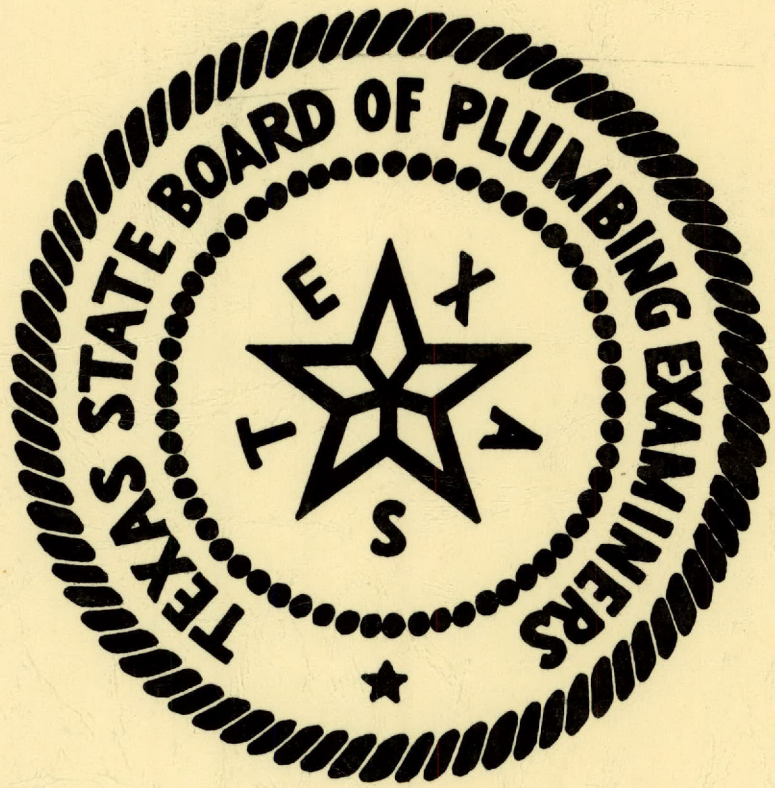

ANNUAL REPORT

1982

Austin, Texas

ANNUAL REPORT

TEXAS STATE BOARD

OF

PLUMBING EXAMINERS

1982

Austin, Texas

B O A R D M E M B E R S

NAME	TITLE	CITY
STANLEY J. BRIERS	CHAIRMAN	SEABROOK
E. L. SMITH	VICE-CHAIRMAN	SAN ANTONIO
MAURICE S. BATISTE	SECRETARY	HOUSTON
J. L. DRYMALLA	MEMBER	COLUMBUS
J. P. FRANZEN	MEMBER	CARROLLTON
EDWARD A. TSCHOEPE	MEMBER	SAN ANTONIO
WILLIAM G. WHEELER	MEMBER	VICTORIA

LYNN BROWN — ADMINISTRATOR

STAFF MEMBERS

DONALD A. NELSON	CHIEF EXAMINER
DARRELL HARDING	CHIEF FIELD REPRESENTATIVE
VIOLA EKENSTAM	ACCOUNTANT

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ADMINISTRATION

The Texas State Board of Plumbing Examiners was created by the 50th Legislature, Regular Session and became effective 90 days after June 6, 1947. It was amended by the 67th Legislature, Regular Session, as a result of the Sunset Review process and continued in existence until 1993. It may be cited as "The Plumbing License Law".

The Board's purpose is twofold: (1) to protect the public health through an efficient and equitable system of licensing; (2) to administer a uniform examination to all persons who qualify and desire to be plumbers by providing a fair and equal opportunity to practice their trade.

Today it is common knowledge that diseases can be transmitted and spread by water. Public health officials have strongly supported licensing and minimum plumbing codes as a deterrent to the spread of water borne diseases such as typhoid fever, diarrhea, cholera, amoebic and bacillary dysentary. The relationship between properly designed and installed plumbing systems and the public health is an established fact.

The Board is composed of nine members, all appointed by the Governor and confirmed by the Senate. Membership consists of one Plumbing Contractor; one Master Plumber; one Journeyman Plumber; one Plumbing Inspector; one Sanitary Engineer; one Home Builder; one Commercial Builder; and two Public Members.

NAME	CITY	REPRESENTATION	TERM EXPIRES SEPTEMBER 5
Stanley J. Briers Chairman	Seabrook	Plumbing Contractor	1985
Edward Lee Smith Vice-Chairman	San Antonio	Master Plumber	1987
Maurice S. Batiste Secretary	Houston	Journeyman Plumber	1985
J. L. Drymalla	Columbus	Commercial Builder Contractor	1983
J. P. Franzen	Dallas	Home Builder Contractor	1983
Edward A. Tschoepe	San Antonio	Sanitary Engineer	1987
William G. Wheeler	Victoria	Plumbing Inspector	1987

Section 6 of the Plumbing License Law provides that each member of the Board is entitled to per diem as set by legislative appropriations for each day that the member engages in business of the Board. The appropriation for the Plumbing Board sets the rate of per diem at $75 per day. Attorney General's Opinion No. MW-388 further provides that members are entitled to reimbursement for travel, meals and lodging.

The Board is a policy making body and delegates the actual administration of the examinations to a full time staff. Examinations are conducted daily at its office in Austin.

Insurance

An insurance policy on the Board's six vehicles provided the Board protection in the amount of $100,000.00-$300,000.00 for bodily injury liability and $10,000.00 for property damage liability.

A special-coverage policy with the Trinity Universal Insurance Company insured the Board against the loss of money and securities, up to $1,500.00, both inside and outside the premises.

Each of the Board's employees was covered by a public employees' honesty blanket position bond with the Trinity Company to the extent of $10,000.00. The following employees are bonded:

Lynn Brown	Administrator
Brett Bretches	Stock Clerk II
William C. Damerau	Occupational Education Specialist II
Viola M. Ekenstam	Accountant II
Raymond G. Fullerton	Occupational Education Specialist II
Darrell Harding	Director of Special Program
Yolanda Hernandez	Administrative Secretary
Mary B. Lane	Secretary III
C. W. Lindley	Occupational Education Specialist II
William J. Marks	Occupational Education Specialist II
Don A. Nelson	Director of Special Program
Johnny G. Reyes	Translator, Spanish
Patsy M. Russell	Administrative Technician III
Mary Jo Sewell	Secretary III
Paul R. Slater	Occupational Education Specialist II
J. H. Walker	Occupational Education Specialist II
Bertha L. Wilson	Secretary III
Larry D. Wilson	Occupational Education Specialist II

The balance of local funds invested in certificates of deposit were transferred to the State Treasury during the period of this report.

No requests for destruction of obsolete or unnecessary records were made during the reporting period.

This Board occupies 15,477 square feet of space at 929 East 41st Street in Austin, Texas. This space is divided as follows: office 5,787 sq.ft.; storage 1,247 sq.ft.; and 8,443 sq.ft. for examination facilities. This space costs 55.31¢ per sq.ft.; $8,560.53 per month; or $102,726.36 per year. The space is leased under the terms of Lease and

Rental contract PE 7925-E-Austin on file with the State Purchasing and General Services Commission. The space is leased from Ausland Construction Company, 601 West Sixth Street, Austin, Texas. The Board does not occupy any space in State owned buildings.

In 1982 the total number of licenses, of all categories, decreased by 2.88%. A breakdown of this figure is shown in the License Activity Report under General Information.

A statement of Receipts and Disbursements, as required by law, is shown on page 15.

Under Field Service Activity it is seen that 396 cities were visited during 1982, resulting in 3,943 field visits. A total of 2,350 plumbers were challenged on the job for licenses; approximately 80.0% were in compliance with the law. A total of 197 registered apprentices were also contacted on the job and 309 apprentice application forms were given to those not previously registered. A complete breakdown is shown under Field Service Activity.

During the year the Board participated in numerous conferences, seminars, training sessions and industry meetings. The Field Service Department and the Chief Examiner were directly involved in this activity. Our participation was by invitation from cities, trade associations, A&M Extension Service, individual Plumbing Inspectors, State Plumbing Inspectors Association and Building Officials Association of Texas.

The danger of cross connections in plumbing systems has been

graphically revealed in the two films produced for the Board by the University of Texas at Austin. These films depict the various ways in which the public water supply can be contaminated by back siphonage and back flow. Cross connections in plumbing systems are wide spread and occur at an unbelievable rate.

Another film produced by the University of Texas at Austin shows the Board's facilities for administering the examination. A typical applicant is followed through each phase of the day long examination.

All of these films have received wide circulation and viewing both in and out of the State. Probably more than 10,000 persons have viewed them.

Representatives of the Board have attended 35 conferences, seminars, and other meetings where more than 3,012 persons were in attendance.

The Board has continued its service to small towns in the State encouraging them to adopt a modern, adequate plumbing code. The Texas League of Municipalities has continued to participate in a cooperative effort with the Board to make copies of the model code available to any city needing such service.

Apprentice permit cards are available to any person learning the trade. A total of 801 apprentice plumbers were registered in 1982 bringing the total to 10,550 since the inception of registration in 1972.

All applicants for examination must certify that they have three

years of experience working at the trade or a combination of work experience and academic training in plumbing to equal three years. In addition, the Board requires a one year waiting period between journeyman licensure and the master examination.

A minimum age of 18 has been established for the master plumber license and also the plumbing inspector license.

The city plumbing inspector must pass a comprehensive qualifying examination in order to obtain his plumbing inspector's license.

The Board conducted a total of 2,406 examinations during the year. The overall failure rate was 22.2%. A further breakdown of the examination figures is shown in the Examination Activity section.

The Board maintains a library of plumbing reference books which are available to persons needing to study for the examination. This Film and Book Library is used extensively during the year. See the applicable section in the body of the report for a complete listing of this activity.

Six Board meetings were held during this reporting period.

GENERAL INFORMATION

License Activity Report

A total of 19,876 licenses were issued by the Board during the year; 8,875 of these were master licenses; 10,183 were journeyman licenses; and 818 were plumbing inspector licenses. This represented a total decrease of 589 licenses for the year, or 2.88%. Broken down by category, the master licenses increased 5.72%; journeyman licenses decreased 9.62%; and plumbing inspector licenses decreased 1.56%.

Licenses are granted by renewal of a previously held license or by successful completion of the examination. Table I shows the manner in which the 19,876 licenses issued in 1982 were obtained.

TABLE I

Number of 1982 Plumbing Licenses
Issued by the State Plumbing Board

	By Renewal	By Examination	Total
Master	8,313	562	8,875
Journeyman	9,528	655	10,183
Inspector	744	74	818
Total	18,585	1,291	19,876

Table II shows the total number of licenses issued annually since the creation of the Board. The yearly total is broken down according to classification of license issued.

TABLE II

Comparative Summary of Licenses
Issued Annually by
State Plumbing Board

	Masters	Journeyman	Inspectors	Total
1948	2,875	4,491	354	7,720
1949	3,001	4,891	383	8,275
1950	3,239	5,269	422	8,930
1951	3,232	5,382	440	9,054
1952	3,383	5,564	450	9,397
1953	3,519	5,679	436	9,634
1954	3,556	5,746	431	9,733
1955	3,711	5,996	450	10,157
1956	3,794	6,073	462	10,329
1957	3,835	6,093	457	10,385
1958	3,878	6,222	481	10,581
1959	3,986	6,457	500	10,943
1960	4,120	6,516	506	11,142
1961	4,147	6,510	512	11,169
1962	4,223	6,596	518	11,337
1963	4,322	6,794	554	11,670
1964	4,447	7,023	559	12,029

TABLE II - continued

	Masters	Journeyman	Inspectors	Total
1965	4,561	7,048	581	12,190
1966	4,605	7,050	610	12,265
1967	4,612	7,187	633	12,432
1968	4,718	7,489	650	12,857
1969	4,892	7,902	654	13,448
1970	5,036	8,177	662	13,875
1971	5,268	8,623	677	14,568
1972	5,687	9,204	756	15,647
1973	6,034	9,506	779	16,319
1974	6,271	9,687	754	16,712
1975	6,459	9,952	747	17,158
1976	6,735	10,010	756	17,501
1977	7,027	10,232	758	18,017
1978	7,487	10,574	776	18,837
1979	7,932	11,229	796	19,957
1980	8,247	11,382	817	20,446
1981	8,367	11,267	831	20,465
1982	8,875	10,183	818	19,876

TEXAS STATE BOARD OF PLUMBING EXAMINERS
Austin, Texas

EXHIBIT I
Balance Sheet
August 31, 1982

	August 31, 1982			
	General Fund	General Fixed Assets	General Long Term Debt	Totals (Memorandum Only)
	$	$	$	$
ASSETS				
Current Assets				
Cash in State Treasury	438,263.74			438,263.74
Petty Cash	100.00			100.00
Cash in Bank	458.00			458.00
Suspense Account	9,975.00			9,975.00
Inventory of Postage and Supplies	6,884.10			6,884.10
Total Current Assets	455,680.84			455,680.84
General Fixed Assets				
Furniture and Equipment		204,015.19		204,015.19
Other Assets				
Amount to be Provided for Retirement of General Long Term Debt			83,397.29	83,397.29
Total Assets	455,680.84	204,105.19	83,397.29	743,093.32
LIABILITIES AND FUND EQUITY				
Current Liabilities				
Accounts Payable	1,901.34			1,901.34
Reserve for Suspense in State Treasury	9,975.00			9,975.00
	11,876.34			11,876.34
Other Liabilities				
Compensable Leave Balance of Employees			83,397.29	83,397.29
Fund Equity				
Investment in General Fixed Assets		204,015.19		204,015.19
Fund Balance				
Reserved for Inventory of Postage/Supplies	6,884.10			6,884.10
Reserved for Encumbrances (Exh. III)	561.51			561.51
Reserved for Transfer/Plumbing Examiners Fund	458.00			458.00
Unreserved Fund Balances:				
Unencumbered Appropriations (Exh. III)	120,358.35			120,358.35
Unappropriated Balance	315,542.54			315,542.54
Total Fund Balances (Exh. II)	443,804.50			443,804.50
Total Fund Equity	443,804.50	204,015.19		647,819.69
Total Liabilities and Fund Equity	455,680.84	204,015.19	83,397.29	743,093.32

The accompanying Notes to the Financial Statements are an integral part of this exhibit.

TEXAS STATE BOARD OF PLUMBING EXAMINERS

Exhibit II

Statement of Revenues, Expenditures and
Changes In Fund Balance
Year Ended August 31, 1982

	Year Ended August 31, 1982 $
Revenues	
Licenses:	
Master	459,800.00
Journeyman	257,270.00
Inspector	20,585.00
Total License Fee	737,655.00
Examination Fees:	
Master	63,300.00
Journeyman	52,270.00
Inspector	2,110.00
Total Examination Fee	117,680.00
Late Fees	57,854.00
Sale of Scrap Metal	436.51
Other	10,134.01
Total Revenues	923,759.52
Expenditures	
Current Operating Expenditures:	
Salaries and Wages	420,263.68
Salaries - Contract	26,462.42
Per Diem - Board Members	3,150.00
Printing, Office Supplies and Services	20,738.16
Telephone and Telegraph	5,621.22
Postage	13,533.13
Rent - Office	101,490.66
Utilities and Janitorial Services	25,356.14
Travel Expense - Administrative	20,715.06
Travel Expense - Board Members	2,990.26
Travel Expense - Automobiles	8,856.96
Materials - Examination	4,790.79
Supplies - Examination	6,659.62
Insurance	3,007.00
Employer's Retirement Contributions	32,797.96
Employer's Group Insurance Contributions	31,089.44
Social Security	43,538.11
Total Current Operating Expenditures	771,060.61

TEXAS STATE BOARD OF PLUMBING EXAMINERS

Exhibit II

Statement of Revenues, Expenditures and
Changes in Fund Balance
Year Ended August 31, 1982
(concluded)

	Year Ended August 31, 1982 $
Expenditures (concluded)	
Capital Outlay:	
Purchases of Furniture and Equipment	41,281.28
Total Expenditures (Exh. III)	812,341.89
Excess of Revenues Over Expenditures	111,417.63
Fund Balance - Beginning	333,671.77
Restoration of Outstanding Checks to Bank Balance	458.00
Decrease in Inventory of Postage and Supplies	(1,742.90)
Fund Balance - Ending (Exh. I)	443,804.50

The accompanying notes to the Financial Statement are an integral part of this exhibit.

TEXAS STATE BOARD OF PLUMBING EXAMINERS

EXHIBIT III

STATEMENT OF FUNDS BUDGETED VS.
FUNDS APPLIED AND ENCUMBERED
Year Ended August 31, 1982

	Funds Budgeted	
	Legislative Appropriations $	Additions to Appropriations $
Year Ended August 31, 1982		
Current Year Appropriations:		
Per Diem of Board Members	16,875.00	
Administrator	45,000.00	
Other Administration	729,222.00	1,383.40
Total Current Year Appropriations	791,097.00	1,383.40
Prior Year Budget	33,917.35	
Total Appropriations	825,014.35	1,383.40
Other Appropriations:		
Social Security	43,538.11	
Retirement	32,797.96	
Insurance	31,089.44	
Total Appropriations	932,439.86	1,383.40

Funds Applied and Encumbered

Expenditures $	Encumbrances $	Variance Favorable (Unfavorable) $
3,150.00		13,725.00
45,000.00		
622,849.03	561.51	107,194.86
670,999.03	561.51	120,919.86
33,917.35		
704,916.38	561.51	120,919.86
43,538.11		
32,797.96		
31,089.44		
812,341.89	561.51	120,919.86
(Exh.II)	(Exh. I)	(Exh. I)

TEXAS STATE BOARD OF PLUMBING EXAMINERS

SUPPLEMENTARY SCHEDULE

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
Year Ended August 31, 1982

	Year Ended August 31, 1982 $
Receipts	
Licenses:	
Master	459,800.00
Journeyman	257,275.00
Inspector	20,585.00
	737,660.00
Less Amount Placed in Escrow	(716.26)
Total License Fees	736,943.74
Examination Fees:	
Master	63,300.00
Journeyman	52,270.00
Inspector	2,110.00
	117,680.00
Less Amount Placed in Escrow	(5,983.50)
Total Examination Fee	111,696.50
Late Fees	57,864.00
Sale of Scrap Metal	436.51
Other	17,312.43
Total Receipts	924,253.18
Disbursements	
Salaries and Wages	420,263.68
Salaries - Contract	26,462.42
Per Diem - Board Members	3,000.00
Printing, Office Supplies and Services	20,853.09
Telephone and Telegraph	5,094.88
Postage	13,533.13
Rent - Office	101,490.66
Utilities and Janitorial Services	25,105.35
Travel Expense - Administrative	20,715.06
Travel Expense - Board Members	2,990.26
Travel Expense - Automobiles	8,621.38
Materials - Examination	4,550.79
Supplies - Examination	6,626.37
Insurance	3,007.00
Employer's Retirement Contributions	32,797.96
Employer's Group Insurance Contributions	31,089.44
Social Security	43,538.11
Total Disbursements	769,739.58

TEXAS STATE BOARD OF PLUMBING EXAMINERS

SUPPLEMENTARY SCHEDULE

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
Year Ended August 31, 1982

	Year Ended August 31, 1982
	$
Disbursements (concluded)	
Purchases of Fixed Assets:	
Furniture and Equipment	41,638.79
Total Disbursements	811,378.37
Excess of Receipts over Disbursements	112,874.81

TEXAS STATE BOARD OF PLUMBING EXAMINERS

NOTES TO THE FINANCIAL STATEMENTS

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Board's accounting records are maintained in accordance with the principles of fund accounting to assure compliance with statutory limitations placed upon the use of its funds. The Board's operations are financed out of the Plumbing Examiner's Fund in accordance with H.B. 656. The costs of fixed assets and prepaid expenses have been recognized as expenditures of the period in which acquired. Fixed assets are reported at cost without provision being made for depreciation or obsolescence. An inventory of postage and supplies on hand was reported as of August 31, 1982.

The accompanying financial statements have been prepared on a modified accrual basis of accounting except for the accounting treatment employed in reporting prepaid expenses. The Expenditures and Balances statement of financial activity is not intended to show the results of operations, net income or loss as would a conventional statement of income and expenses.

NOTE 2 - OTHER OPERATING COSTS

In addition to the expenditures reflected in Exhibit II, which were charged to appropriations of the Texas State Board of Plumbing Examiners, certain additional benefit costs relating to the Board were appropriated directly to other administering state agencies. These costs were as follows:

	Year Ended August 31, 1982
Retirement Contributions	$ 32,607.96
Employees Retirement System Annual Membership Dues	190.00
Social Security Contributions	43,538.11
State Insurance Contribution	31,089.44
Totals	$ 107,425.51

NOTE 3 - EMPLOYEES' RETIREMENT PLAN

The Texas State Board of Plumbing Examiners participates in a joint contributory retirement plan for its employees administered by the Employees Retirement System of Texas. The retirement expense to the Board is limited to statutorily-defined state contributions at the rate of eight percent of employees salaries. Each employee also contributes six percent of salary each month, through payroll deductions. Retirement expense to the Board during the period covered by this report, as reflected in the preceding note entitled "Other Operating Costs", was $32,607.96 for the year ended August 31, 1982.

NOTE 4 - CHANGES IN LONG-TERM DEBT

The following is a summary of changes in employees' compensable leave balance, which reflect employee's accrued rights to future compensated absences. Changes and balances are stated in terms of hours.

	Annual Leave	Sick Leave	Compen-satory Time	Totals
Compensable Leave Hours - September 1, 1981	3481.3	7274.5		10755.8
Leave Hours Earned	2197.0	1664.0		3861.0
Leave Hours Compensated:				
By Time Off	1917.8	727.0		2644.8
By Monetary Payment including Accounts Payable	-0-			-0-
Leave Hours Lost or Cancelled:				
Accumulated Hours in Excess Of Maximum Balances	-0-	1,178.0		1,178.0
Sick Leave Balances Cancelled by Employee Terminations				
Other Changes or Adjustments				
Compensable Leave Hours August 31, 1982	3760.5	7033.5	-0-	10,794.0

The Texas State Board of Plumbing Examiners, monetary liabilities for compensable future absences as of August 31, 1982, as computed by multiplying the above ending balance times the year - end average hourly salary rate for all employees, were as follows:

Annual Leave	$ 43,095.33
Sick Leave (One-Half Compensable)	40,301.96
Compensatory Time	-0-
Total (Exh. I)	$ 83,397.29

NOTE 5 - EXPENDITURES

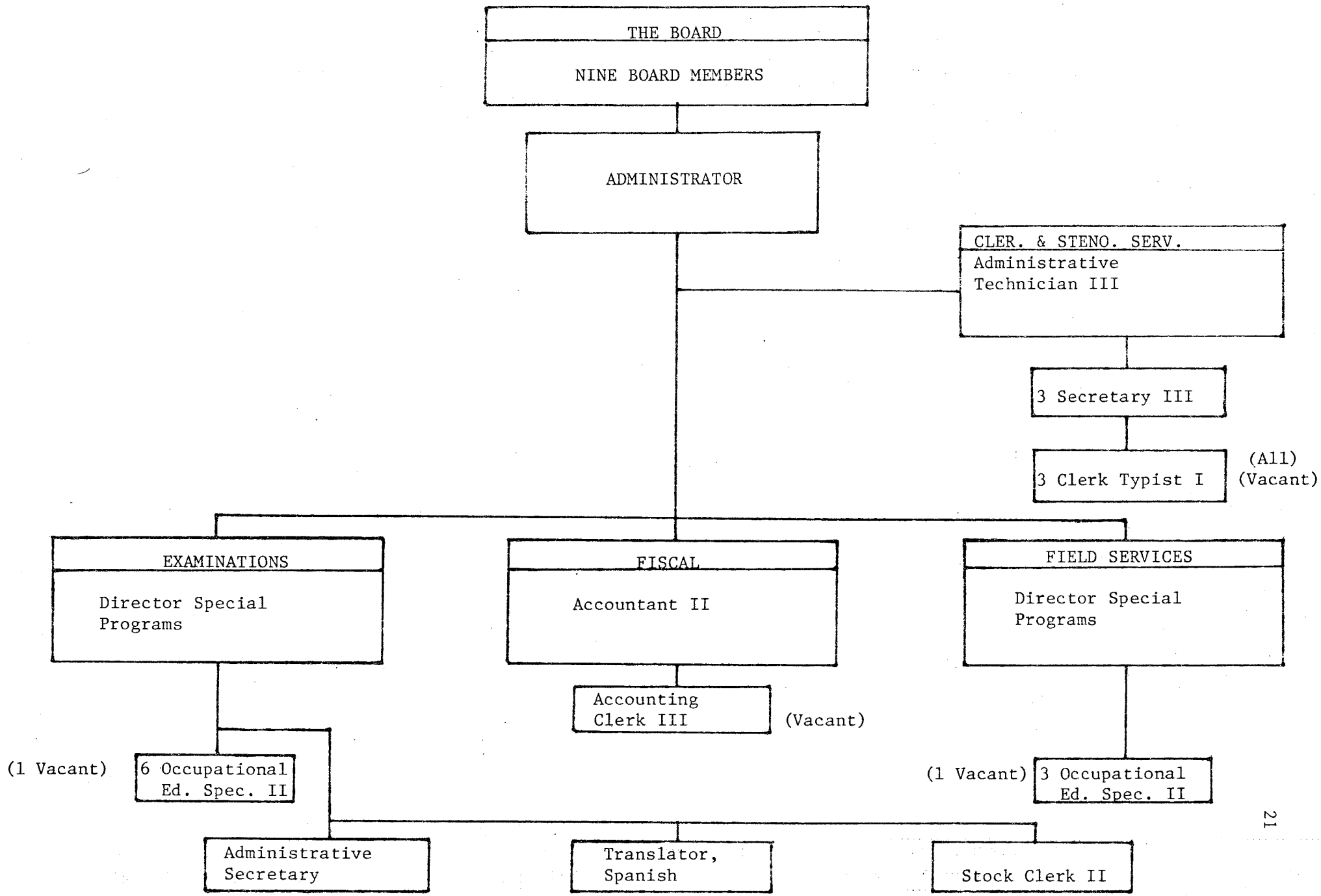
The expenditure classification "Salaries - Contract" includes payments to temporary employment agencies during the peak renewal period. Professional and/or consultant services are also included within this classification. A summary of payments follows:

	Year Ended August 31, 1982
Charles L. Davis - consultant services	$ 1,800.00
William H. Lalla - consultant services	7,348.50
Judi C. L. Hewett - displaywriter instruction	5,720.75
Carrie Reyes - master license statistical research	475.00
Olsten of Austin - displaywriter instruction	946.40
Interglobal Temporary Service - temporary help	10,004.27
F. R. Moerke - lettering for official resolution	125.00
Country Store Gallery - framing for official resolution	42.50
Total (Exh. II)	$ 26,462.42

NOTE 6 - CHANGES IN FIXED ASSETS

A summary of changes in General Fixed Assets follows:

	Year Ended August 31, 1982
Balances - Beginning	$ 198,445.58
Changes:	
Less Adjustments	(33,337.04)
Purchases of Furniture and Equipment (Exh. II)	41,281.28
Trade in Allowance	240.00
Deletions	(2,614.63)
Balances - Ended (Exh. I)	$ 204,015.19


THE BOARD
NINE BOARD MEMBERS
ADMINISTRATOR
CLER. & STENO. SERV.
Administrative Technician III
3 Secretary III
3 Clerk Typist I
(All) (Vacant)
EXAMINATIONS
Director Special Programs
FISCAL
Accountant II
FIELD SERVICES
Director Special Programs
Accounting Clerk III
(Vacant)
(1 Vacant)
6 Occupational Ed. Spec. II
(1 Vacant)
3 Occupational Ed. Spec. II
Administrative Secretary
Translator, Spanish
Stock Clerk II

Requests for Information

Each year the Board receives requests from other states concerning its operations, examinations and other procedures. The Board is happy to supply any helpful information to another state or political subdivision concerning its licensing or examining procedures.

MISSOURI	Inquiry from Paula F. Boyd, Secretary, Board of Plumbing Examiners, requesting information on Wolford Skiles and his plumbing experience.
NEW MEXICO	Request from Campbell McMordie, Staff Assistant, Southern Union Company, for a copy of a Texas Code Survey.

FIELD SERVICE ACTIVITY

The Field Service Activities are grouped as follows:

1. Field Visits
2. License Compliance Checks
3. Meetings, Conferences, Seminars, and Training Seminars
4. Plumbing Code Activity

Field Visits

396 cities and towns were visited during 1982. As a result of these 396 trips, 3,943 field visits were made. The visits included license compliance checks; contacts with plumbing inspectors; contacts with master and journeyman plumbers; association officials; contacts with city councils and city officials, such as city managers and city attorneys. In the course of investigating complaints, many contacts were made with consumers. Board representatives attended and participated at other meetings and short schools.

License Compliance Checks

A total of 243 license compliance checks were made in 143 cities at least one or more times during the year. A total of 2,350 plumbers were found working on jobs and 469 were found to be unlicensed. 80.0% of the plumbers contacted were in compliance with the Licensing Law. 198 of the 469 found to be unlicensed subsequently obtained their license. 258 have been or will be scheduled for examination. 13 failed the examination and will be re-scheduled for examination after the expiration of the prescribed waiting period. Also, a total of 197 registered apprentice plumbers were found working on jobs and a total of 309 applications for registration as an apprentice plumber were given to apprentices.

Most cities of 5,000 or more population were visited one or more times during the year. Every city, regardless of size, requesting assistance was visited and offered the full services of the Board.

The following table shows the frequency of visits to the 13 larger cities, number of plumbers contacted on jobs and the number who were unlicensed. In each of the cities listed below one, two, or three representatives were assigned for one week to conduct a license compliance check.

TABLE III

Compliance Checks

City	Number Visits	Number Persons Contacted	Number Persons Unlicensed	Percent Unlicensed
Abilene	1	10	2	20.0
Amarillo	3	35	11	31.4
Austin	3	179	28	15.6
Beaumont	2	27	6	22.2
Corpus Christi	2	79	13	16.5
Dallas	5	230	67	29.1
El Paso	2	62	18	29.0
Fort Worth	3	67	18	26.9
Houston	5	304	53	17.4
Lubbock	2	24	12	50.0
San Antonio	5	121	15	12.4
Waco	2	22	4	18.2
Wichita Falls	1	7	2	28.6

COMPLAINTS

Eighty-four complaints and requests for assistance were received during the reporting period. All but three were resolved. The three unresolved complaints are on appeal in the courts or the defendant cannot be located.

Most of the complaints involved alleged overcharges or inferior workmanship.

MEETINGS, CONFERENCES, SEMINARS, AND TRAINING SEMINARS

Date	Location	Type of Meeting	Purpose/Subject	Participants and No. Attended				
				Trade Ass'n	Con-sumer	Gen'l Public	Agency	Number
1981 10/21	Corpus Christi	Training seminar	Training to plumbing apprentice class. Show cross connection films, discuss proper plumbing installation.				Del Mar College	13
10/22	Austin	Seminar	Training, present lecture on cross connection exhibit to maintenance employees		Martine Properties			15
10/25	Orlando, Florida	Meeting and seminar	Participated in annual plumbing code changes. Attended seminar on plumbing.	Southern Bldg. Code Conference				360
11/11	Bellaire	Training seminar	Conduct training on proper waste and venting. Show 2 cross connection films.					21
11/11	Reno, Nevada	Meeting and training seminar	Participated in annual plumbing code changes. Attended sessions on plumbing code work shop.	Intl. Assn. of Plumbing and Mechanical Officials Annual Bus. and Edu. Conf.				420
11/18	Austin	Seminar	Lecture on cross connection exhibit, dicuss what are good, acceptable plumbing installations.	Members of Plumbing Local #268, Austin				22
11/24	Harlingen	Seminar for City Plumbing Inspectors	Conduct training on good and acceptable plumbing installations, show two films on cross connections.				A&M University	15

MEETINGS, CONFERENCES, SEMINARS, AND TRAINING SEMINARS

Date	Location	Type of Meeting	Purpose/Subject	Participants and No. Attended				
				Trade Ass'n	Con-sumer	Gen'l Public	Agency	Number
12/8	Austin	Training seminar	Lecture on Cross connection exhibit and general plumbing information to plumbing apprentice class.				St. Phillip College	25
12/8	Denison	Training	Conduct training on cross connection, discuss good plumbing installations and procedure to take examination to city plumbing inspectors, officials and public.		Public		City	30
1982 1/18	Beford	Training meeting, city inspectors and officials, plumbers, and general contractors.	Conduct training on interpretation of plumbing code, discuss waste and vents. Show cross connection films.				City	21
1/12	Gilmer	Training Seminar, city plumbing inspectors and officials and plumbers	Interpretation of plumbing ordinance, license law and procedure to follow to take plumbing exam.				City	11
3/5	Austin	Conduct plumbing examination for plumber apprentices.	Design plumbing examination for student apprentices, give examination and grade enrollees to state plumbing contest.	Area Five VICO				5
4/14	Dallas	Training Conference	Attend meeting, manned booth, explain various plumbing installation. Hand out copies of license law and answer questions.	Assoc. Plumbing, Heating, Cooling Contractors of Texas				250

MEETINGS, CONFERENCES, SEMINARS, AND TRAINING SEMINARS

Date	Location	Type of Meeting	Purpose/Subject	Participants and No. Attended				
				Trade Ass'n	Con-sumer	Gen'l Public	Agency	Number
5/6	Cedar Park	Meeting city plumbing Inspector and manager.	Discuss license law enforcement and City plumbing ordinance.				City	2
5/14	South Padre Island	Training seminar, city bldg. officials	Conduct training on waste and vent installations in multi-story bldgs.				City	23
5/25	Grand Prarie	Training seminar, city plumb-inspectors.	Conduct training on drain, waste and vents and good plumbing installations, show two cross connection films.				A&M University	20
6/2	College Station	Training seminar, city plumbing inspectors.	Conduct training on waste, vents and proper and acceptable plumbing installations, show cross connection films.				A&M University	11
6/7	Las Vegas, Nevada	Exposition and conference.	Manned booth with four story model with varous plumbing designs and and installations, show cross connection films.	Natl. Plumbing, Heating and Cooling Contractors				1,500
6/14	Austin	Training seminar, conference city inspectors.	Conduct training on all aspects of plumbing installations. discuss license law and enforcement.				City	148
6/28	Lubbock	Training seminar, city plumbing inspectors.	Conduct training on drain, waste and vents also on good and proper installations, show two cross connection films.				A&M	16

Date	Location	Type of Meeting	Purpose/Subject	Participants and No. Attended				
				Trade Ass'n	Con-sumer	Gen'l Public	Agency	Number
7/12	San Antonio	Training seminar for city plumbing inspectors.	Conduct training on drain, waste and vents. General discussion on good and accepted plumbing installations. Show two films on cross connection.				A&M University	20
7/29	Austin	Training seminar for plumbing school instructors.	Presented cross connection lecture and discussed requirements for apprentices to take journeyman exam.				Texas Department of Education	14
8/20	Austin	Meeting officials of New Mexico Dept. of Labor, License Div.	Presented cross connection lecture, reviewed examination procedures				State	4
8/9	College Station	Training seminar, city plumbing inspectors and bldg. officials.	Conducted training on one and two story family housing codes. Show cross connection films.				A&M University	40
8/23	Pittsburg	Meeting city plumbing inspector and city officials and plumbers.	Conduct discussion on new plumbing ordinance. Interpretation on enforcement, also license law.				City	6

Plumbing Code Activity

The Board has continued its assistance and encouragement to small cities in adopting adequate plumbing codes. During the year numerous cities have adopted the Texas Municipal League Plumbing Code. The Board's representatives have favored the adoption of this code and a large number of cities have requested copies. Many of them are currently in the process of adopting the code while others are considering minor changes or revision before its adoption. This code is gradually becoming the standard code for the smaller cities. The Texas Municipal League is to be commended for publishing this code for its member cities.

EXAMINATION ACTIVITY

Examination Report

The Board conducted 2,406 examination in 1981. 899 were Master examinations, 1,401 were Journeyman examinations, and 106 were Inspector's examinations. Of the 2,406 examined, a total of 1,872, or 77.8 percent, qualified for their licenses.

A breakdown by category shows that 899 Master Plumber candidates were examined and of that number 789, or 87.8 percent, passed. 1,401 Journeyman Plumber candidates were examined and 990, or 70.7 percent, passed. 106 Inspector candidates were examined and 93, or 87.7 percent, passed.

The monthly breakdown of the Master examinations, showing the number given and the number passing or failing, is shown in Table IV.

The monthly breakdown of Journeyman examinations is shown in Table V.

Table VI shows the number of examinations given by month for the reporting period by category. The passing and failure rate for each is also shown.

Table VII shows the number of Master examinations conducted each year since the Board's inception. It also reveals the number passing and failing along with the percentage of passes and failures.

Table VIII is the same information shown in the same manner on the Journeyman examinations since 1947.

Table IX shows the number of examinations given by category for each year of the Board's operation.

TABLE IV

Monthly Distribution of
Master Examinations for 1982

	No. Exams	Passed	Failed
September	90	79	11
October	58	54	4
November	56	46	10
December	49	40	9
January	76	63	13
February	63	57	6
March	89	80	9
April	101	91	10
May	97	80	17
June	71	63	8
July	79	69	10
August	70	67	3
Total	899	789	110

TABLE V

Monthly Distribution of
Journeyman Examinations for 1982

	No. Exams	Passed	Failed
September	188	140	48
October	165	114	51
November	91	68	23
December	72	51	21
January	92	67	25
February	64	48	16
March	127	92	35
April	147	94	53
May	137	96	41
June	129	87	42
July	93	65	28
August	96	68	28
Total	1,401	990	411

TABLE VI

Monthly Distribution of
Master and Journeyman Examinations
for 1982

	No. Exam'd	Passed	Percent	Failed	Percent
September	278	219	78.8	59	21.2
October	223	168	75.3	55	24.7
November	147	114	77.6	33	22.4
December	121	91	75.2	30	24.8
January	168	130	77.4	38	22.6
February	127	105	82.7	22	17.3
March	216	172	79.6	44	20.4
April	248	185	74.6	63	25.4
May	234	176	75.2	58	24.8
June	200	150	75.0	50	25.0
July	172	134	77.9	38	22.1
August	166	135	81.3	31	18.7
Total	2,300	1,779	77.3	521	22.7

TABLE VII

Comparative Analysis of Master Examinations
Given Annually by State Plumbing Board

	Examined	Passed	Percent Passed	Failed	Percent Failed	Total Examined
1947	35	32	91.4	3	8.6	35
1948	338	313	92.6	25	7.4	373
1949	429	370	86.2	59	13.8	802
1950	426	374	87.7	52	12.3	1,228
1951	278	176	63.6	102	36.4	1,506
1952	419	293	69.9	126	30.1	1,925
1953	356	292	82.0	64	18.0	2,281
1954	311	234	75.3	77	24.7	2,592
1955	345	268	77.8	77	22.2	2,937
1956	331	259	78.0	72	22.0	3,268
1957	308	240	77.8	68	22.2	3,576
1958	303	238	78.5	65	21.5	3,879
1959	354	248	70.0	106	30.0	4,233
1960	389	291	74.8	98	25.2	4,622
1961	332	248	74.4	84	25.6	4,954
1962	349	270	77.3	79	22.7	5,303
1963	353	262	74.2	91	25.8	5,656
1964	424	310	73.1	114	26.9	6,080
1965	419	299	71.4	120	28.6	6,499
1966	307	223	72.7	84	27.3	6,806
1967	311	225	72.4	86	27.6	7,117

TABLE VII - continued

	Examined	Passed	Percent Passed	Failed	Percent Failed	Total Examined
1968	354	264	74.6	90	25.4	7,471
1969	424	316	74.5	108	25.5	7,895
1970	412	300	73.0	112	27.0	8,307
1971	501	386	77.1	115	22.9	8,808
1972	726	557	76.6	169	23.4	9,534
1973	623	505	81.0	118	19.0	10,157
1974	543	454	83.6	89	16.4	10,700
1975	500	431	86.2	69	13.8	11,200
1976	544	472	86.8	72	13.2	11,744
1977	679	590	86.9	89	13.1	12,423
1978	780	680	87.2	100	12.8	13,203
1979	816	722	88.5	94	11.5	14,019
1980	716	629	87.8	87	12.2	14,735
1981	616	540	87.7	76	12.3	15,351
1982	899	789	87.8	110	12.2	16,250

TABLE VIII

Comparative Analysis of Journeyman Examinations
Given Annually by State Plumbing Board

	Examined	Passed	Percent Passed	Failed	Percent Failed	Total Examined
1947	86	68	79.0	18	21.0	86
1948	1,196	926	77.4	270	22.6	1,282
1949	936	751	80.2	185	19.8	2,218
1950	1,051	690	65.6	361	34.4	3,269
1951	751	421	56.0	330	44.0	4,020
1952	725	415	57.3	310	42.7	4,745
1953	625	414	66.2	211	33.8	5,370
1954	664	410	61.7	254	38.3	6,034
1955	760	544	71.6	216	28.4	6,794
1956	605	417	69.0	188	31.0	7,399
1957	455	323	71.0	132	29.0	7,854
1958	623	432	69.3	191	30.7	8,477
1959	757	528	69.9	229	30.1	9,234
1960	579	413	71.3	166	28.7	9,813
1961	500	379	75.9	121	24.1	10,313
1962	615	463	75.3	152	24.7	10,928
1963	751	585	77.9	166	22.1	11,679
1964	780	588	75.4	192	24.6	12,459
1965	728	442	60.7	286	39.3	13,187
1966	640	390	61.0	250	39.0	13,827
1967	696	459	65.8	237	34.2	14,523

TABLE VIII - continued

	Examined	Passed	Percent Passed	Failed	Percent Failed	Total Examined
1968	956	550	57.5	406	42.5	15,479
1969	1,161	757	65.2	404	34.8	16,640
1970	979	626	64.0	353	36.0	17,619
1971	1,122	817	72.8	305	27.2	18,741
1972	1,568	1,030	65.7	538	34.3	20,309
1973	1,221	861	70.5	360	29.5	21,530
1974	1,128	863	76.5	265	23.5	22,658
1975	987	857	86.8	130	13.2	23,645
1976	1,137	909	80.0	228	20.0	24,782
1977	1,419	1,062	74.8	357	25.2	26,201
1978	1,558	1,164	74.7	394	25.3	27,759
1979	1,900	1,460	76.8	440	23.2	29,659
1980	1,740	1,188	68.3	552	31.7	31,399
1981	1,210	894	73.9	316	26.1	32,609
1982	1,401	990	70.7	411	29.3	34,010

TABLE IX

Comparative Summary of Examinations
Given Annually by State Plumbing Board

	Master	Journeyman	Inspector	Total
1947	35	86	0	121
1948	338	1,196	37	1,571
1949	429	936	66	1,431
1950	426	1,051	45	1,522
1951	278	751	55	1,084
1952	419	725	49	1,193
1953	356	625	58	1,039
1954	311	664	48	1,023
1955	345	760	46	1,151
1956	331	605	58	994
1957	308	455	54	817
1958	303	623	64	990
1959	354	757	53	1,164
1960	389	579	59	1,027
1961	332	500	52	884
1962	349	615	29	993
1963	353	751	78	1,182
1964	424	780	62	1,266
1965	419	728	63	1,210
1966	307	640	83	1,030
1967	311	696	80	1,087

TABLE IX - continued

	Master	Journeyman	Inspector	Total
1968	354	956	82	1,392
1969	424	1,161	68	1,653
1970	412	979	65	1,456
1971	501	1,122	80	1,703
1972	726	1,568	129	2,423
1973	623	1,221	105	1,949
1974	543	1,128	93	1,764
1975	500	987	77	1,564
1976	544	1,137	95	1,776
1977	679	1,419	123	2,221
1978	780	1,558	123	2,461
1979	816	1,900	108	2,824
1980	716	1,740	105	2,561
1981	616	1,210	79	1,905
1982	899	1,401	106	2,406

EDUCATIONAL FACILITIES

OF

THE EXAMINATION CENTER

The Examination Center is visited each year by several groups of students, health officers, inspectors and others. Among the visiting groups this year were Members of the St. Philip's College (San Antonio), Texas Department of Education (Austin), Texas Railroad Commission (Austin), Texas Department of Education (School Instructors) (Austin), New Mexico Department of Labor (License Division) (New Mexico), Plumbing Local #286 (Austin), and Martine Properties (Austin).

The Director of Special Programs attended and conducted Seminars for the Valley Building Officials Association (South Padre Island), Texas A & M Mechanical Seminar (College Station), Texas State Association of Plumbing Inspector's Seminar (Austin), National Plumbing-Heating-Cooling Contractors Association Exposition Meeting (Las Vegas, Nevada), Southern Building Code Conference (Orlando, Florida), and International Association of Plumbing and Mechanical Officials 52nd Annual Education and Business Conference (Reno, Nevada).

Book Library Activity

The Board maintains a library of technical books on sanitary plumbing practices which it loans, upon request, to persons wishing to study for the examination.

There were 111 copies of the Model Code sent to applicants for the examination who had requested them as well as to other parties who manifested an interest. A total of 149 copies of the Model Code were sent to City Plumbing Inspectors at various times. Three of our other books were loaned to plumbers and inspectors who requested additional information.

Film Library Activity

The Board also maintains a library of educational films for use by schools, trade groups, inspection meetings, and other public institutions.

Seven different films were used 105 times for various types of meetings. The following tabulation shows the use of the films:

1. Cross-Connections: The Unseen Hazard

Mr. Ray Brown	El Paso
Mr. Charlie J. Hall	Garland
H & G Air Conditioning and Heating, Inc.	Garland
Mr. David Bailey	Midlothian
Mr. Joseph Lorenz, Chief Plumbing Inspector	San Antonio
Mr. Asher Tapper, Operations Division	Ft. Carson, CO
Mr. Ray Piret, Mostek	Carrollton
Mr. Robert T. Coursey	Dallas
Mr. Rod Doughty, TD Mechanical	Dallas
Houston Area J.A.C.	Houston
Mr. Weldon Roe	Waco
Plumber's Local No. 93 UA	Waukegan, IL
Texas Public Health Association	Garland
Mr. Randy Green, Building Official	Denison
Mr. Robert Robertson	Houston
Mr. Ronald Brossman, City of Schulenburg	Schulenburg
Mr. Elmer D. Lazure	Helena, MT
Mr. Richard W. Sprang	Perrysville, OH
Patton Plumbing	Amarillo
Mr. Graham Moore, TD Mechanical	Dallas
Sam P. Wallace Company	Houston
Mr. John C. Rose, Plumbing Inspector	Irving
Mr. Emilio Garza, Jr., Plumbing Inspector	Kingsville
Mr. Jerry Mullenbach	St. Paul, MN
Oklahoma State Department of Health	Oklahoma City, OK
Plumbers & Pipefitters Local Union No. 654	Abilene
Mr. Arnold Villarreal, McAllen ISD	McAllen
Mr. Leonard Dwoskin	New York City, NY

Uses by Plumbing Board Field Men and Chief Examiner:

Plumbing Apprenticeship Class	Corpus Christi
Building Officials Association of Texas	Bellaire
Plumbing Code #286	Austin
A & M Mechanical Seminar	Harlingen
Plumbing Apprentice Class, St. Philip's College	Austin
City Plumbing Inspectors and Officials, Plumber Apprentice and Public	Denison
City Plumbing Inspectors and Official Plumbers	Bedford
City Plumbing Inspectors and Official Plumbers and Public	Gilmer
Texas Railroad Commision, LP Gas Division	Austin
City Plumbing Inspectors and Building Officials	Grand Prairie
City Plumbing Inspectors and Building Officials	College Station
National Plumbing-Heating-Cooling Contractors	Las Vegas, NV
Texas A & M Mechanical Seminar	Lubbock
Texas A & M Station	San Antonio
Texas Department of Education, Plumbing School Instructors	Austin
New Mexico Department of Labor, License Division	Austin
City Plumbing Inspectors and Building Officials	College Station

2. Anybody Can Do It?

Plumbers and Pipefitters Local Union No. 654	Abilene
Mr. Weldon Roe	Waco
Mr. Ray Brown, Local Union No. 231	El Paso
Charlie Hall & Associates, Inc.	Garland
H & G Air Conditioning	Garland
Houston Area J.A.C.	Houston
Mr. David Bailey	Midlothian
Mr. Ray Piret, Mostek	Carrollton
Mr. Randy Green, Building Official	Denison
Houston Area J.A.C. Local #68	Houston
Mr. Joseph Lorenz, Chief Plumbing Inspector	San Antonio
Plumbers Local No. 93 UA	Waukegan, IL
Mr. Richard W. Sprang	Perrysville, OH
Mr. Rod Doughty, TD Mechanical	Dallas
Mr. Graham Moore, TD Mechanical	Dallas
Mr. Leonard Dwoskin, Department of Education	New York, NY

Mr. John W. Lingo, Apprentice Coordinator, for Local Union No. 286	Austin
Mr. Charlie Hall	Garland
Mr. Emilio Garza, Jr., Plumbing Inspector	Kingsville
Mr. Arnold Villarreal, McAllen ISD	McAllen
Mr. Jerry Mullenbach	St. Paul, MN

Uses by Plumbing Board Field Men and Chief Examiner:

Plumbing Apprenticeship Class, Del Mar College	Corpus Christi
Building Officials Association of Texas	Bellaire
City Plumbing Inspectors and Building Officials	Harlingen
City Plumbing Inspectors and Officials Plumbers and Public	Gilmer
City Plumbing Inspectors and Building Officials	Grand Prairie
City Plumbing Inspectors and Building Officials	College Station
National Plumbing-Heating-Cooling Contractors	Las Vegas, NV
City Plumbing Inspectors and Building Officials	San Antonio
City Plumbing Inspectors and Building Officials	College Station

3. <u>All In A Day's Work</u>

Mr. Leonard Dwoskin	New York, NY
Plumbers & Pipefitters Local Union No. 654	Abilene
Mr. John W. Lingo, Apprentice Coordinator for Local Union No. 286	Austin
Mr. Larry Nelson, Mechanical Bureau	Santa Fe, NM
Houston Area J.A.C.	Houston
Mr. Richard W. Lisle	Santa Fe, NM
Mr. H. W. Holder	Garland
Mr. Jerry Mullenbach	St. Paul NM
Mr. Bob Coursey	Dallas
Mr. Randy Green, Building Official	Denison
Mr. J. J. Keefe, Plumbers Local No. 93 UA	Waukegan, IL
Mr. James Cummings	Lansing, MI
Mr. Richard W. Sprang	Perrysville, OH

Uses by Plumbing Board Field Men and Chief Examiner:

Building Officials Association of Texas	Bellaire
City Plumbing Inspectors and Officials, Plumbers Apprentices and Public	Denison

City Plumbing Inspectors and Officials, Plumbers and Public	Gilmer
City Plumbing Inspectors and Building Officials	College Station
National Plumbing-Heating-Cooling Contractors	Las Vegas, NV
City Plumbing Inspectors and Building Officials	San Antonio
City Plumbing Inspectors and Building Officials	College Station
City Plumbing Inspectors and Officials Plumbers and Public	Pittsburg

4. Explosion - Danger Lurks

Mr. John Lingo, Apprentice Coordinator for Local Union No. 286	Austin
Mr. John C. Rose, Instructor, Irving, ISD	Irving
Mr. Fred Flores, St. Philip's College	San Antonio

5. Health and The Cycle of Water

Mr. Jack Thrasher, Building Official	Henderson

6. Piping Safety

Mr. Ernest L. Pinckard	Beaumont
Mr. Fred Flores, St. Philip's College	San Antonio

7. Sins of Sanitation

Mr. Jack Thrasher, Building Official	Henderson