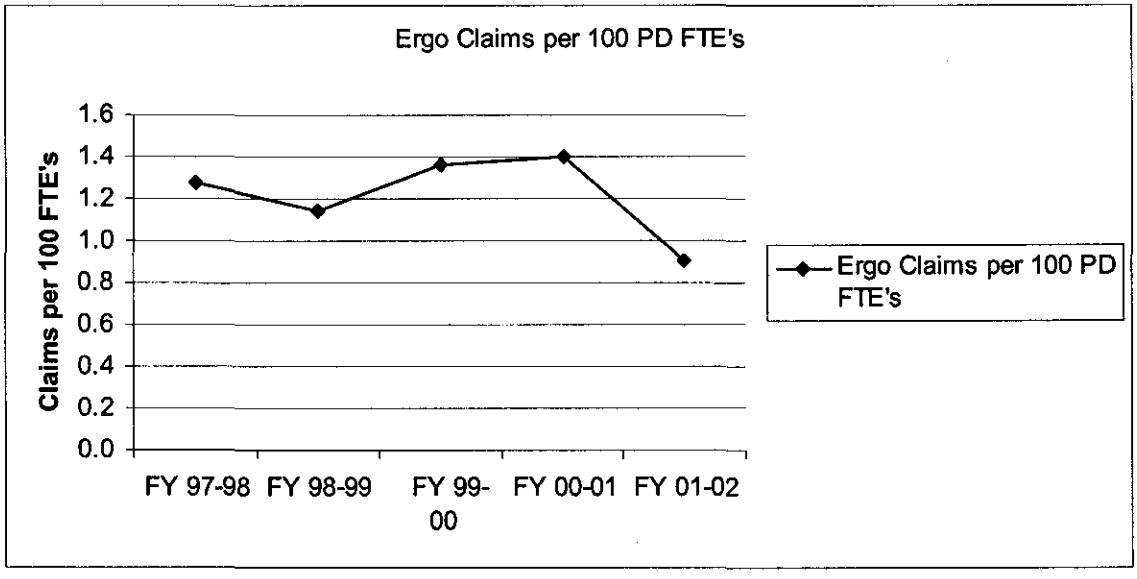
Table 31- Police Department equipment with a potential safety impact after fiscal year 1996-1997 (PD Admin, Training, Safety)

a) While in some cases, new equipment replacing old equipment results in less weight for the employee to carry, there appears to be a **general trend toward more equipment**, and by extension more weight for employee s to carry on average. While the addition of a laptop to an officer's available daily tools makes the officer a more efficient or effective worker, it adds to the weight to the complement of items an officer must put in and take out of his or her car each day. The same is true for special weapons, more ammunition, or crime scene kits. The more weight an employee must move each day, the more likely they are to suffer lifting, pushing /pulling, strain, and sprain type injuries. Most damaging however, and most difficult to quantify, are the long-term cumulative effects of the weight.

b) Advancements in **ergonomic equipment**, specifically the office equipment and layout changes made in 1998, and the hiring of a full time safety officer with ergonomic certification should reduce repetitive motion injuries over the five-year period. Ergonomic claims did decline sharply in FY 01-02.

	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02
PD Claims Which Resulted From Ergonomic or Rep Motion Injury	23	21	25	26	17
PD FTEs	1,803	1,837	1,839	1,860	1,887
Ergo Claims per 100 FTE's	1.3	1.1	1.4	1.4	0.9

Table 32- 5 year history of Police Department repetitive motion claims. (David system report)



c) Extensive use of less-lethal weapons, could in theory, reduce the number of physical altercations in which officers become involved (a leading cause of PD injuries). But the widespread use of these weapons is not documented nor is their long-term effect on injuries.

d)

2) **Safety Related PD Training and Policy Changes:** Training brought on line within the last five years. A majority of new training relates to driver training, or arrest and control techniques.

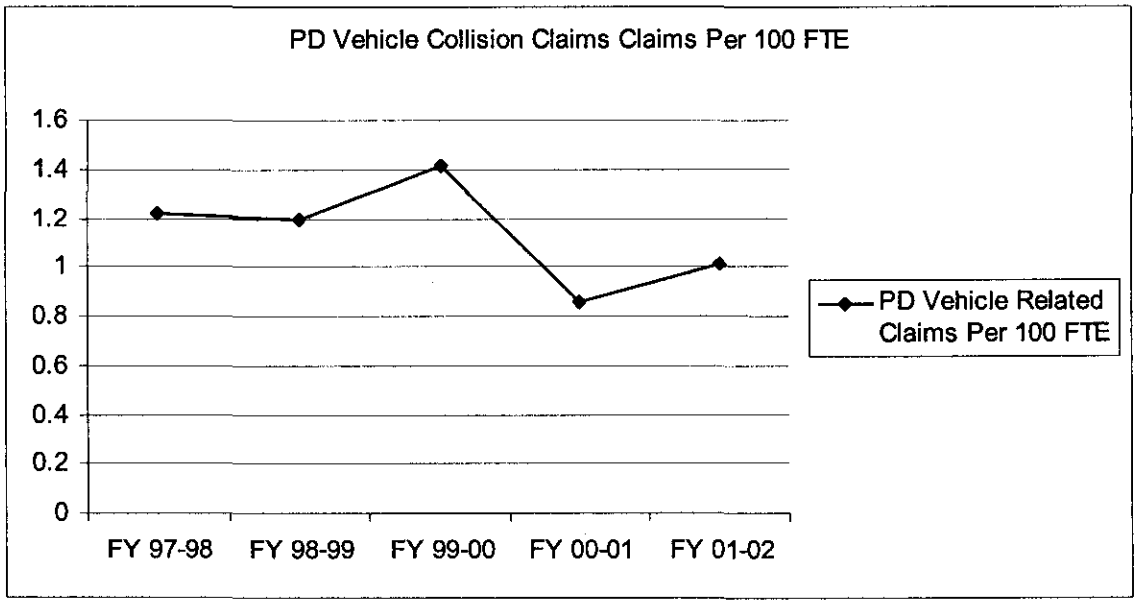
Training/ Policy	**Date Instituted**
Vehicle pursuit policy	**2001** NA **New Pursuit Policy**
Simulator based training	**2000** 3 years on the new more realistic simulators **Simulator Training Program**
Enhanced driver training (skid course, pursuit, etc)	**2000 (Training All Sworn)** **1999 (8–hours of EVOC Update)** **2000 (Simulator Driver Training)**
Car rotation policy (cars changed out less frequently, causing more wear, worse suspension etc)	**1998**
Changes in arrest policy – to less confrontational (negotiations stressed)	**1999** CIT (Crisis Intervention Team)
Full time safety officer hired	**2001**

Table 33- Safety Related Police Department Training with implementation estimate (Provided by Police Administration, Training)

a) **Changes to driver training and policy**, and a reduction in dangerous pursuits, should reduce the number of vehicle accident related injuries. FY 00-01 is the Departments five year low

	FY 97-98	**FY 98-99**	**FY 99-00**	**FY 00-01**	**FY 01-02**
PD Vehicle Collision Claims	22	22	26	16	19
PD FTEs	1,803	1,837	1,839	1,860	1,887
PD Vehicle Related Claims Per 100 FTE	1.2	1.2	1.4	0.9	1.0

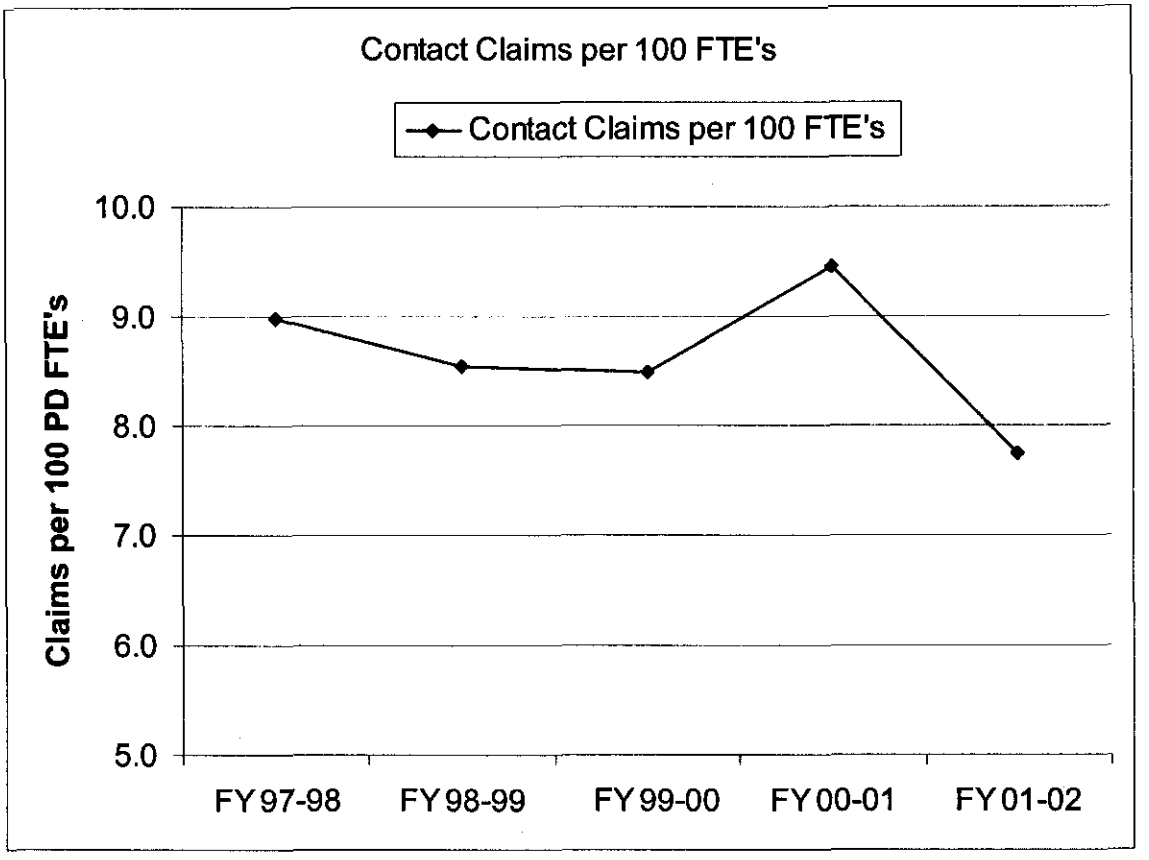
Table 34- 5 Year History of Police Department Vehicle Collision Claims. (David system report)



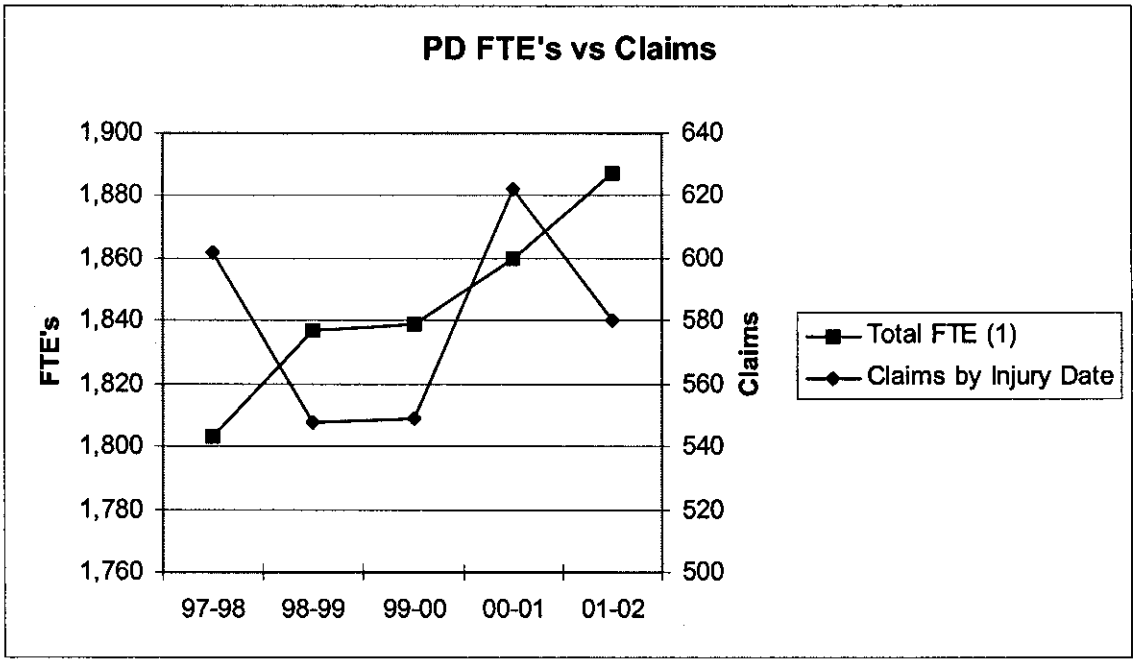
b) **Less confrontational arrest and control techniques used by the PD** would in theory result in less contact with combative people, and reduce the number of injuries resulting from contact with another person.

	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02
PD Claims Which Resulted From Contact With Another Person	162	157	156	176	146
PD FTEs	1,803	1,837	1,839	1,860	1,887
PD Contact Related Claims Per 100 FTE	9.0	8.5	8.5	9.5	7.7

Table 35- 5 Year History of Police Department Injuries resulting from contact with another person. (David system report)



c) **Full time PD Safety Officer:** Among the many duties associated with PD Safety Officer Position is a general charge to track, catalogue and assist in the future prevention of accidents Department wide. In the Safety Officer's first full year of employment, the accident rate at the Police Department has gone down from 33.4 per 100 FTE's in FY99-00 to 30.7 per 100 FTE's in FY 00-01. While it is difficult to attribute this reduction in accidents to any single factor, the full time safety officer with broad departmental responsibilities definitely played a role.



d) **Wellness assessments** are conducted by both the Fire and Police Departments annually to measure the aerobic capacity, flexibility, strength, and endurance of the police officers. Based on the results of these tests, at-risk police officers are given the opportunity to enroll in a voluntary six-week program to address identified health problems. Typical results of the six week course document marked improvement in run stamina, upper body strength, and flexibility. An average of the results for all participants in 2002 is outlined below.

Test Title	Relative Improvement Over Six Week Course
Run Test	8.4% improvement
Body Composition	1% improvement
Dynamometer	5.7% improvement
Push Up Results	20.1% improvement

Table 36- Results of 2002 PD Wellness Assessment (Club 1 Report on SJPD Fitness)

3) **FD Equipment:** Equipment brought on line or with an estimated impact within the last five years.

Equipment	Date Instituted
Diesel Exhaust Extraction System	**2000** (retrofit finished)
Fully enclosed Fire Engines (elimination of jump seat)	**1994**
Hydraulic extension ground ladders	**1994**
Respiratory equipment upgrade (15 minutes of additional air, low air warning)	**1996**
Leather chaps for chain saw use	**1997**
Thermal Imaging Cameras	**1999**
Portable radio inventory with each Fire company reaches 1 to 1 ratio	**2002**

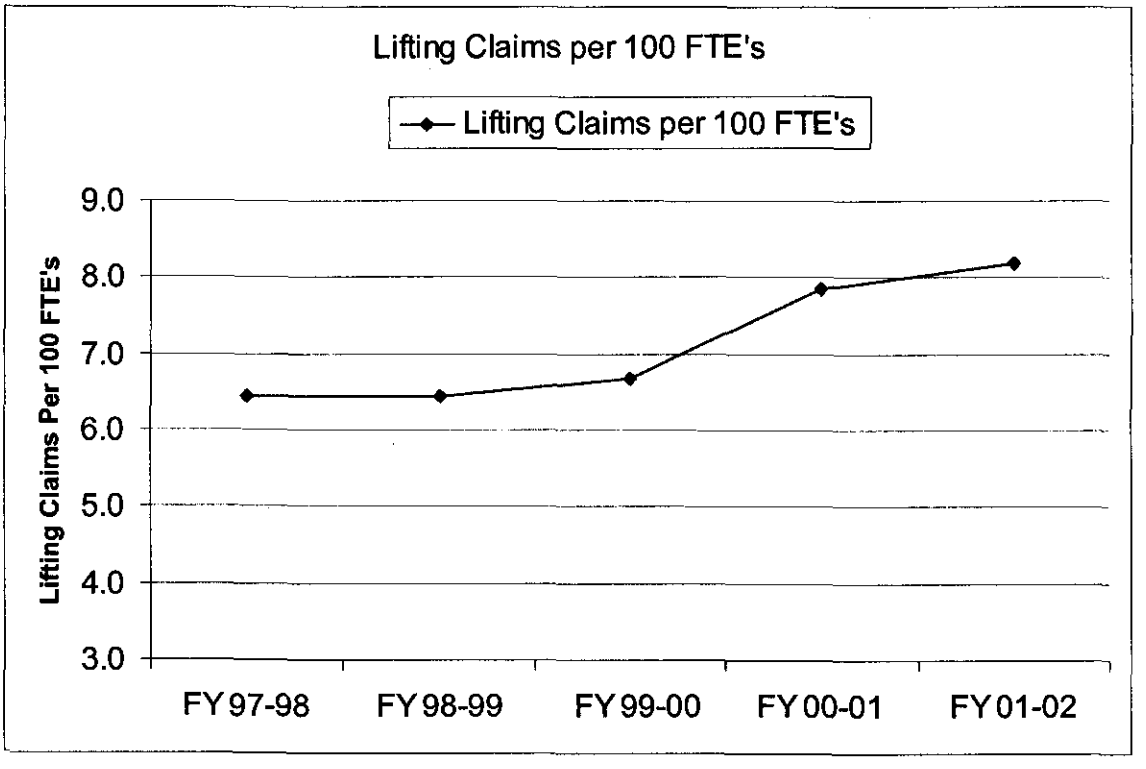
Table 37- Fire Department safety related technology or equipment. (Provided by Fire Administration)

a) The **diesel exhaust extraction system** could result in the prevention of long-term respiratory disorders. Injury or illness resulting from dust, gas or fumes, were responsible for 2% of total injuries in FY 01-02, but of those, most likely occurred during fire suppression activities. Without a way to quantify past injuries as a result of diesel fumes, the impact of the new system is difficult to estimate.

b) **Hydraulic extension ground ladders** reduce the need for overhead lifting of ladders and in theory should reduce the number of lifting injuries to the back, neck and shoulders. Despite the equipment, general lifting claims at the Fire Department are occurring more frequently.

	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02
FD Claims Resulting From Lifting	50	51	54	65	69
FD FTEs	777	792	808	829	843
Lifting Claims per 100 FTE's	6.4	6.4	6.7	7.8	8.2

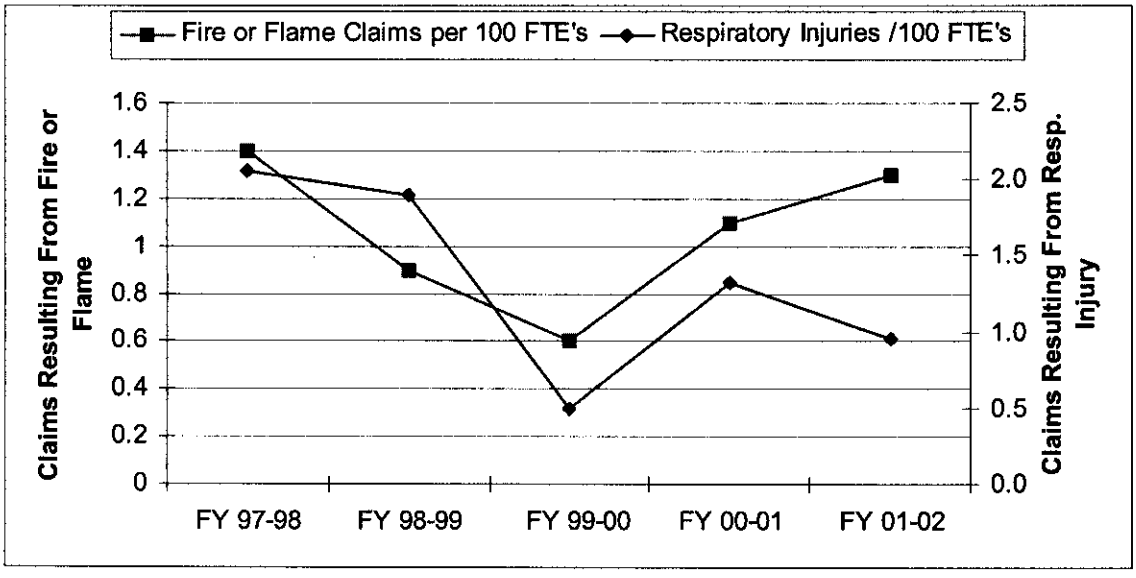
Table 38- 5 Year history of Fire Department Claims resulting from lifting injuries. (David system report)



c) The **respiratory equipment upgrade** may have a dual effect. On one hand, injuries to the respiratory system could decrease due to extended breathing time afforded to firefighters by the new equipment. On the other hand, more breathable air might serve as an incentive for firefighters to overextend their endurance to heat and dehydration, resulting in more injuries from fire or flame. The larger air cylinder is also 6 pounds heavier than the smaller, more maneuverable cylinder. It is possible that the larger, bulkier cylinder could result in more back and shoulder injuries, but as table 42 demonstrates, the arte of back and shoulder injuries decreased until FY 00-01, at which time is rose sharply, seemingly independent of the respiratory equipment. Respiratory injury has decreased from 2.1 per 100 FTE in FY 97-98 to .9 per 100 FTE's in FY 01-02. Injuries due to fire or flame do not demonstrate a clear trend.

	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02
FD Claims Resulting From Fire or Flame	11	7	5	9	11
Fire or Flame Claims per 100 FTE's	**1.4**	**0.9**	**0.6**	**1.1**	**1.3**
Respiratory Injuries	16	15	4	11	8
Respiratory Injuries /100 FTE's	**2.1**	**1.9**	**0.5**	**1.3**	**0.9**
FD FTEs	777	792	808	829	843

Table 39- 5 year history of Fire Department respiratory injuries and claims resulting from flame or fire (David system report)



4) **Safety Related FD Training and Policy Changes:** Training or policies brought on line or with an estimated impact within the last five years. The FD's wellness program is the centerpiece of safety related programs instituted in the last five years. The wellness program is voluntary for firefighters hired prior to 1986 and is mandatory for those hired after that

date.

Training/ Policy	Date Instituted
Aerobic Fitness	**1998**
On-site Station Training	**1998**
Wellness Assessments	**1998**

Table 40- Safety Related Fire Department Training or policy with implementation estimate (Fire Administration)

a) The **aerobic fitness component** of the Fire Department's wellness program is designed to elevate the pulse rate for 20 minutes. Any activity (biking, running, walking) that raises the pulse rate satisfies this requirement. The most quantifiable result of this program, is a reduction in weight with all of the direct and indirect health benefits that accompany lower weight.

b) **Wellness assessments** are conducted annually to and measure the aerobic capacity, flexibility, strength, and endurance of the firefighters. As with the Police Department, at-risk firefighters are given the opportunity to enroll in a voluntary six-week program to address identified health problems. Typical results of the six week course document marked improvement in run stamina, upper body strength, and flexibility. An average of the results for all participants in 2001 is outlined below.

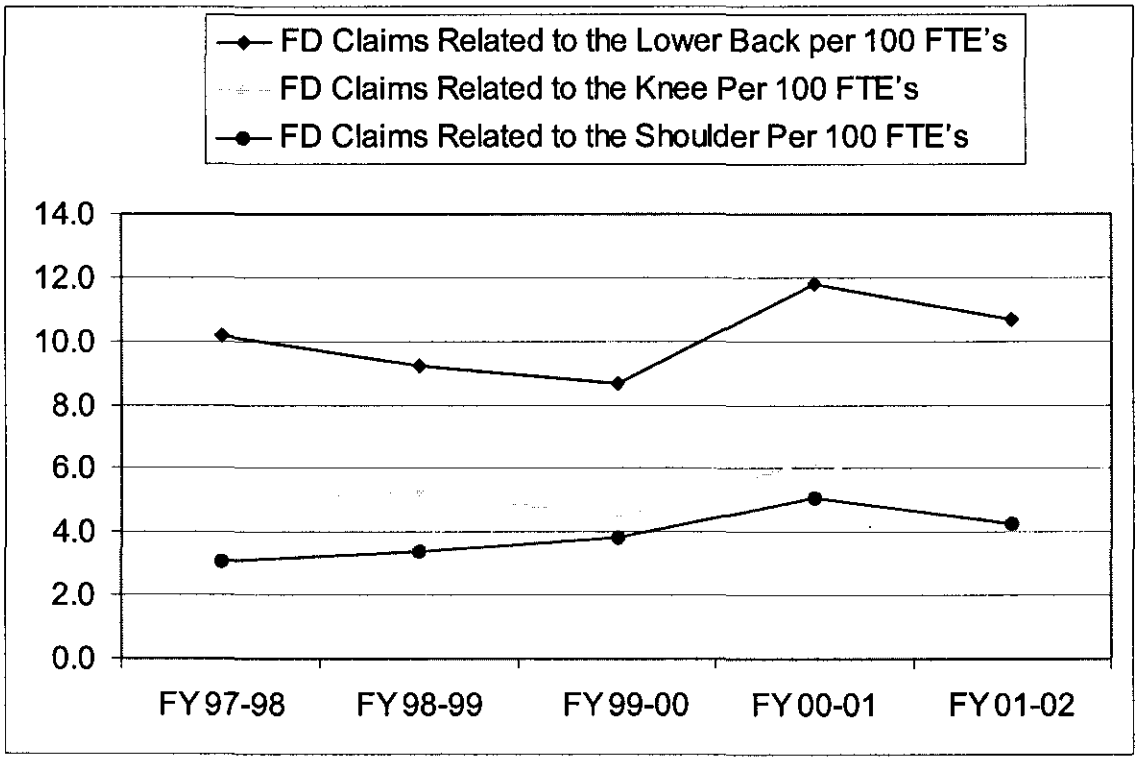
Test Title	Relative Improvement Over Six Week Course
Run Test	improvement
Body Composition	improvement
Dynamometer	improvement
Push Up Results	improvement

Table 41- Results of 2002 FD Wellness Assessment (Club 1 Report on SJFD Fitness)

c) **On-site station training** is conducted to address several health relate areas, including workout habits, meal preparation, fat loss, hypertension, and healthy diet but can also include training on a specific subject, if one is identified as significant by the Safety Officer. In FY 00-01, with back injuries spiking to 11.8 claims per 100 FTE's, the FD instituted on-site station training on back, knee, and shoulder care for 50% of all line companies. In FY 01-02 back injuries decreased to 10.7 per 100 FTE's. The rate of knee and shoulder injuries also decreased.

	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02
FD Claims Related to the Back per 100 FTE's	10.2	9.2	8.7	11.8	10.7
FD Claims Related to the Knee Per 100 FTE's	5.0	5.3	4.5	6.3	4.2
FD Claims Related to the Shoulder Per 100 FTE's	3.1	3.4	3.8	5.1	4.3
FD FTEs	777	792	808	829	843

Table 42- Five year History of FD Claims related the Back, Knee, and Shoulder (David system report)



F) WORKERS' COMPENSATION COST DRIVERS

As described in previous sections of the report, the volume of claims has been fluctuating in a narrow range, from 1,444 to 1,627 for the last five years. In the last three years, the volume of claims has been on a downward trend, from a high of 1,627 to an estimated 1,400 by the end of FY 02-03. However, during the same period, workers' compensation costs have continued to escalate, averaging an increase of 9.4% a year, from $10.9M in FY 97-98 to an estimated $19.9M by the end of FY 02-03. These two diverging trends, claims going down and costs going up, are analyzed to identify those factors, which are driving up costs. These factors are called cost drivers. They are described as follows:

1) Legislative Changes

These are changes in workers' compensation laws designed to ensure adequate benefits for injured workers. These changes have also increased costs to employers. In 2002, AB 1177 was passed which requires employers to pay the PPO fees for in-patient medical procedures instead of the lower State Official In-Patient fee scheduled. Also, effective on 1/1/2003, AB 749 raises the benefits to injured employees. Temporary disability benefits increase from $490 per week to $602 (a 23% increase). This benefit will continue to increase every year over the next five years. In addition, permanent disability benefits have also increased. The disability percentage used in calculating permanent disability benefits has increased which result in higher payments to injured workers. At present, bill AB 1136 is being introduced which would increase the disability leave supplement period from one year to two years. This bill would increase this cost significantly.

2) Medical Inflation

Medical costs have increased in double digit (12% or higher), especially in the last three years. These increases are expected to continue in the future. As of 3/31/2003, medical costs paid by the City total $9.6M as compared to $6.2M in the same period last fiscal year (a 54% increase).

3) Workers' Compensation Laws

These laws tend to favor the injured employees in the course of their medical treatment and in legal matters with employers. Generally, employers have to produce substantial evidence and information in disputes with employees in order to receive a favorable ruling. Some examples of include:

a) Presumptions: certain illness for public safety employees are presumed work-related. These include heart disease, cancer, blood born pathogen, etc.
b) Treating Physician's Opinion: This opinion is generally deemed

correct under the current workers' compensation laws. A second medical opinion does not carry as much legal authority.

c) Perspective of Workers' Compensation Appeal Board: The Board has generally ruled in favor employees, unless employers are able to produce substantial evidence in disputes with employees.

4) **System Incentives:** In addition to the State mandated benefits, the City provides additional benefits to injured employees as follows:

a) **Disability Leave Supplement:** Public safety employees receive 100% of their salary while they are on disability leave due to work-related injuries. There is no waiting period for public safety employees. Non-safety employees receive 85% of their salary after three days on disability leave.

b) **Disability Retirement**: Public safety employees, who retire on service-connected disability, are exempt from paying taxes of some portion of their pension. Non-public safety employees are exempt from paying taxes on up to 40% of their pension. As compared to large cities in California, the City of San Jose has the highest rate of disability retirement for public safety employees. Approximately 70% of all retirements are disability retirements (see Appendix K)

5) **Claim Management:** Claim management refers to the process of ensuring the injured employees receiving adequate treatment and services to allow them to return to work if possible. Major steps in claim management include:

a) Claim Evaluation (determination of benefits and investigation)
b) Managing Treatment Plan
c) Determination of Modified Duty
d) Return to Work of the Employee
e) Final Disposition of Claim

Claim management requires concentrated, proactive, and diligent efforts from the claim adjusters to ensure injured employees receiving adequate treatment and/or services in a timely manner to expedite their recovery. Delay in this process will extend the employee's recovery. As employees remain on disability leave, their medical costs will increase due to more frequent medical treatments. This has been shown by a 20% increase in utilization rate in FY 02-03 as compared to that of FY 01-02.

To ensure that injured employees are receiving appropriate treatments, claim adjusters need to proactively manage their caseload. Proactive management of claims is becoming more challenging with the current caseload per adjuster. The caseload per adjuster of the City of San Jose is highest in California (306 claims vs. an average of 206, see Appendix L).

6) Prevention

The analysis of accidents and injuries shows that a significant number of injuries are preventable (from the low of 40% to the high of 65% of all injuries). Reducing preventable injuries/accidents will lower costs to the City. The prevention efforts are more effective if they are generated from the top management down to the front line employees. This approach has been taken at the Airport, called the Eight-Point Prevention Plan. The plan describes eight proactive actions to help departments maintain a safe workplace and healthy employees. These actions include identification of hazards, investigating injuries/accidents and taking corrective actions to prevent repeated injuries/accidents, and holding everyone accountable for safety.

7) Management Accountability:

The California Department of Industrial Relations, Division of Workers' Compensation has stated in its Employer's Guide to Workers' Compensation that a key in controlling cost is management accountability in preventing injuries and illness from occurring. The California Commission on Health and Safety and Workers' Compensation Annual Report cited similar finding in controlling cost. Various studies by the one of largest workers' compensation insurance companies, Liberty Mutual, have confirmed this management accountability as a key factor in controlling cost.

City of San Jose workers' compensation costs are budgeted in Citywide. This lessens the responsibility and accountability of departments to control costs. A number of large cities and counties (Anaheim, Fresno, LA County, San Francisco) who are self-insured in California have begun to budget workers' compensation costs at the department level. Starting in FY 03-04, a Cost-Containment Pilot program will begin in three pilot departments, Police, Fire, and Transportation. While workers' compensation costs are still budgeted in Citywide, a parallel tracking system will be set up to monitor costs and claim activity in Police, Fire, and Transportation. Health and Safety Staff will work more closely with three pilot departments on prevention, investigation of all injuries and accidents, and follow-up on corrective and preventive actions.

FINDINGS

1) Claims Trends- Both the Police and Fire Departments' claims are erratic in volume, and do not demonstrate a clear trend. When averaged, the rate at which both Departments are making claims appears to be holding constant or declining slightly. Claims per 100 Police Department FTEs are declining at a rate of –2.5% each year going from 33.4 to 30.7 in the last five fiscal years. Claims per 100 Fire Department FTE's has demonstrated a small amount of growth, going from 44.5 to 47.2 over the last five fiscal years.
   1 Ref pg. 5-7 section A1a, A1b

2) Distribution of Injuries by Age- Both the Police and Fire Departments' distribution of injuries by age are reflective of the respective workforces' employee age distribution. A notable exception includes age class 50-59 in the Police Department, which represents only 131 or 10% of the FTE's for FY 01-02, but accounts for 93 or 16% of the claims in. Another exception is Age class 50-59 in the Fire Department, which represents only 111 or 16% of the FTE's but accounts for 133 or 32% of the claims for FY 01-02.
   1 Ref pg. 8-9 section A2a, A2b

3) Nature of Injury- A majority of injuries in the Police and Fire Department relate to "strain". A full 256 or 61% of all FD Injuries, and 271 or 44% of all PD injuries are classified as "strains".
   1 Ref pg. 10-11 A3a-A3b

4) Part of Body Injured- Back neck, and shoulder injuries account for a combined 139 or 38% of all Fire Department injuries and 122 or 21% of all Police Department injuries in FY 01-02. Multiple Body part injury ranks second in the Fire Department at 54 or 14% and first at the Police Department at 122 or 21% of all injuries.
   1 Ref pg. 14-15 A5a-A5b

5) Cause of Injury- Lifting ranks first as the cause of 17% of all Fire Department Injuries in FY 01-02 while altercations cause 12% of all PD injuries and ranks first in that Department. Some form of over exertion, (Lifting, pushing/ pulling, strain, or carrying) cause a combined 43% of FD injuries and 18% of all PD injuries.
   1 Ref pg. 16-17 A6a-A6b

6) Activity or Location at Time of Injury- At the time of their injury, Firefighters were most often engaged in fire suppression activities with that situation accounting for 44% of all injury related activities in a six month case study analysis. Fire calls, however, represent only 3% of service demand in FY 01-02. 24% of all injuries in this period occurred at Fire Stations. During this same period for the Police Department, altercations, foot pursuits, or confrontational activities resulted in 29% of that Department's injury claims.

1 Ref pg. 18-19 A7a-A7b

7) Preventability- In the six-month case study conducted in FY 02-03, a significant number of injuries were judged preventable, in both the Police and Fire Departments. This judgment is based on analysis of the text description of the accidents.
   1 Ref pg. 18-19 A7a-A7b

8) More "high cost" claims (claims that the workers' compensation adjustor estimates will eventually cost the City more than $100,000 over the life of the claim) occur each year, with the number of claims rising from 283 open claims in FY 96-97 to 515 open claims in FY 01-02 for a 45% increase over five years.
   1 Ref pg. 22, B1-B2

9) History of Rising Cost- Citywide paid WC costs has gone from $11 million to 15 million in the last five years, and average increase of 9% each year. This increase in due primarily to medical inflation, changes in workers' compensation laws mandating higher payments on injuries, and higher utilization of medical services. FY 02-03 is estimated to close at $19.9 million, a 22.7% increase over FY 01-02 closing cost of $15.5 million.
   1 Ref pg. 24 B3

10) Projected Rising Costs- The City's actuarial consultant projects a $15 million dollar increase over the next five years with costs expected to increase from $19.9 million in FY 02-03 to $31.3 million in FY 06-07.
   1 Ref pg. 25 B4

11) Where San Jose Ranks- Among Cities surveyed, the Fire Department has the highest rate of injury per 100 FTE's at 47.2. The Police Department ranks 3rd out of 6 cities, with a rate of 30.7.
   1 Ref pg. 26-27 C1-C2

12) Service Demand- Service demand has risen slightly over the past 5 years, with both the Fire and Police Department demonstrating an average 1% increase in calls for service each year.
   1 Ref pg. 28-31 D1-D4

13) City Population and claims- The City of San Jose has grown from 851,528 to 918,000 over the past five years. This is an overall increase of 7%. Population does not appear to have a direct effect on injury rates for either the Police or Fire Departments.
   1 Ref pg. 30 D5

14) Correlation of Service Demand to Police Injury- There does not appear to be significant correlation between overall service demand and PD injuries. Despite a constant demand for service between FY 97-98 and FY 98-99,

there were substantially fewer injuries in FY 98-99 than in the previous year.

1 Ref pg. 33 D6a-D6b

15) Correlation of Service Demand to Fire Injury- The Fire Department injuries/ 100 FTE's tracks especially closely with its total calls for service history over the last three years.

1 Ref pg. 34 D6c-D6d

16) Police Department Equipment and Training- The impact of training and equipment upgrades is most demonstrable in the following areas-

a) Ergonomic policy and equipment has reduced injuries per 100 FTE's at the Police Department from 1.3 to 0.9 over the last five fiscal years.
b) The extensive use of reality based driver training and equipment, appears to have reduced claims resulting from vehicle collision slightly from 1.2 in FY 96-97 to 1.0 in FY 01-02.
c) Claims resulting from contact with other individuals has decreased from 9.0 in FY 97-98 to 7.7 supporting the effectiveness of new arrest and control training.
d) There has been an overall decline in injuries since the advent of the full time PD Safety Officer.

1 Ref pg. 35-39 E1-E2

17) Fire Department Equipment and Training

a) Despite the introduction of hydraulic ladder lifts, and a continued focus on safe lifting training in the Fire Department, injuries resulting from lifting grew from 6.4 claims per 100 FTE's in FY97-98 to 8.2 claims per 100 FTE's in FY 01-02.
b) Respiratory injuries, possibly as a result of 1998's new respiratory equipment, have declined from 2.1 per 100 FTE's in FY 97-98 to .9 per 100 FTE's in FY 01-02.

➢ Ref pg. 40-44 E3a-E4c

RECOMMENDATIONS

1) Having established that lifting-type injuries account for 38% of all FD claims and 21% of all PD claims, Departments should continue to emphasize training employees in the use of proper body mechanic techniques and enhance existing programs where they exist. They should continue to automate as many lifting activities as possible.

2) With an estimated 44% of recent FD injuries occurring at a fireground, and with Fire service calls accounting for only 3% of service demand, the Department should ensure that Fireground procedures are as safe as possible, and consistently implemented.

3) Based on the fact that #1 cause of PD accident claims is altercation (12% of all claims) every effort should be made to ensure arrest and control techniques are as safe as possible. A wellness assessment should be conducted to ensure that arresting officers are physically fit.

4) Since a significant number of FD and PD claims in the six-month case study conducted in FY 02-03 were classified as preventable, the Departments should ensure individual employees are trained in job specific safety procedures. It should also hold employees accountable for accidents identified as preventable by Departmental safety staff.

5) With high-cost claims rising each year at a rate of 9%, high-risk employees should be identified and treated before they suffer catastrophic illness.

6) Implement programs to control workers' compensation costs which have risen from 10.9 million in FY 97-98 to an estimated 19.9 in FY 02-03.
    a) Pilot Departmental Cost Control Program
    b) Preferred Medical Provider Usage
    c) Medical Provider Utilization Review
    d) Health Risk Reduction Program

7) Perform more comprehensive best practices case study to identify how other cities control claims and costs.

8) Given the demonstrated effectiveness of reality-based driver training (reduced claims resulting from vehicle collision slightly from 1.2 in FY 96-97 to 1.0 in FY 01-02), and arrest and control technique (claims resulting from contact with other individuals has decreased from 9.0 in FY 97-98 to 7.7) both programs should be broadened to effect as many FTE's as possible, as frequently as possible.

9) Review the use of SCBA and its contribution to the reduction in respiratory injuries as it appears to have lowered respiratory claims from 2.1 per 100

FTE's in FY 97-98 to .9 per 100 FTE's in FY 01-02.

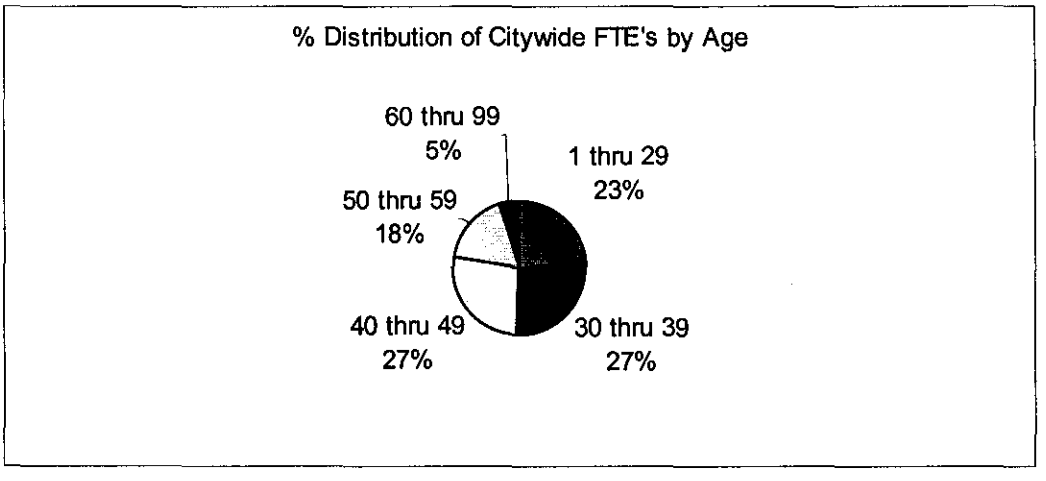
10) Establish a Health and Safety Planning Board to review long-term accident trends and provide policy direction and guidance on safety and health issues in the City of San Jose.

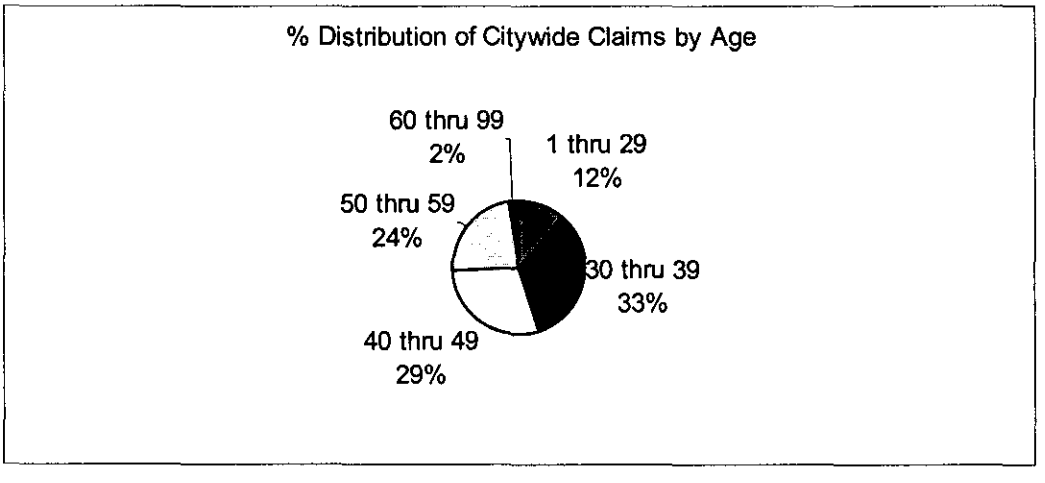
APPENDIX

A. **Citywide FTE's and Claims** Distributed by Age Bracket for FY 01-02. Age class 1-29 represents 23% of all FTE's but only 12% of total injury claims for that year. Age class 50-59 represents only 18% of the FTE's for that year, but accounts for 24% of the claims.

Age of Claimant	# Citywide FTE's in Age Bracket	% of Total FTE's	# of City-wide Claims	% of Total Claims
1 thru 29	1940	23%	186	12%
30 thru 39	2226	27%	524	33%
40 thru 49	2255	27%	458	29%
50 thru 59	1469	18%	373	24%
60 thru 99	383	5%	39	2%
Total	**8273**		**1580**	

Table 43- Distribution of Citywide FTE's and Claims for FY 2001-2002 by Age. Actual FTE's on Jan.1, 2002 (PeopleSoft report); Claims information based on full fiscal year. (DAVID System report).



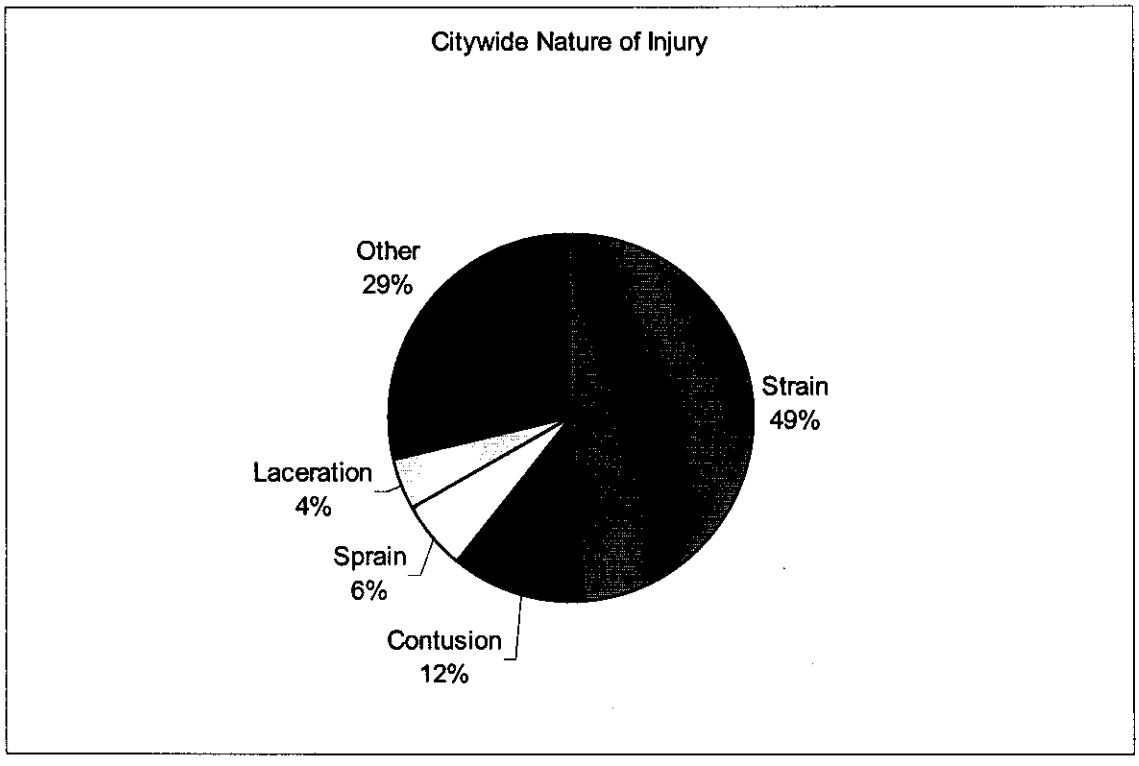


B. **Citywide type or nature of injury for fiscal year 2001-2002.** Strain, the

broadest classification of worker injury, constitutes 49% of all injuries.

Type of Injury	Nature of Injury	% of Total Injuries
Strain	768	49%
Contusion	190	12%
Sprain	97	6%
Laceration	68	4%
All Other CT	51	3%
Carpal Tunnel	24	2%
Mental Stress	23	1%
Foreign Body	22	1%
Fracture	21	1%
Puncture	21	1%
Other	295	19%
Total	**1580**	

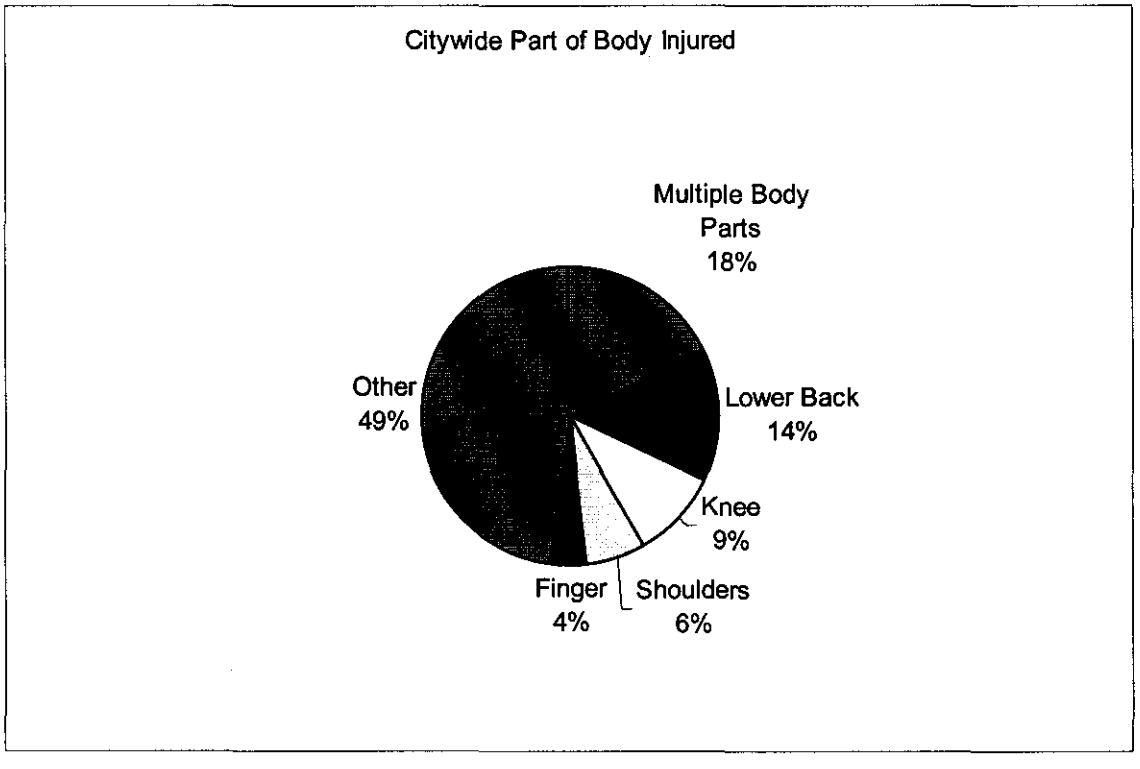
Table 44- Distribution of Citywide injuries by type or class of injury for FY 2001-2002. (DAVID system report)



C. **Citywide part of body injured** in all claims occurring during Fiscal Year 2001-2002. Multiple body part injuries (often associated with expensive cumulative trauma claims) account for 18% of the city's total injury accidents.

Part of Body	FY 01-02	% of Total
Multiple Body Parts	267	18%
Lower Back	216	14%
Knee	140	9%
Shoulders	96	6%
Finger	59	4%
Multiple Upper Extrem	54	4%
Ankle	47	3%
Eye	45	3%
Wrist	42	3%
Hand	42	3%
Other	487	33%
Total	**1495**	

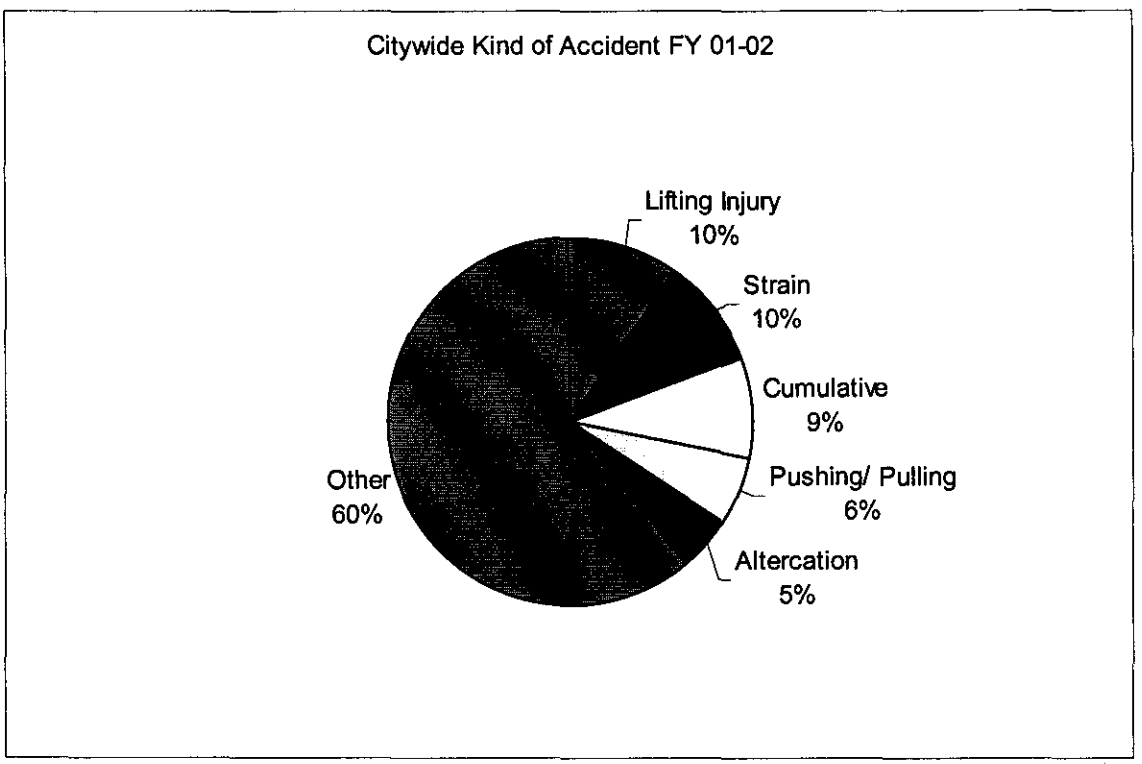
Table 45- Citywide Distribution of injured body parts for FY 2001-2002. (DAVID system report)



D. **Citywide cause of injury resulting** in all claims occurring during Fiscal Year 2001-2002. Lifting, strain, and pushing/ pulling are catalysts for 26% of the Citywide injuries in the year.

Kind of Accident	Citywide Kind of Accident FY 01-02	% of Total
Lifting Injury	159	10%
Strain	152	10%
Cumulative	136	9%
Pushing/ Pulling	94	6%
Altercation	74	5%
Twisting	71	4%
Repetitive Motion	51	3%
Fall/ Same Level	44	3%
Slip/ Fall/ Trip	44	3%
Absorb/ Ingest	38	2%
Other	720	45%
Total	**1583**	

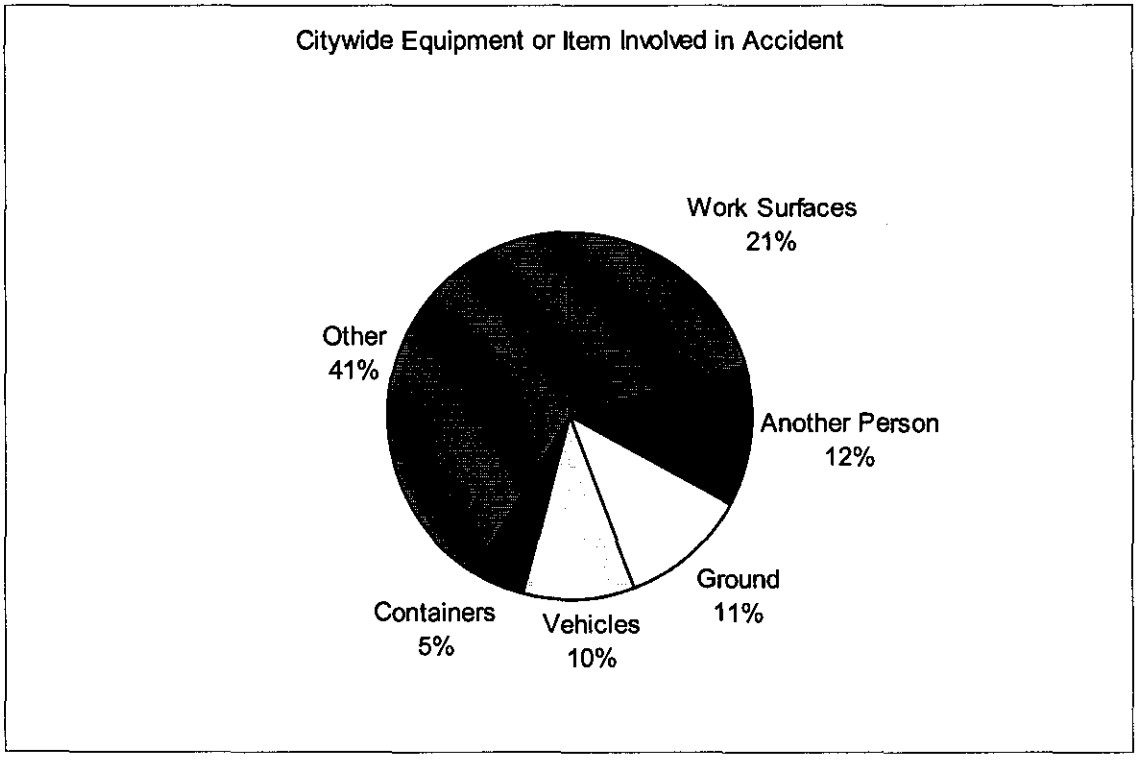
Table 46- Citywide distribution of accident types for FY 2001-2002. (DAVID system report)



E. Citywide item, equipment, or object involved in all claims for Fiscal Year 2001-2002. Work surface related accidents (such as slips and falls, stepping in holes, etc) account for 21% of Citywide claims.

Item	Citywide FY 01-02	% of Total
Work Surfaces	328	21%
Another Person	195	12%
Ground	177	11%
Vehicles	153	10%
Containers	74	5%
Structures	69	4%
Machines	58	4%
Hand Tools	56	4%
Recreational	46	3%
Metal Items	40	3%
Other	384	24%
Total	**1580**	

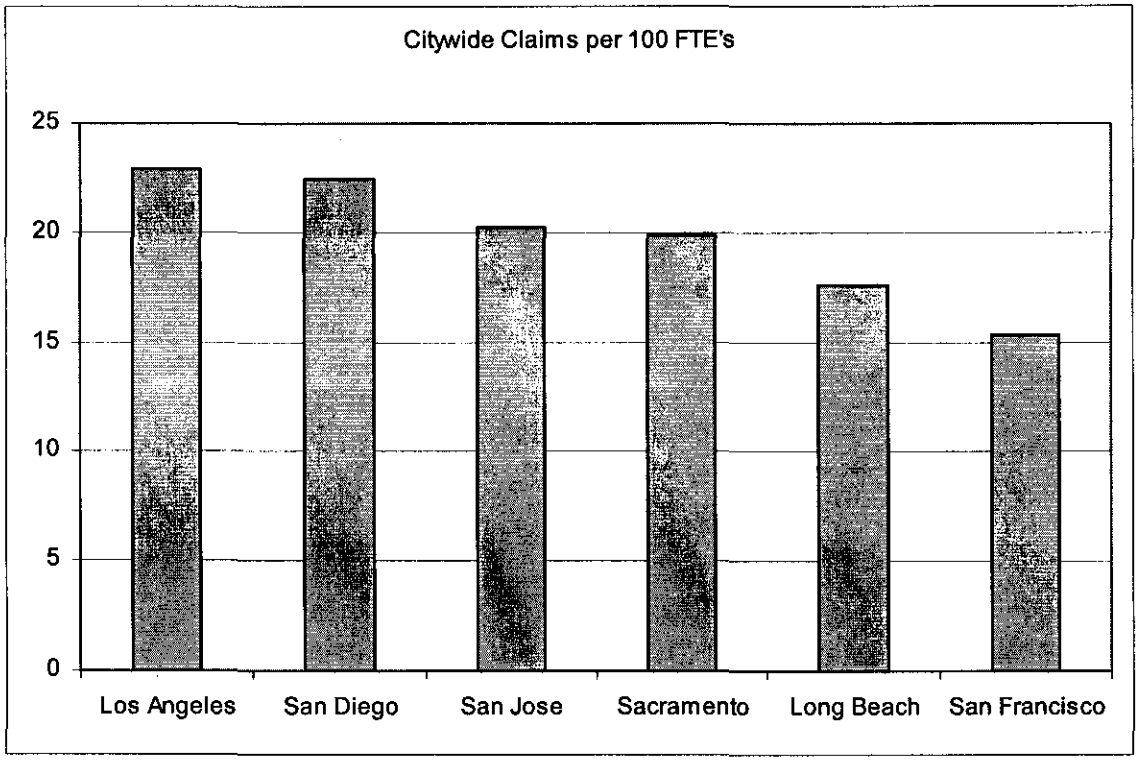
Table 47- Distribution of Citywide injuries by item, equipment, or object involved in injury for FY 2001-2002. (DAVID system report)



F. Comparison of Citywide claims per 100 FTE's: City of San Jose is 3rd among surveyed cities with 20.3 claims per 100 FTE's.

City	Citywide WC Claims FY 01-02	Total FTE's	Claims per 100 FTE's
Los Angeles	9602	42,000	22.9
San Diego	2462	11,000	22.4
San Jose	**1516**	**7,453**	**20.3**
Sacramento	922	4,617	19.9
Long Beach	1026	5,843	17.6
San Francisco	4594	30,000	15.3

Table 48- Comparison of Citywide claims per 100 FTE's. Department figures refer to budgeted FTEs'. (internal study conducted by Employee Services staff)



A. 4 Year History of Age Distributed by Claimant

FY 2000-2001 Claims Distributed by Age of Claimant

Age of Claimant	# FTE's in Age Bracket	% of Total FTE's	# of City-wide Claims	% of Total Claims	# of FD FTE's	% of Total FD FTE's	# of FD Claims	% of Total FD Claims	# of PD FTE's	% of Total PD FTE's	PD Claims	% of Total PD Claims
1 thru 29	1645	22%	186	12%	80	13%	33	8%	239	19%	97	15%
30 thru 39	2017	28%	505	32%	268	42%	142	33%	555	43%	239	38%
40 thru 49	2144	29%	483	30%	190	30%	112	26%	401	31%	186	30%
50 thru 59	1252	17%	363	23%	96	15%	138	32%	95	7%	96	15%
60 thru 99	304	4%	55	3%	3	0%	5	1%	0	0%	9	1%
Total	7362		1592		637		430		1290		627	

FY 1999-2000 Claims Distributed by Age of Claimant

Age of Claimant	# FTE's in Age Bracket	% of Total FTE's	# of City-wide Claims	% of Total Claims	# of FD FTE's	% of Total FD FTE's	# of FD Claims	% of Total FD Claims	# of PD FTE's	% of Total PD FTE's	PD Claims	% of Total PD Claims
1 thru 29	1254	17%	187	13%	74	13%	34	10%	246	22%	97	18%
30 thru 39	2913	39%	425	30%	251	43%	86	26%	438	39%	188	35%
40 thru 49	2020	27%	457	32%	190	32%	86	26%	386	34%	172	32%
50 thru 59	1050	14%	327	23%	73	12%	119	36%	67	6%	77	14%
60 thru 99	233	3%	44	3%	1	0%	6	2%	0	0%	7	1%
Total	7470		1440		589		331		1137		541	

FY 1998-1999 Claims Distributed by Age of Claimant

Age of Claimant	# FTE's in Age Bracket	% of Total FTE's	# of City-wide Claims	% of Total Claims	# of FD FTE's	% of Total FD FTE's	# of FD Claims	% of Total FD Claims	# of PD FTE's	% of Total PD FTE's	PD Claims	% of Total PD Claims
1 thru 29	NA	NA	182	13%	NA	NA	25	7%	NA	NA	104	19%
30 thru 39	NA	NA	437	32%	NA	NA	94	28%	NA	NA	208	39%
40 thru 49	NA	NA	402	29%	NA	NA	86	26%	NA	NA	140	26%
50 thru 59	NA	NA	318	23%	NA	NA	123	37%	NA	NA	75	14%
60 thru 99	NA	NA	41	3%	NA	NA	8	2%	NA	NA	10	2%
Total	NA		1380		NA		336		NA		537	

FY 1997-1998 Claims Distributed by Age of Claimant

Age of Claimant	# FTE's in Age Bracket	% of Total FTE's	# of City-wide Claims	% of Total Claims	# of FD FTE's	% of Total FD FTE's	# of FD Claims	% of Total FD Claims	# of PD FTE's	% of Total PD FTE's	PD Claims	% of Total PD Claims
1 thru 29	NA	NA	143	10%	NA	NA	19	6%	NA	NA	118	23%
30 thru 39	NA	NA	450	32%	NA	NA	94	29%	NA	NA	204	40%
40 thru 49	NA	NA	476	34%	NA	NA	97	29%	NA	NA	190	37%
50 thru 59	NA	NA	291	21%	NA	NA	114	35%	NA	NA	76	15%
60 thru 99	NA	NA	27	2%	NA	NA	5	2%	NA	NA	9	2%
Total	NA		1387		NA		329		NA		597	

Table 49- Five Year History of All City of San Jose Claims Distributed by Age (David System Report)

A. 4 Year History of Nature of Injury

Nature of Injury FY 2000-2001

Type of Injury	Citywide Nature of Injury	% of Total Citywide Injuries
Strain	750	47%
Contusion	155	10%
Sprain	98	6%
Laceration	80	5%
Pain	51	3%
All Other CT	45	3%
Exposure	27	2%
Foreign Body	26	2%
Inflammation	23	1%
Contagious Disease	23	1%
Other	316	20%
Total	1594	100%

Type of Injury	FD Nature of Injury	% of Total FD Injuries
Strain	253	59%
Sprain	25	6%
Contusion	24	6%
Pain	22	5%
Exposure	12	3%
Contagious Disease	8	2%
Smoke Inhalation	7	2%
Cancer	7	2%
All Other CT	7	2%
Burn	6	1%
Other	59	14%
Total	430	100%

Type of Injury	PD Nature of Injury	% of Total PD Injures
Strain	271	43%
Contusion	72	11%
Laceration	40	6%
Sprain	31	5%
All Other CT	20	3%
Pain	16	3%
Loss of Hearing	13	2%
Contagious Disease	12	2%
Fracture	11	2%
Hernia	8	1%
Other	133	21%
Total	627	100%

Nature of Injury 1999-2000

Type of Injury	Citywide Nature of Injury	% of Total Citywide Injuries
Strain	670	46%
Pain	147	10%
Contusion	113	8%
Laceration	81	6%
Sprain	69	5%
All Other CT	52	4%
Fracture	27	2%
Inflammation	27	2%
Foreign Body	25	2%
Exposure	23	2%
Other	224	15%
Total	1458	100%

Type of Injury	FD Nature of Injury	% of Total FD Injuries
Strain	191	57%
Pain	27	8%
Sprain	20	6%
All Other CT	15	4%
Laceration	12	4%
Contusion	10	3%
Exposure	6	2%
Burn	6	2%
Fracture	5	1%
Puncture	5	1%
Other	37	11%
Total	334	100%

Type of Injury	PD Nature of Injury	% of Total PD Injures
Strain	213	39%
Pain	68	12%
Contusion	53	10%
Laceration	30	5%
Sprain	27	5%
All Other CT	20	4%
Exposure	14	3%
Fracture	13	2%
Inflammation	13	2%
Bite-Human	8	1%
Other	91	17%
Total	550	100%

Nature of Injury FY 1998-1999

Type of Injury	Citywide Nature of Injury	% of Total Citywide Injuries
Strain	611	43%
Pain	231	16%
Contusion	74	5%
All Other CT	60	4%
Inflammation	42	3%
Exposure	36	3%
Foreign Body	28	2%
Sprain	28	2%
Mental Stress	22	2%
Fracture	22	2%
Other	279	19%
Total	1433	100%

Type of Injury	FD Nature of Injury	% of Total FD Injuries
Strain	160	47%
Pain	63	18%
Contusion	14	4%
All Other CT	13	4%
Exposure	12	4%
Loss of Hearing	8	2%
Contagious Disease	8	2%
Hernia	5	1%
Inflammation	5	1%
Laceration	5	1%
Other	49	14%
Total	342	100%

Type of Injury	PD Nature of Injury	% of Total PD Injures
Strain	220	40%
Pain	90	16%
Laceration	42	8%
Contusion	35	6%
Inflammation	17	3%
Exposure	12	2%
Fracture	12	2%
All Other CT	12	2%
Sprain	11	2%
High Blood Pres	7	1%
Other	91	17%
Total	549	100%

Nature of Injury FY 1997-1998

Type of Injury	Citywide Nature of Injury	% of Total Citywide Injuries
Strain	615	41%
Pain	226	15%
Laceration	100	7%
Contusion	74	5%
Inflammation	66	4%
All Other CT	52	3%
Sprain	34	2%
Exposure	29	2%
Fracture	28	2%
Puncture	23	2%
Other	259	17%
Total	1506	100%

Type of Injury	FD Nature of Injury	% of Total FD Injuries
Strain	168	48%
Pain	51	15%
Exposure	17	5%
All Other CT	16	5%
Laceration	4	1%
Burn	7	2%
Puncture	6	2%
Sprain	6	2%
Faint/ Dizziness	6	2%
Contusion	5	1%
Other	61	18%
Total	347	100%

Type of Injury	PD Nature of Injury	% of Total PD Injures
Strain	234	39%
Pain	90	15%
Laceration	42	7%
Contusion	35	6%
Inflammation	34	6%
All Other CT	19	3%
Sprain	15	2%
Fracture	13	2%
Puncture	10	2%
Foreign Body	8	1%
Other	104	17%
Total	604	100%

Table 50- Five Year History of All City of San Jose Claims Distributed by Type of Injury (David System Report)

A. 4 Year History of Equipment of Item Involved in Accident

Equipment or Item Involved in Accident FY 2000-2001

Item	Citywide FY 00-01	% of Total
Another Person	253	16%
Work Surfaces	249	16%
Ground	193	12%
Vehicles	166	10%

Item	FD FY 00-01	% of Total
Another Person	58	13%
Work Surfaces	55	13%
Ground	52	12%
Vehicles	33	8%

Item	PD FY 00-01	% of Total
Another Person	176	28%
Work Surfaces	103	16%
Vehicles	84	13%
Ground	70	11%

Ground	165	11%	Ground	32	10%	Work Surfaces	75	14%
Vehicles	157	11%	Structures	26	8%	Ground	55	10%
Misc.	85	6%	Misc.	25	7%	Misc.	26	5%
Structures	83	6%	Vehicles	22	7%	Structures	25	5%
Machines	66	5%	Ladders	19	6%	Machines	15	3%
Containers	53	4%	Heating Equipment	16	5%	Animals/ Insects	15	3%
Hand Tools	53	4%	Recreational	15	4%	Fence	14	3%
Fixtures	46	3%	Power Apparatus	13	4%	Fixtures	12	2%
Other	334	23%	Other	78	23%	Other	81	15%
Total	1458		Total	334		Total	550	

Equipment or Item Involved in Accident FY 1998-1999

Item	Citywide FY-98-99	% of Total	Item	FD FY 98-99	% of Total	Item	PD FY 98-99	% of Total
Work Surfaces	246	17%	Work Surfaces	85	25%	Another person	157	29%
Another Person	214	15%	Another Person	38	11%	Vehicles	84	15%
Vehicles	164	11%	Ground	33	10%	Work Surfaces	82	15%
Ground	164	11%	Structures	29	8%	Ground	57	10%
Structures	87	6%	Misc.	24	7%	Misc.	35	6%
Misc.	81	6%	Heating Equipment	19	6%	Structures	26	5%
Containers	69	5%	Ladders	17	5%	Machines	17	3%
Machines	62	4%	Hoisting Equipment	12	4%	Animal/ Insects	15	3%
Hand Tools	42	3%	Recreational	12	4%	Containers	11	2%
Recreational	31	2%	Containers	11	3%	Fence	10	2%
Other	273	19%	Other	62	18%	Other	55	10%
Total	1433		Total	342		Total	549	

Equipment or Item Involved in Accident FY 1997-1998

Item	Citywide FY-97-98	% of Total	Item	FD FY 97-98	% of Total	Item	PD FY 97-98	% of Total
Work Surfaces	308	20%	Work Surfaces	82	24%	Another Person	162	27%
Another Person	215	14%	Another Person	46	13%	Work Surfaces	122	20%
Vehicles	168	11%	Vehicles	26	7%	Vehicles	93	15%
Ground	122	8%	Hoisting Equipment	25	7%	Ground	41	7%
Structures	81	5%	Structures	22	6%	Misc.	32	5%
Containers	71	5%	Recreational	21	6%	Structures	23	4%
Machines	67	4%	Ground	21	6%	Machines	16	3%
Misc.	66	4%	Misc.	16	5%	Fence	15	2%
Hand Tools	50	3%	Hand Tools	13	4%	Animals/ Insects	13	2%
Recreational	44	3%	Ladders	10	3%	Containers	12	2%
Other	314	21%	Other	65	19%	Other	75	12%
Total	1506		Total	347		Total	604	

Table 51- Five Year History of All City of San Jose Claims Distributed by Equipment or Item Involved in Accident (David System Report)

A. 4 Year History of Part of Body Injured In Accident

Part of Body Injured in Accident FY 2000-2001

Part of Body	Citywide FY 00-01	% of Total	Part of Body	FD FY 00-01	% of Total	Part of Body	PD FY 00-01	% of Total
Low Back	250	16%	Low Back	98	23%	Multiple Body Parts	94	15%
Multi Body Parts	217	14%	Knee	52	12%	Low Back	82	13%
Knee	156	10%	Shoulders	42	10%	Knee	64	10%
Shoulders	111	7%	Multiple Body Parts	41	10%	Shoulders	36	6%

Low Back	211	15%	Low Back	70	21%	Knee	66	12%
Knee	147	10%	Knee	36	11%	Low Back	63	11%
Multi Body Parts	112	8%	Multiple Body Parts	35	10%	Multiple Body Parts	47	9%
Shoulders	100	7%	Shoulders	31	9%	Shoulders	35	6%
Hand	73	5%	Ankle	14	4%	Hand	32	6%
Ankle	69	5%	Mid Back	13	4%	Ankle	25	5%
Wrist	56	4%	Neck Soft Tissue	11	3%	Wrist	19	3%
Finger	50	4%	Heart Cardio	11	3%	Finger	19	3%
Lower Arm	45	3%	Hand	8	2%	Elbow	16	3%
Foot	45	3%	Lower Leg	8	2%	Multiple Head Injury	15	3%
Other	513	36%	Other	97	29%	Other	212	39%
Total	1421		Total	334		Total	549	

Part of Body Injured in Accident FY 1998-1999

Part of Body	Citywide FY-98-99	% of Total	Part of Body	FD FY 98-99	% of Total	Part of Body	PD FY 98-99	% of Total
Low Back	213	15%	Low Back	73	21%	Knee	75	14%
Knee	168	12%	Knee	42	12%	Low Back	66	12%
Multiple Body Parts	109	8%	Multiple Body Parts	37	11%	Shoulders	37	7%
Shoulders	102	7%	Shoulders	27	8%	Multiple Body Parts	37	7%
Hand	89	6%	Resp.	15	4%	Hand	36	7%
Wrist	61	4%	Ankle	12	4%	Ankle	22	4%
Ankle	51	4%	Ear	11	3%	Lower Arm	21	4%
Finger	47	3%	Hand	10	3%	Wrist	20	4%
Eye	43	3%	Foot	9	3%	Fingers	19	3%
Elbow	39	3%	Mid Back	8	2%	Elbow	18	3%
Other	475	34%	Other	96	28%	Other	197	36%
Total	1397		Total	340		Total	548	

Part of Body Injured in Accident FY 1997-1998

Part of Body	Citywide FY-97-98	% of Total	Part of Body	FD FY 97-98	% of Total	Part of Body	PD FY 97-98	% of Total
Lower Back	229	16%	Low Back	79	23%	Knee	81	13%
Knee	180	12%	Knee	39	11%	Low Back	72	12%
Multiple Body Parts	109	7%	Multiple Body Parts	31	9%	Multiple Body Parts	49	8%
Shoulders	103	7%	Shoulders	24	7%	Shoulders	46	8%
Hand	96	7%	Resp.	16	5%	Hand	44	7%
Finger	72	5%	Hand	15	4%	Finger	25	4%
Wrist	62	4%	Ankle	14	4%	Heart Cardio	22	4%
Elbow	48	3%	Fingers	13	4%	Neck Soft Tissue	20	3%
Foot	46	3%	Neck Soft Tissue	10	3%	Wrist	20	3%
Neck Soft Tissue	45	3%	Elbow	10	3%	Ear	17	3%
Other	471	32%	Other	95	27%	Other	206	34%
Total	1461		Total	346		Total	602	

Table 52- Five Year History of All City of San Jose Claims Distributed by Part of Body Injured (David System Report)

A. City of San Jose Disability Retirement Data

	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	6-Yr Avg.
Police							
Regular Retirement	11	32	19	12	20	21	**19**
Disability Retirement	18	26	14	12	17	16	**17**
Total	**29**	**58**	**33**	**24**	**37**	**37**	**36**
Dis. as a % of Total	**62%**	**45%**	**42%**	**50%**	**46%**	**43%**	**48%**

	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	6-Yr Avg.
Fire							
Regular Retirement	15	8	12	10	2	1	**8**
Disability Retirement	25	14	22	20	22	13	**19**
Total	40	22	34	30	24	14	27

Federated							
Regular Retirement	79	73	85	87	84	144	**92**
Disability Retirement	7	11	10	6	15	19	**11**
Total	**86**	**84**	**95**	**93**	**99**	**163**	**103**
Dis. as a % of Total	**8%**	**13%**	**11%**	**6%**	**15%**	**12%**	**11%**

Table 53- Six Year History of Regular vs. Disability Retirements for PD, FD, and Federated (Retirement Study)

A. City of San Jose Adjuster Case Load Comparison Data

City	Caseload Per Adjuster
San Jose	**306**
San Diego	245
Long Beach	220
Oakland	160
Santa Clara County	155
San Francisco	150
Average	**206**

Table 54- Adjuster Caseload Survey of Municipalities (Internal Study Conducted by City of San Jose Workers' Compensation Program)