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A STUDY OF THE NEED FOR A JOURNEYMAN ON SMALL CONSTRUCTION PROJECTS

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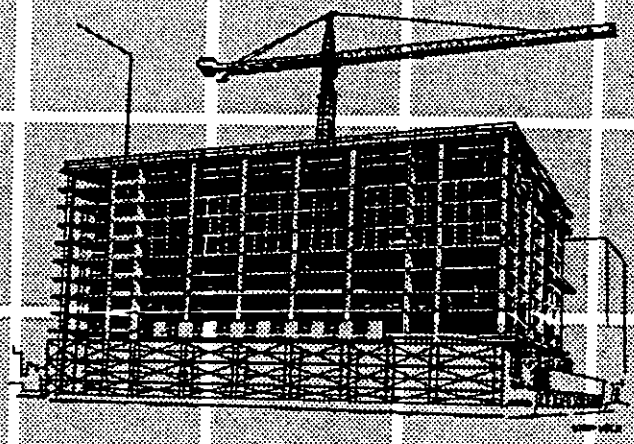

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Executive Summary

The genesis of the project was a request by the Building Construction Industry Advisory Committee (BCIAC) that a study effort be initiated by the Department of Construction Management of Florida International University to examine the "desirability of requiring the presence of a journeyman for each trade working on small construction projects..." The specific concerns that the Committee expressed were related to the lack of adequate supervision in the absence of a licensed contractor or their designated and qualified representative. The original response by the study team to fulfill the task listed the following as points that would be addressed:

- a review of the definition of a journeyman;
- an assessment of the costs and benefits of requiring the presence of journeymen on certain projects;
- what are the responsibilities with respect to the qualifications of individuals employed on construction projects
- an assessment of the availability of journeymen if a program is adopted to require staffing of certain construction projects with these individuals.

This report fulfills the request with respect to the items requested and provides additional information concerning the subject area. The term "journeyman" and the male appellation is used throughout the report without an intent to be gender specific.

The study team consulted written materials, texts, contractor and trade representatives, and federal, state, and local jurisdiction laws and regulations to arrive at a definition of a journeyman that is both succinct and complete.

> *A journeyman is an individual, employed in an apprenticable occupation, that has completed appropriate training and employment experience so that he possesses the skills necessary to work as a skilled craftsman in his trade.*

Notably lacking from this definition is the requirement for examination and licensure.

The team examined the basis in law for requiring the presence of journeymen on site for construction projects. As a part of this effort, the team also expanded this part of the work to include the completion of a survey of county building departments that had originated with, and was partially completed by, the Florida House of Representative's staff. A tabulation was

prepared showing the journeyman licensing and on site requirements of all of the counties in Florida, save one. (At the time that draft report was submitted, despite numerous queries and repeated requests, the data from Orange County were not provided.)

In addition to the survey work, the team also examined the State's contractor licensing law and local jurisdictions' laws and regulations concerning the necessity of having journeymen on site. Case law was also examined concerning the responsibilities of contractors, qualifying license holders, and employees of firms. In particular, the effort was focused on what, if any, liability a licensed journeyman would shoulder as the result of being employed on site in a supervisory capacity. Members of the team conferenced with, and specifically pursued this latter item, with an attorney representing a jurisdiction with on site requirements for journeymen.

In order to assess the benefits of requiring the presence of journeymen on certain construction projects the study team elected to examine the results of building department inspections for a trade that typically has licensed journeymen (electricians) and one that does not (carpenters). It was considered that such an examination would provide a surrogate, measurable standard indicating the benefit, or lack thereof, for the presence of journeymen. Inspection data were requested from four jurisdictions throughout the state, three in areas covered by the Standard Building Code (SBC) and one falling under the aegis of the South Florida Building Code (SFBC). The common denominator for the four jurisdictions chosen was that they all required the presence of journeymen on the jobs for certain trades. Only the data from the SBC jurisdictions were provided and, as a result, an inter-code comparison of results could not be included in the report. The data requests were limited to those involving single family residences.

After an initial screening of the data, two inspections were chosen as representative of those that would require a demonstration of skill level on the part of the workers: the building framing inspection and the electrical rough inspection. This selection was based upon an examination of building codes (to ensure commonality between jurisdictions and codes); the data provided; and professional experience. An analysis of the data for these two inspections revealed a consistently higher passing rate for the electrical inspections than for framing in the three jurisdictions examined. The data also show large differences between the passing rates in

the different jurisdictions. No attempt was made to rationalize the reason for this latter disparity and to do so is beyond the scope of this report.

An inquiry was made of 45 contracting firms, operating in the same jurisdictions that had provided the inspection data, concerning wage rates. A compilation of these rates was made in order to determine an "average" cost for electrical workers and carpenters. Using these data the team formulated a cost for failed inspections, considering only labor, and provided an estimate of the monetary benefit represented by the supervision and training resident in journeymen.

The report includes a discussion of the rationale behind a requirement for contractors to have journeymen on the site and, as a logical extension of that, the role that should be expected of the parties to a contract for work, i.e., the owner, the design professional, and the contractor. The proper role of government is also discussed. It is pointed out that the basis for the contracting laws in the State is the regulation of an industry which can have a profound effect on public safety. Consequently, this part of the report also discusses the role of local and state government with respect to regulations and licensing of journeymen.

The final analysis section deals with the workforce for construction, both current and projected. All of those interviewed during the process of compiling the report indicated that there are not currently, and apparently will not be in the foreseeable future, sufficient journeymen to fill the requirements that now exist. However, statistics provided by the State Department of Labor do not support this contention. Consequently the team proposes that additional work be done in this area.

Summary Findings, Conclusions, and Recommendations

Findings and Conclusions

1. *Definition of a journeyman*

The study team found that there was a consensus as to the definition of a journeyman except for the requirement for licensure and examination.

A journeyman is an individual, employed in an apprenticable occupation, that has completed appropriate training and employment experience so that he possesses the skills necessary to work as a skilled craftsman in his trade.

2. *Examination and Licensure for Journeymen*

The study established there is a lack of consistency between states and, within Florida, between local jurisdictions as to the requirement for examination and licensure of journeymen. Additionally, the jurisdictions that do have an examination and licensure requirement, do not include carpenters as one of the licensed trades.

3. *Regulations and Laws Requiring Journeymen on Site*

The study also established a lack of consistency between counties in the State of Florida, as to the requirement for having journeymen on the construction site. The lack of consistency is reminiscent of the situation that was present, with respect to the licensing of contractors, prior to the enactment of the statewide contractor licensing law.

4. *Duties and Responsibilities the Devolve Upon a Journeyman*

The study found that there is a clear pattern, established in law, that employees are not normally responsible to the employer's customers or clients for acts performed on behalf of the employer.

Construction contracts, written or implicit, are between the customer and the contractor. Absent intentional wrong doing or negligence, the journeyman is not responsible to the customer for damages suffered due to the work

rosecuted under the contract. If the customer is dissatisfied with the work, the customer must look to the contractor for relief.

5. *Monetary Costs and Benefits*

The study showed that approximations can be made of the monetary benefit derived from requiring journeymen on site.

Actual, hard data can only be derived on a job by cost comparison. In the construction industry, where identical work and projects are rare, a refinement of the data using standard statistical quality control techniques is probably meaningless.

6. *Enforcement of Examination, Licensure, and Journeymen on Site Requirements*

The basis for the State law and regulations governing the construction industry in Florida is the safety and welfare of the public.

If the intent of placing statutory requirements for the presence of journeymen on construction sites is a public safety and welfare issue, then this may be a proper exercise of governmental power. If, however, the intent is to provide a layer of supervision in order to improve the quality of supervision and workmanship, a strong case can be made that this is an unwarranted intrusion on the part of the government.

7. *Availability of Trained Personnel*

The data were not found to support a forecast of a shortage of trained personnel should state-wide laws or regulations be adopted to require the presence of journeymen on construction sites.

Recommendations

The authors make the following specific recommendations based upon the facts and the conclusions set forth in the report:

1. That appropriate state-wide law or regulations be formulated to codify the requirement for a specific level of training, experience, examination, and licensure before an individual may be considered to be a journeyman in the construction trades.

As described in the report, there is a lack of commonality of definition, examination and licensure requirements for journeymen among the various counties in Florida. The current situation parallels that which lead to the establishment of the Construction Industry Licensing Board.

2. That an appropriate state-wide policy be established, and codified if required, as to the requirement for the employment of journeymen on construction sites.

At present there is not a consensus as to the rationale for certain local jurisdictions requiring journeymen on the construction site while other do not. If the rationale is for public safety and welfare, then the requirement should be state-wide. If the rationale is for improvement of the construction process, then the intrusion of the government into the contractual relationship between the contractor and the customer is unwarranted. In this latter case, the responsibility for workmanship and quality remains with the contractor and the requirement for a journeyman on site does not shift the responsibility.

3. An in depth study of the availability of trained construction industry tradesmen in Florida should be undertaken.

The construction industry is one of the largest industries in the State of Florida. The availability and use of trained professionals is the means to ensure quality construction. The study is required to know the actual deficit, if one exists, so that adequate training programs can be put in place.

INTRODUCTION

Background

The structural damage resulting from Hurricanes Andrew and Opal revealed repeated instances of the improper use of materials and methods of construction. Previously concealed areas were now open to inspection due to structural failures. Examinations, carried out by members of the design and construction professions, revealed a lack of prescribed roof truss bracing, improperly made wood to wood connections, and the absence of building code mandated wood to wood and wood to concrete steel connectors.[1] Similar inspections of less seriously damaged structures showed an absence of quality workmanship as evidenced by leaking air conditioning ducts and sub-standard plumbing and electrical work. The discoveries lead to a round of assessments which have included more, and more complete, inspections; more detailed plans and specifications; revisions in allowable materials and methods; and a questioning of the state of training of construction workers.

Simultaneously, segments of the construction industry began to question the lack of training and trained personnel.[2] On-the-job instruction is the norm in the construction industry, rather than the exception. Individuals with little or no formal training and with limited construction experience and knowledge are allowed to work as carpenters, plumber, electricians, and in other construction related trades. The consequences of these less than desirable circumstances is often mitigated on larger construction projects since design professionals are employed as special inspectors and larger contractors normally provide adequate supervision. Quality control is an assigned or designated responsibility and inspections are made prior to concealment. Although an irritant to both the contractor and owner, failed inspections and the re-do of improperly installed materials or systems is a remedy that precludes many subsequent problems.

At least one part of this tier of inspection and management may be missing on smaller projects. Design professionals are not normally engaged to monitor the work. To some extent their work is done by personnel in the local building departments. These individuals are

generally competent within their field or expertise and ensure that, for the required inspections, the work meets the minimum acceptable standards as set forth in the building code.[3]

However, the missing link in the small construction area is the supervisory effort of the contractor, the superintendent, or the foreman. The primary contractor usually has more than one project underway at the same time. While this individual is ultimately responsible for ensuring the quality and safety of the work, the actual knowledge of the requirements for each trade is not necessarily within the scope of the contractor's experience.[4] Projects are not generally large enough to afford full time or separate supervision, and workers may be entrusted with construction requirements that exceed their level of experience and knowledge. The thrust of this study was to determine if this problem could be obviated or relieved by the requirement for contractors to employ journeymen on small projects.

Scope and Limitations of the Study

The study is limited in two respects. The first, small construction projects, is reflected in the title and in the background information. If one leaves out categories such as highways, underground utilities, and other infrastructure related construction, the building construction industry is generally divided along the lines of commercial and residential. While it is possible to define small construction projects by a dollar amount, the study team decided that the normal commercial-residential break would provide a better resolution for purposes of data collection. This was based on both expectation and experience. Commercial projects tend to have greater involvement, at all stages, of the design professionals. There are types of equipments, finishes, and materials that require a high level of training and knowledge if they are to be installed properly. Building code requirements are also more stringent for commercial than residential projects. For example, the South Florida Building Code (SFBC) allows the installation of non-metallic shielded wiring in residential construction but expressly prohibits it elsewhere as permanent wiring.[5] The degree of training and skill required to fabricate and install conduit is certainly greater than that for draping wire and driving staples. It was for reasons such as this

that the team considered the degree of complexity of the work and the training required for even small commercial projects would make a dollar value definition of small-large not to be the proper one for the study.

The second limitation is in the amount and the type of information that could be obtained, digested, and which would be meaningful. This consideration reinforced the rationale for adopting the commercial-residential break. Building department records are generally maintained as to the type of construction. Residential, and to be more specific, single family residence, is a common type that requires the integration of most of the building trades. At the same time, it is an area in which the degree of supervision is commonly very low, and where individual trades are allowed to pursue the work without on site supervision. In many instances, the general contractor actually has no employees actually engaged in the construction of the structure, and all work is provided by specialty sub-contractors. Quality assurance, other than for cosmetic features, relies on the inspections done by the local building departments. Although there have been attempts to force the design professionals to take a greater responsibility in this area, in most instances there is no involvement by the design professionals once the original plans are permitted.[6]

The use of building department records to define large-small projects automatically excluded all projects that were not permitted, regardless of size. Both the SFBC and the Standard Building Code (SBC), the two building codes used throughout the state, exclude certain low dollar or non-life safety types of projects from the permitting process.[7] The plumber that comes to clear the sewer line is not normally required to obtain a permit: the plumber installing a hot water tank is. Consequently data which are related to the first project are not captured, even though it may be rather involved, while the data concerning the second are. Work which, by code, requires a permit but for which no permit is obtained is also excluded. Additionally, no work was done with data from units subordinate to country governments, such as cities or towns.

A final limitation is mentioned only for completeness. Some readers may consider the term 'journeyman' to include an explicit reference to the male sex. While there are increasing numbers of women in the trades, there do not appear to be many gender neutral terms to be in

common use in construction. 'Chairperson' as compared to 'Chairman' is a common use appellation that we have grown accustomed to. However, nowhere in the literature or legislation did the study team find reference to a 'journeyperson'. Consequently, the terms 'journeyman' and 'journeymen' are utilized throughout and are intended to include both men and women. Maintaining this same convention the authors abided by the convention of using the masculine form of the third person singular pronoun ('his' instead of 'his/her') with the intent that it included both genders.

The Study

Tasks

The project was broken into five primary tasks:

- The first task was to review the basic requirements for an individual to be considered as a journeyman.
- The second task was to address the duties and responsibilities that may be expected to devolve on designated journeymen if there is a requirement for their employment on a project.
- The third was to provide an assessment of the costs and benefits of requiring the presence of a journeyman on certain projects.
- The fourth task was to consider the entity that should be responsible for ensuring the presence of trained personnel on construction projects.
- The fifth task was to examine the available data to determine the availability of journeymen in construction occupations throughout the State.

Definition of a Journeyman

Whether or not a person is considered to be a journeyman depends upon one's definition of what a journeyman is. Using one dictionary, the primary definition is a person that is "a qualified mechanic or artisan who works for another."[8] In a second dictionary, the primary meaning is given as "one who has fully served an apprenticeship in a trade or craft and is a qualified worker in another's employ."[9] Yet another provides that a journeyman is "one who, having served his apprenticeship to a handicraft or trade, is qualified to work at it for a day's wages: a mechanic who has served his apprenticeship or learned his trade or handicraft, and works at it not on his own account but as the servant of employee or another...distinguished on one side from *apprentice*, on the other from *master*."[10]

Information received from trade associations as to the attributes of a journeyman was not uniform:

- "... an individual, working in an apprenticable area, who has successfully completed a state or federal recognized apprenticeship program, or who has worked the number of years required by recognized industry practice for the particular trade of occupation;"[11]
- "...a skilled craftsman who has completed an apprenticeship program;"[12]
- "...(an electrical) journeyman is an individual who works in the electrical industry and is qualified to do all phases of work, has completed an apprenticeship program, and has a certain amount of experience."[13]

The common thread throughout these is the necessity of an apprenticeship or of working in a field for which there are apprenticeships. Whether or not the individual has to complete apprenticeship training or can rely solely on field experience appears to depend upon the individual or organization furnishing the definition.

Florida State law has a similar definition. Within the purposes and requirements of the statute relating to training, journeyman is defined as "a person working in an apprenticable occupation who has successfully completed a registered apprenticeship program or who has worked the number of years required by established industry practices for the particular trade or occupation."[14] There is no requirement for testing, examination, or certification; but there is a requirement for the occupation to be one in which apprenticeship is normal.

The apprenticable occupations have been defined by the United States Department of Labor (USDOL), Bureau of Apprenticeship and Training and the same definition is utilized by the corresponding Florida agency. The USDOL "Officially Recognized Apprenticable Occupations List" contains approximately 850 apprenticable occupations ...from accordion maker to x-ray equipment tester ...including the various construction trades.[15] Also included in the listing is the "term" of the apprenticeship i.e. the minimum number of hours of apprenticeship for each trade. The various terms are specified in increments of 2000 hours, beginning at 2000 for some trades and ranging as high as 12,000 hours for other trades. The number of hours listed by the USDOL is also incorporated into apprenticeship programs that are

registered by the Florida Department of Labor and Employment Security, Division of Jobs and Benefits. Typical training hours for construction trades are shown in Table 1.

Table 1

TYPICAL TRAINING HOUR REQUIREMENTS[16]
CONSTRUCTION RELATED TRADES

Occupational Title	Training Hours*
Bricklayer	6,000
Carpenter	8,000
Electrician	8,000
Landscape Technician	4,000
Plumber	8,000
Roofer	4,000
Refrigeration Mechanic	6,000
Sheet Metal Worker	8,000

*A training hour requirement of 2,000 hours is equivalent of 1 year. The training hour requirement is normally a combination of formal instruction and on-the-job experience.

Statutory definitions as to the requirements to be considered a journeyman have been created in connection with specific legislation and necessarily correspond to the requirements of that particular legislation. Each municipality or separate jurisdiction that has enacted a journeyman licensing ordinance has, of necessity, defined the term for their own purpose. "The term *journeyman* shall mean any person who possesses the required skill, knowledge and experience, as evidenced by three (3) years' (sic) proven experience in the trade or craft, or education equivalent thereto, or a combination thereof, but not more than one-half of such experience may be education equivalent, and who has passed an examination in his or her particular trade or craft and possess a valid certificate of competency as a journeyman in such trade or craft."[17] This particular statutory definition has five requirements: skill; knowledge; experience and/or education; examination; and licensure from the jurisdiction. Notably lacking is the requirement that the trade be one that is covered by the USDOL standard definition of an

apprenticable occupations. Other local jurisdictions define journeymen in other terms and the result is inconsistency, both in definition and application of requirements throughout the state.

A matrix displaying the various definitions and requirements discussed is shown in Table 2.

Table 2
Definition Matrix

Defining Entity ⟹ **Requirement ⇓**	**Dictionary**	**Trade Association**	**Federal Law**	**State Law**	**Local Jurisdiction**
Apprenticable occupations	**X**	**X**	**X**	**X**	
Apprenticeship training	**X**	**mixed response**	**X**	**X** **but experience may be substituted**	**acceptable as substitute for part of experience**
Trade Experience	**X**	**X**	**X**	**X**	**X**
Skill	**X**	**X**			**X**
Examination					**X**
License					**X**

An examination of the matrix allows a statement of the definition of a journeyman that provides an insight into one of the problem areas associated with requiring journeymen on small construction projects:

> *A journeyman is an individual, employed in an apprenticable occupation, that has completed appropriate training and employment*

experience so that he possesses the skills necessary to work as a skilled craftsman in his trade.

Conspicuously lacking from this definition is the necessity for examination and licensure. Instead, there is a confluence of opinion that a journeyman is an individual that possess knowledge and skill that sets them apart from other workers and, at this point, examination and licensure is not a requirement. This leads to problems with identification and a lack of a consistent standard against which to measure the state of training, skill, and knowledge that the individual journeyman may possess.

There is one other detail, important to this study, that is missing from the common definition: the qualifications, ability, and effectiveness to act as a supervisor. The term journeyman does not necessarily or automatically assign a supervisory role to the individual worker. Assignments as supervisors are made by the employer, and not set forth in law or regulation.

Statutory Requirement

The State of Florida does not require either the licensure of journeymen or their presence on construction sites. The law does require the licensure of contractors. Licensed contractors, either firms or individuals, can be held accountable to their clients for the performance of work. They can also be held accountable to the licensing authority issuing their license and which oversees their activities. In the contractual setting, rights and liabilities flow from the contract, and the terms of the contract guide the parties in the performance of their duties and obligations arising from the contract. In the regulatory setting of the State of Florida, both firms (through the mechanism of hiring a licensed individual as a qualifying agent) and individuals acting as contractors are subject to regulation by the Construction Industry Licensing Board (CILB) or the local jurisdiction issuing the license. While contracting firms and individuals can be held accountable for workmanship and quality through contractual means and civil proceedings, the individual licensee acting as a qualifier cannot unless there is personal injury or property damage.[18]

Under Florida contracting law, qualifying agents are responsible for "supervision of all operations of the business: for all field work at all sites..."[19] Common usage of the language leads one to think that "supervision", as used in the statute implies actual direction and even physical presence at the job site. The dictionary definition, " supervise. to direct and inspect the performance of" clearly suggests this.[20] However, this is not the sense that is used by the CILB or other jurisdictions throughout the State. There is no definition of "supervise" or "supervision" in the Florida Statute regulating contracting. While there is no hard, fast rule as to what constitutes supervision, it is not currently interpreted to require the actual, physical presence of the contractor or the qualifying agent on the job site. Consequently, there is no current statewide rule, law, or regulation that the contractor or qualifying agent actually oversee or directs worker during the construction process. Owners may use civil proceedings and juries are free to determine what constitutes "reasonable" quality or supervision on a case by case basis.

The research team examined other reports and contacted other jurisdictions to determine where such statutes currently exist, both outside of and within the State. A study conducted by the Florida House of Representatives Committee on Regulatory Reform (FHRCRR), issued in January of 1991, indicated that there were twenty-one states (and the federal district) that issued statewide journeyman licenses for electricians.[21] The report also stated that "Each of these states also requires that a licensed contractor or licensed journeyman be on the job-site, or be represented in a certain minimum proportion among the job-site work force..." Additionally, the study noted that "an examination is required for electrical journeyman licensure in all (jurisdictions)..." and that there were additional experience requirements before one could take the examination. However, the study did not address the question of responsibilities and duties of licensed individuals.

Subsequent to this report the Committee Staff conducted a survey to determine which of the counties within Florida had licensing requirements for journeymen and whether or not they required the presence of journeymen on the site of construction projects. At the time that the results of the survey were originally published, only forty-eight of the counties (out of sixty-

seven) had responded.[22] Copies of the returned and completed surveys were obtained and the work was extended by the authors of this report. A portion of the results of the survey are shown in Table 3, below; a copy of the survey is included as Appendix A; and a more complete set of tabulated data from the survey is presented in Appendices B and C. Approximately one third of the counties in the state have both a licensure requirement for journeymen and a requirement for the presence journeymen on the construction site. A lesser number of counties issue licenses but have no requirement for any of the workers on a construction site to possess such a license. Finally, 40% of the counties in the state neither license nor require the presence of journeymen on the job-site for construction projects.

Table 3
Counties in Florida*
Journeyman Licensure Requirements and Journeyman on Site (JOS) Requirements

Counties that issue licenses, have a JOS requirement	Counties that issue licenses, have no JOS	Counties that issue no license, have no JOS
Alachua	Baker	Calhoun
Brevard	Bay	Citrus
Broward	Bradford	Columbia
Charlotte	Collier	Desoto
Clay	Gadsden	Dixie
Dade	Hernando	Flagler
Duval	Highlands	Franklin
Escambia	Hillsborough	Glades
Gilchrist	Holmes	Gulf
Indian River	Lake	Hamilton
Leon	Lee	Hardee
Manatee	Levy	Hendry
Marion	Nassau	Jackson
Martin	Okeechobee	Jefferson
Monroe	Seminole	Lafayette

Counties that issue licenses, **have a JOS requirement**	Counties that issue licenses, **have no JOS**	Counties that **issue no license, have no JOS**
Osceola	St. Johns	Liberty
Palm Beach	St. Lucie	Madison
Pinellas	Wakulla	Okaloosa
Polk		Pasco
Putman		Santa Rosa
Sarasota		Sumter
Volusia		Suwannee
		Taylor
		Union
		Walton
		Washington

* Data for Orange County were not provided.

One thing that is readily apparent from the table is that there should be an issue of "portability" or joint recognition of individuals licensed in one county and desiring to work in another. The Committee report that used the preliminary survey results noted that certain counties indicated "...a willingness to reciprocate..." but that industry sources had stated that non-reciprocity was more likely than not. That particular section of the report concluded with the statement that "The important thing to remember is what is called "reciprocity" is really almost never "pure" reciprocity, and that substantial barriers that hinder cross-jurisdictional construction commerce continue to exist..."[23]

The team examined the current state of journeyman licensure in the Southeastern region of the United Sates in order to learn from the experience of neighboring jurisdictions that may be competing for the same labor pool. The states that contacted were: Alabama, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. Alabama is the only one that has adopted a uniform system of licensing of journeymen for the major trades

of electrical, mechanical, and plumbing. Kentucky has adopted statewide licensing for the mechanical trades. Two states, Georgia and Louisiana, have adopted statewide licensing for the plumbing trade only. The remaining four states in this group of eight have not adopted any statewide licensing for journeymen.

Of the four states that have implemented some type of statewide licensing of journeymen, only one, Alabama, has preempted local jurisdictions from issuing separate or local licenses. However, the preemption does not apply to all three trades. For reasons that are unclear, they have chosen to allow the electrical journeyman to be licensed at the state or local level. The preemption in relation to plumbers and HVAC means there is a single tier journeyman licensing scheme at the state level and the counties are not permitted to issue local journeyman licenses. The other three states that have adopted journeyman licensing ...Georgia, Kentucky and Louisiana ... have what essentially amounts to a two-tier journeyman arrangement. A tradesman may obtain a state journeyman license or a local journeyman license.

The data obtained are tabulated below in Table 4.

Table 4
JOURNEYMAN LICENSURE REQUIREMENTS
Southeastern United States

State	Journeyman Licensing Requirement at the State Level	Journeyman Licensing Requirement at the Local Level
Alabama	Electrical, Plumbing, & HVAC	Preempted for Mechanical
Georgia	Plumbing only	Variable at the local level
Kentucky	Plumbing & HVAC	Variable local requirements for electrical. State wide model available
Louisiana	Plumbing	
Mississippi	No	Variable local requirements
North Carolina	No	Variable local requirements
South Carolina	No	Variable local requirements. State-wide model available
Tennessee	No	Variable local requirements

The data generally indicate the same lack of consistency in regulation and requirement that is found in Florida.

Finally, the authors examined county ordinances that imposed both licensure and on-site requirements. Unlike qualifying agents or individual contractors, there is no way that a journeyman, working on a construction site, can be absent from the job site except temporarily. Section 10-2 of the Code of Metropolitan Dade, County contains the requirements and restriction for contracting in the County. As such, it has been adopted into the SFBC (Dade County Version) so that the requirements for the presence, on-site, for journeymen is not only in an ordnance but also in the Building Code. The law and regulation establish that, for those trades for which journeymen are licensed, employers must maintain a ratio of not less than one journeyman for each three unlicensed tradesmen. Both the employer contractor and the qualifying agent for the firm are responsible for providing this ratio and failure to do so exposes both to fines and/or imprisonment.[24] Thus, not only does this and other similar local ordinances establish a requirement for licensure, but they also set forth a minimum acceptable number of licensed individuals on the job site.

Duties and Responsibilities of a Journeyman

Contractor Accountability and Liability

Contractors can be held liable to their clients for their actions in performing their contracts. They can also be held accountable to the licensing authority which issued their license and which oversees their activities. In the contractual setting, rights and liabilities flow from the parties contract. The terms of the contract guide the parties performance of their duties and obligations. The terms of the contract often contain an explicit procedure for dispute resolution. The parties may litigate their disputes before a court, or they may agree to have their disputes

settled through an alternative form of dispute resolution such as arbitration, mediation, mini-trial or whatever other mechanism is currently in fashion.

The licensing authority has certain other power to discipline license holders for failure to abide by the requirements of the statutes governing construction. This applies to both local and state licensing authorities. The State of Florida CILB, which regulates state licensed contractors, has the power to "place on probation or reprimand the licensee, revoke, suspend, or deny the issuance or renewal of the certificate or registration, require financial restitution to a consumer, impose an administrative fine not to exceed $5,000 per violation, require continuing education, or assess costs associated with investigation and prosecution."[25]

As employees journeymen may be held accountable to their employers, and as discussed below, they may also be held accountable to the licensing authority which issues their journeyman certification. There are also limited circumstances where journeymen as employees may be held liable for their actions to their employers customer.

Journeymen Accountability as Employees

The employee/employer relationship is a contractual one.[26] Employees and employers, like contractors and their customers, are governed by the terms of their explicit or implicit contract. Under normal circumstances, employees may be held accountable to their employer for the work which they perform. Under the legal doctrine of respondeat superior, employers may be held vicariously liable for the actions of their employee who are acting within the scope of their employment.[27] Absent intentional wrongdoing or negligence which results in personal injury or property damage, while working within the scope of their employment the employees are not liable to the employer's client or customer for their acts. However, employees who hold licenses may also be held accountable to the licensing authority for work which is done within the scope of their license. Therefore, if the employer's customer is dissatisfied with the quality of the work performed, the customer must look to the employer for relief. The licensed journeyman will be responsible to the licensing agency only for those things defined as pertaining to their trade.

To place this in a construction context, a carpenter who works for a construction company might construct the walls of a building improperly and not in accordance with the terms of the contract documents, plans and specifications. The building owner may claim that the company has breached its contract, but the owner cannot bring a claim against the carpenter as an individual for poor workmanship. Simply stated, a journeyman, as an employee is not responsible to the building owner for failing to provide proper supervision or for not ensuring proper quality of workmanship. A journeyman, like any other employee, may be held liable for intentional wrongful acts or negligent acts done within the scope of employment which result in personal injury of property damage. However, it is in the area of negligence, considering a superior or higher state of training, knowledge, and expertise, that the licensed journeyman may be exposed to a liability not currently experienced or considered.

Contractors, Qualifying Agents, and Journeymen

Corporations which wish to engage in the business of construction contracting must be licensed through an individual, known as a qualifying agent.[28] The corporation and the individual qualifying agent and individual contractors are subject to regulation by the Construction Industry Licensing Board.[29] The corporation (or the individual contractor) is also responsible to the customer for performing the obligations set out under their agreement. The individual qualifying agent, however, cannot be held personally liable to the corporation's customer for a breach of the customer's agreement with the corporation absent personal injury or property damage.[30] Absent such damage, the qualifying agent (or individual contractor) is only held accountable to the CILB.

Qualifying Agents (and individual contractors) are responsible for "supervision of all operations of the business organization; for all field work at all sites; and for financial matters, both for the organization in general and for each specific job."[31] While the language of the statue is inviting, one should not presume that "supervision" has a clear meaning. One might think that "supervision" as used in the statute implies actual, physical presence of the supervisor

at the job site. The dictionary meaning of "supervise" -- "to oversee (a process, work, workers, etc.) during execution or performance" suggests this.[32] However, this is not necessarily the sense which is used by the CILB. There is no definition of "supervise" or "supervision" in the definition section of Chapter 489.[33] A broader view of the term has been applied by the licensing authority, perhaps because any attempt to define the term would create more problems than it would solve. Consequently, while there is no hard and fast rule as to what constitutes supervision, it is not now interpreted to require the actual, physical presence of the qualifying agent or contractor on the job site, overseeing the workers during the execution of the work. By extension, the requirement to have journeymen on a job site does not constitute a directive that they act in a supervisory capacity.

Journeymen on the Job Requirements: A typical ordinance

Unlike qualifying agents, journeymen are required to be actually, physically on the job site. Interviews with attorneys from jurisdictions with such ordinances indicate that it is this 'on site' requirement which has motivated the ordinances to fill a perceived gap in qualifier supervision. A more conventional and defensible position would be to require the presence, on site, of individuals with the experience and knowledge to ensure installation of materials and equipment in a manner consistent with acceptable construction practice. As can be seen in the case of Dade County's journeyman ordinance, the requirement for the use of journeymen may implicitly add the responsibility for supervision, and thus liability, on an individual journeyman. From the perspective of a construction company charged with the requirement of hiring journeymen and seeing to it that a certain number of journeymen are on the job site, there is not only the added requirement of supervision and oversight, but the added concern about the liability involved in cases where it can be shown that the requisite number of journeymen were not present on the job site.

Chapter 10 of the Code of Metropolitan Dade County, Florida, contains requirements and restrictions for contracting in the county. Section 10-2 of the code defines journeyman, in pertinent part, as follows:

> *The term journeyman shall mean any person who possess the required skill, knowledge and experience, as evidenced by three (3) years' proven experience in the trade or craft, or education equivalent thereto, or a combination thereof, but not more than one-half of such experience may be education equivalent, and who has passed an examination in his or her particular trade or craft and possesses a valid certificate of competency as a journeyman in such trade or craft.*

For those trades which require journeymen, the statute requires a ratio of one journeyman for every three trainees. Both the employer contractor *and* the qualifying agent are responsible for providing the proper amount of journeymen at the job site. Failure to comply with the ordinance exposes the employer and qualifying agent to a fine not to exceed $500.00 or imprisonment in the county jail for up to 60 days or both.[34]

Journeyman Accountability and Liability

Clearly the journeyman requirement of the Dade County Code and those of similar ilk in other jurisdictions impose an additional responsibility, and thus exposure to liability, upon employer/contractors and qualifying agents to insure that a specified number of journeymen are on the job site. The question arises if the special status of the journeyman and the additional requirement to employ a certain number of journeyman affect the liability of the journeyman? A journeyman holds a special status as one with superior knowledge, expertise, ability and capability in a given trade. A journeyman may be both an employee and a license holder and may therefore be responsible to the licensing authority, to the employer and in certain circumstances (wrongful or negligent acts), to the employer/contractor's customer.

As an employee with superior skill and knowledge, a journeyman will be held to a higher duty of performance than an ordinary employee. It therefore follows that in cases of negligence

by an employee/journeyman, a higher standard of care will be presumed for the journeyman, and thus potentially greater liability. Additionally, as an employee who, because of superior skill and knowledge, commands a higher wage, the journeyman may well be held to a higher standard by the employer. As a license holder, certified by the local jurisdictions which now require the use of one or more journeyman on a construction site, the journeyman may face the loss of the license and possible monetary penalties due to infractions of the building code. Thus while the requirement for licensure and use of journeyman on job sites may be used to bridge the perceived gap of supervision, it also creates a possible increase in liability for the journeyman which did not previously exist.

The argument that the journeyman has a higher duty, hence increased exposure to liability, is particularly compelling in the presence of laws or regulations that set a ratio of journeymen to non-trained workers for a particular trade. Such ratios, implicitly and explicitly, suggest a supervisory role. When this is coupled with the requirement for examination and licensure as an expert in a trade, the situation is created wherein the journeyman has, to some extent, been assigned a portion of the duties of the qualifying agent or contractor. An assignment of duties carries with it the obligation to ensure that the duties are fulfilled. Whether or not a portion of the responsibility, hence liability, actually flows in such a scenario is a concept that will ultimately be tested by the courts.

Determinable Benefits and Costs of the Requirement for Journeymen On-Site

Inspections results

Direct measurement of the costs and benefits that may be derived from requiring journeymen on small construction projects is difficult at best and impossible except in specific cases. Costs for individual projects can be obtained by monitoring payrolls, including taxes and benefits, and segregating into categories of journeymen and non-journeymen. Benefits cannot be determined as easily. If construction tasks were repetitive, as are those in a factory, it would be possible to determine labor related benefits by controlled substitution of trained for untrained workers and measurements of the differences in productivity. Since construction tasks are typically not repetitive, the technique would have limited value for this study.

The authors decided that a cogent argument for measurement of journeymen effectiveness could be made by examination of the pass-fail rates for various building department inspections. Certain inspections are directly related to specific trades. By choosing inspections for a trade normally associated with apprenticeship training, examination, and licensure, a comparison of pass-fail rates with inspections results for a trade not subject to the same training or skill requirements can be performed. The data from the surveys initiated by the FHRCRR and completed during this project provided information on counties that required journeymen to be licensed and to be present on construction projects. In every case, the information showed that the electrical trade was one for which the licensure and training were required, while carpentry was not. Consequently it was decided to examine those two trades to determine if there were significant differences in the inspection pass-fail rates. The hypothesis was that if the passing rates for electrical inspections were significantly higher than for carpentry related items, a positive benefit could be assigned to the presence of the journeymen on the project.

Both the SFBC and SBC were examined to determine the commonality of required building department inspections for single family dwellings and a table of common required inspections was developed. It was immediately apparent that there were many required inspections that did not provide a measure of significant skill or training. A sidewalk inspection, for instance, may be necessary to ensure that the standards or plans and specifications requirements for reinforcing, thickness, or width are adhered to. On the other hand, it really does not present an opportunity to judge the capabilities of the carpenter that strings the forms. Consequently, the scope of the examination was focused on certain inspections which, in the opinion of the authors, would require the most training and expertise for the individuals in either trade to complete successfully. Specifically, the following inspections were considered to meet this requirement:

- Electrical rough-in inspection within the structure for the electrical journeyman;
- Framing for carpenters.

Other possibilities were considered but discarded as not being truly representative of a high level of skill for both trades. The framing inspection, in particular, takes place after all structural elements, including anchors and bracing, have been installed. From this point forward in the construction process workmanship and adherence to plans and specifications will be, at least in part, concealed by drywall or other finish products. Similarly, the inside electrical rough inspection is the last chance that the electrical inspector has to ensure that the workmanship and material installed meet the minimum acceptable code standards prior to concealment. From experience in the field, the authors considered that a pass-fail rate for these two inspections would most clearly demonstrate the relative competency of the workforces.

Data covering all permitted single family dwelling projects for the last five years were requested from four counties with journeymen licensure and journeymen on site requirements that they surveys indicated were enforced. Three of the counties (Duval, Charlotte, and Pinellas) provided the requested information in electronic format. Although officials in Dade County originally indicated that their data could be provided in short order at nominal cost, the information was not forthcoming for over six months, and then only at a cost beyond that which could be justified within the budget available for the project. Consequently the available data are only from counties which are regulated under the SBC.

The results of the data collation and reduction for the selected inspections are presented in Table 5. A more complete listing of the inspection results obtained from the counties is presented in Appendices D, E, and F.

Table 5
Inspection Passing Rates

Type of Inspection	County Passing Rate					
	Duval		Charlotte		Pinellas	
	number	passing rate	number	passing rate	number	passing rate
Framing	10,302	70.71%	2,585	81.2%	8,164	68.6%
Electrical Rough	6,753	98.7%	2,133	93.1%	6,719	88.3%

Intuitively, it is appealing that the number of framing inspections and the number of electrical rough inspections should be approximately the same. No investigation was conducted to determine why there is a difference. The tabulated data clearly reveal the following:

- *in every case, there is a higher inspection passing rate for the trade requiring journeymen on site.*

There are many factors that affect the inspection results other than the state of training and skills of the individuals involved. Two of the more important of these are the complexity of the work and the degree of supervision. The first of these is mitigated by restricting the analysis to single family dwellings, a rather common, uncomplicated type of construction. The second of these is mitigated by the shear size of the sample. The tabulation represents a total of over 36,000 individual projects and no conceivable argument can be made that it is not representative of all levels of supervision for the type of construction that is involved..

It can be argued that the selection of electrical and carpentry, and the restriction to selected inspections could result in a bias. If structural inspectors were more qualified than electrical inspectors, they could be expected to conduct more critical inspections, resulting in a lower passing rate. While it is not possible to entirely eliminate this possibility, the use of data from three different and geographically separated jurisdictions was an intentional effort to remove such an inclination from the results of the analysis.

Consequently the authors consider that it is possible to state with a reasonable degree of assuredness that which should be obvious: training makes a difference in the ability to successfully complete a task. Further, the requirement to employ trained individuals on construction projects presages the ability to successfully meet the minimum acceptable construction standards, namely the requirements of the Building Code. It should be noted, however, that no conclusion should be drawn beyond that. There is nothing in the data that indicates, or is meant to indicate, that the final quality of workmanship for a project is in any way affected by the presence of trained individuals, such as journeymen. The inference may be appealing, but the data do not support it. Similarly, there is nothing in the data that states that

the higher passing rates for the journeyman trade reflects a degree of supervision not present with the unlicensed carpenters.

Costs of failure

At the outset of this section it was stated that the quantification of benefits and costs was difficult if not impossible except for specific cases. However, certain generalizations can be made which will at least point out the very real costs of failed inspections and, by extension, the penalty of lower degrees of training and, possibly, supervision.

A total of forty-five construction firms, in the three counties for which inspection data were obtained, were contacted and solicited for information concerning wage rates. A compilation of the average of the wages reported by twenty-nine respondents, multiplied by a factor of 1.40 to approximate costs of applicable taxes and workers compensation insurance, is provided in Table 6. The data include both union and non-union shops. No additional effort was expended on comparisons with prevailing wage rates or to explain the differences between the wages paid. Similarly no data were collected on the actual experience levels for journeymen or helpers.

Table 6

Average Wages for Selected Occupations (Duval, Charlotte, and Pinellas Counties)

Trade/Skill Level	Adjusted Wage Rate[1]
Journeyman Carpenter	$17.32
Carpenter's Helper	$11.65
Journeyman Electrician	$18.37
Apprentice Electrician	$10.13

1. Average rate multiplied by 1.4

If one assumes that a failed structural framing or electrical rough inspection requires that a team, consisting of one journeyman and one helper/apprentice, devote one day to remedy the defect, then the labor costs can be calculated:

- framing ($17.32 + $11.65)8 = $ 233.76
- electrical ($18.37 + $10.13)8 = $ 228.00

Such calculations are, of course, rudimentary and do not include the very real cost of lost time, wasted material, and overhead. Still they represent a basic, or minimum, cost that is lost due to failed inspections and that can be used to indicate the seriousness of the problem. At the extreme, if the rate of the structural framing inspection failures in the three counties surveyed were brought to the same level as the rough electrical inspections failures through the use of better trained and/or supervised personnel, the projected labor savings would amount to $1.25 million over the period of the inspections that were reported. Extrapolating to a state-wide level and using weights based upon population, the cost avoidance by improving the carpenter skills/supervisory level, as measured by this two inspections over the time frame examined, would be approximately ten million dollars.[35]

Enforcement for Journeymen on Site Requirements

The discussion thus far has indicated what constitutes a journeyman, what are the duties and possible liabilities that one may logically expect of a journeyman on a construction site, and the benefits one can logically expect from having better trained and more experienced individuals on a project. The question that the authors considered in this section of the study was the establishment and enforcement of any law, regulation, or contractual obligation to actually have journeymen as a part of the work force on a project.

Florida operates under a two tier contractor licensing system; state wide and local. At the state level, the CILB recognizes contractors operating in 19 different work categories. Contractors *certified* by the CILB in one or more of these categories may contract for the appropriate type of work in any jurisdiction within the state without further examination or

qualification. Contractors *registered* by the CILB hold a certificate of competency in one of the 19 categories which has been granted by a specific jurisdiction or county. Registered contractors can only contract for work within that jurisdiction. There is actually a third tier of contractors not generally considered; those that hold a specialty license (certificate of competency) in a category not recognized by the CILB.[36] Like the registered contractors, these can only operate in the specific jurisdiction that granted their certificate.

The statute that originated the category of certified contractors was enacted in 1967, partly due to the confusion resulting from each jurisdiction instituting disparate and peculiar local requirements for a contracting license. A salient provision of the act, as amended over the years, is that *certified* contractors are exempt from most local building industry regulations and disciplinary proceedings. Local jurisdictions may only penalize certified contractors for violations of the building code, not for violations of local building ordinances. Generally, and in the case of code violations, the only form a locally assessed penalty can take is loss of ability to obtain building permits in that jurisdiction. Infractions of the local building and contracting law or regulations that are not in the building code have to be referred to the CILB for action. In short, excepting for building code standards, certified contractors are answerable primarily to their customers and the CILB. On the other hand, registered and other local contractors are subject to local regulation can be disciplined for infractions of the local building ordinances by local authorities.

The data of Table 3, above, indicated that one third of the counties in the state have requirements that journeymen be utilized on construction projects. However, of these, only six indicated that they have adopted this as a part of the building code. Consequently, the other sixteen counties that require journeymen on the construction site have no effective means for actually enforcing the ordinance or regulation against state certified contractors. They may enforce the rule against locally licensed and registered contractors.

Any discussion of the enforcement of journeyman on site requirements ultimately revolves around the issue of responsibility. Construction licensing laws, regulations, and building codes are based upon the concept that regulation is required to ensure public safety. In Florida, the interest of the State has been to ensure that, through contractor licensing and

adoption of building codes, the safety of the public was ensured by licensure, plan review, supervision, and inspection. Both the State and local jurisdictions share oversight of the system that has emerged. Table 7, presented below, is a responsibility matrix which provides insight to certain of the responsibilities of the participants in the construction process.

Table 7

Current Responsibilities Matrix

Entity → Function ↓	State	Local Jurisdiction	Owner	Design Professional	Contractor
Licensure to ensure health and safety matters	X	X			
Plans Adherence to Building Code				X	
Plans Review for Code Requirement		X		X	
Construction for Code and Plans Requirement		X[1]		X[1]	X
Quality of Materials			X	X	X[2]
Quality of Workmanship					X

1. Inspection may be carried out by the local jurisdiction or the design professional, depending upon the terms of the contract and arrangements with the building official.

2. Only to the extent that the material provided is consistent with the plans, specifications, and building code.

The table clearly indicates that, under existing law and regulation in the State, the responsibility for the quality of workmanship on a construction project rests solely with the contractor. This in no way denigrates the owner's or design professional's interest in the quality

of workmanship. However, their role is typically limited to accepting or rejecting the work, not specifying the workers, the trades, the training, or the individuals that will actually prosecute the effort.

Construction contract specifications are often replete with statements on the quality of workmanship that is desired. "...will be installed in a neat and workmanlike manner ...workmanship shall be of the highest quality ...joints shall be properly fitted..." Standard texts are equally replete with statements that such phrases are unenforceable.[37]

If the thrust of the requirement for journeymen on site is, in fact, related to public safety, then the interest of the State and the local jurisdictions should be to provide examination and licensure. That block is already indicated in the responsibility matrix of Table 7. Licensure includes not only the establishment of licensure procedures but also the oversight to ensure that licensed individuals and firms are performing the work. However, if the interest of the State and local jurisdictions is to improve the quality of workmanship, then this is a substitution of the opinion and judgement of government officials for that of the contractor and places these individuals between the contractor and the owner.

It has been noted elsewhere in this report that the law and regulations requiring the qualifier for a contracting firm exercise supervision does not necessarily require that individuals presence on a project. A law or regulation adopted to ensure supervision by journeymen is apparently in contradiction to this precedent. Unless set forth explicitly in law or regulation, the presence of a journeyman on site does not ensure supervisory effort on the part of the individual. Rather it supposes that such will occur.

It has also been established in Florida law that building departments and their employees bear no responsibility to owners for construction which, although reviewed, approved, and inspected by building departments, was designed and constructed contrary to the building code.[38] Surely this would extend to the quality of the construction, given that it met the acceptable minimum standards established by a building code. Consequently it is difficult to make a cogent argument for laws or regulations requiring journeymen on site, and a particular ratio of journeymen to non-journeymen for a particular trade, based on any other rationale than public safety.

The Availability of Trained Personnel

The study team obtained Statewide occupational employment projections from the Florida department of Labor and Employment Security, Division of Jobs and Benefits, Bureau of Labor Market Information. The data are the most recent provided by that organization, and represent occupational employment as of 1994, and employment projections for the year 2005.[39] The projections made are based on the assumptions that "Construction (in Florida) will be one of the slowest growing major industry divisions...due to a slow down in population growth and the decline of household formations." The Bureau noted that specialty trade contractors, i.e. "...plumbers, electricians, roofers, etc..." will account for over three fourths of new construction job openings in the state due to the trend from in-house work done by general contractors to subcontracting for all but the management of projects. Table 8 presents their projections for overall construction employment in the state.

Table 8

State of Florida Construction Industry Employment
1994 Average and 2005 Projected[40]

Construction Employment	1994	2005	CHANGE	PER CENT CHANGE
Total Construction Employment	295,834	330,952	35,118	11.87
General Building Contractors	67,129	71,443	4,314	6.43
Other General Contractors	39,813	44,124	4,311	10.83
Specialty Trade Contractors	188,892	215,385	26,493	14.03

Further analysis of the data, by trade, utilizing figures furnished by the same organization but restricted to residential building construction, indicate that only one fifth of the workers in the State that are considered carpenters work in residential construction. Data for the

construction specialty trades (electricians, air conditioning mechanics, etc.) are not similarly segregated.

An examination of the changes that are expected to occur in the construction occupational fields was conducted. Selected data from that examination, limited to residential construction, are displayed in Table 9. Data for other residential construction related trades, such as electricians, are not available in a similar format but rather are aggregated as specialty contractors, not limited to residential work. However, the import of the data are clear. The projected growth in the work force for residential construction is minimal. To the extent that residential construction is representative of small construction projects, a similar trend can be forecast for that part of the industry.

Table 9

Residential Construction Occupational Employment Projections
State of Florida

Occupation	1994	2005	Total Increase	Average Annual Increase	Due to Growth	Due to Separation
Carpenter	8,778	9,285	507	114	47	67
Carpenter Helper	4,673	4,943	270	61	25	36
Plumber	555	587	32	7	3	4
Concrete & Terrazzo	690	730	40	9	4	5

Similar data for other parts of the construction work force considered as a whole, and not limited to only residential or other screening to ensure small construction projects, yield the results displayed in Table 10.

Table 10

Occupational Employment Estimates
State of Florida Construction Related Trades[41]

Occupation	1994	2005	Total Increase	Average Annual Openings[1]	Due to Growth[1]	Due to Separation[1]
Electrician	18,312	21,689	3,377	703	307	396
Drywall Installer	4,004	4,186	182	119	17	102
Roofer	6,619	6,922	303	103	27	76
Glazier	2,274	2,600	326	72	30	42
Painter/Paper Hanger	6,483	7,226	743	157	70	87
Plumber	8,749	9,620	871	198	79	119

1. Calculations for these columns are derived from similar calculations contained in "Florida Industry and Occupational Employment Projections, 1994-2005", published by the same Bureau.

The data displayed in the Tables 9 and 10 are not inclusive of all construction trades. Equally, since there is no requirement in any jurisdiction for journeymen drywall installers, glaziers, or paper hangers, a part of the data are not necessary for this study. However, it is presented to show the trends in growth and employment industry wide.

Due to differences in the manner in which categories are reported and aggregated by various agencies, a one to one tracking of between the number of licensed journeymen and the number of individuals reported in various trades cannot be realized. Still, one can utilize the electrician employment data to examine the relationship between those employed in 1994, and those that might have been employed if the examination, licensure, and on site requirements were extended throughout the state.

The number of electricians employed in Florida in 1994 was reported as 18,312 while data reported by the counties requiring licensed electrical journeymen indicates there were 16,125 license holders. (Note that this latter figure is "soft" to the extent that part of the data were gathered in 1995 by the legislative staff, part in 1996 by the project team.) Given that:

- 26 of the counties, whose employment data are included in the number of electricians employed, do not examine or license journeymen, and
- that some, albeit small, percentage of the 18,312 electricians held a contractors license
- that the co-mingling of 1994-96 data does not lead to totally accurate results,

the spread between the numbers reported licensed (16,125) and employed (18,312) is not large. An estimate of the total number of individuals in the state that could be licensed as a journeymen in the electrical field can be made by population ratios. If this is done, the statewide potential for electrical journeymen in 1994 was approximately 18,286, which is not meaningfully different than the number reported as being employed in the field.

Data manipulation is always fraught with error, and these calculations must be viewed with a certain amount of scepticism. However, the obvious inference is that an extension of the requirement for journeyman examinations, licensure, and on site requirements would not result in a shortage of trained electricians. It is difficult to extrapolate this further and say that the same would hold true for all of trades. However, common micro-economic theory tells us that, absent an artificial constraint or other type of barrier, a shortfall will not exist for an extended period of time in any labor field.

Extension of the Journeyman Concept

Throughout the course of this project the study team noted, time and time again, the lack of consistency amongst jurisdictions with respect to laws, codes, and regulations affecting journeymen. One of the more surprising items is that, despite the fact carpenters constituted nearly a quarter of the number of people working in the construction trades in Florida in 1994, none of the counties (and none of the states surveyed) included any requirements for journeymen carpenters. In the opening to this report the authors recited problems, primarily in the carpentry

area, that were contributors to the damage resulting from major storms. The inspection data cited in the body of the report make it obvious that carpenters fail certain inspections at a greater frequency than do electricians. These facts suggest that the concept of journeymen examination and licensure, if warranted under any circumstances, should be extended to trades other than electrical and mechanical.

Findings and Conclusions

1. *Definition of a journeyman*

   The study team found that there was a consensus as to the definition of a journeyman except for the requirement for licensure and examination. Using the definition matrix, presented in the body of the report, the team was able to enunciate a concise and inclusive definition consistent with federal and state law and regulation. However, based upon the documentation that was reviewed, the team considers that, for purposes of the construction industry, the definition is insufficient. The requirement for examination and subsequent licensure is the only control that the industry and governmental organizations have to enforce a minimum acceptable standard for an individual to be classified as a journeyman.

2. *Examination and Licensure for Journeymen*

   The study established there is a lack of consistency between states and, within Florida, between local jurisdictions as to the requirement for examination and licensure of journeymen. Additionally, the jurisdictions that do have an examination and licensure requirement, do not include carpenters as one of the licensed trades. A survey of eight Southeastern states indicated that four had some form of statewide licensing for at least one trade, while the other four did not. Only one state (Alabama) required licensing for all of the electrical and mechanical trades. Within the State of Florida, forty counties have examination and licensure for journeymen while twenty-six do not. (The data for Orange County were not provided.)

3. *Regulations and Laws Requiring Journeymen on Site*

   The study also established a lack of consistency between counties in the State of Florida, as to the requirement for having journeymen on the construction site. The lack of consistency is reminiscent of the situation that was present, with respect to the licensing

of contractors, prior to the enactment of the statewide contractor licensing law. To the extent that only county building departments were surveyed, the requirements of smaller jurisdictions is unknown.

4. *Duties and Responsibilities the Devolve Upon a Journeyman*

The study found that there is a clear pattern, established in law, that employees are not normally responsible (liable) to the employer's customers or clients for acts performed on behalf of the employer. Construction contracts, written or implicit, are between the customer and the contractor. Absent intentional wrong doing or negligence, the journeyman is not responsible to the customer for damages suffered due to the work prosecuted under the contract. If the customer is dissatisfied with the work, the customer must look to the contractor for relief. However, while the courts have held that "supervision" by the contractor or the qualifying agent does not require the presence of this individual on site, some local jurisdictions have adopted laws and regulations requiring the presence of journeymen, and in specific ratios. Under the legal doctrine of respondeat superior, journeymen should not be expected to assume any of the liability for the work. However, it has not been decided if the physical presence requirement will entail additional liability for the licensed journeyman due to lack of supervision. This aspect becomes particularly worrisome in the event of accidents.

5. *Monetary Costs and Benefits*

The study showed that approximations can be made of the monetary benefit derived from requiring journeymen on site. Actual, hard data can only be derived on a job by cost comparison. In the construction industry, where identical work and projects are rare, a refinement of the data using standard statistical quality control techniques is probably meaningless.

6. *Enforcement of Examination, Licensure, and Journeymen on Site Requirements*

The basis for the State law and regulations governing the construction industry in Florida is the safety and welfare of the public. Nowhere in the basic statute is there mention of the intent to improve the quality of the workmanship. Indeed, discussions on the quality of materials and workmanship provided are a matter of concern to the contractor and the customer. The worker is, by common law, shielded from such complaints. If the intent of placing statutory requirements for the presence of journeymen on construction sites is a public safety and welfare issue, then this may be a proper exercise of governmental power. If, however, the intent is to provide a layer of supervision in order to improve the quality of supervision and workmanship, a strong case can be made that this is an unwarranted intrusion on the part of the government. Current State law and regulations provide for the disciplining of contractors and qualifying agents who violate provisions of the contracting law, including provision of the necessary supervision. Civil courts and tort law provide the means for customers to be made whole in the case of breaches of contract, including workmanship and quality of materials.

7. *Availability of Trained Personnel*

The data are not available to allow a reasonable forecast of a shortage of trained personnel should state-wide laws or regulations be adopted to require the presence of journeymen on construction sites. There are three factors which preclude such an analysis. First, there is no mandatory state-wide registration of individuals with the training and experience required to be considered a journeyman. Secondly, there are only a limited number of counties that require the use of journeymen on site. While a third of the counties have adopted the journeyman on site requirement, only six have done so in a way that allows it to be enforced with respect to certified contractors. Consequently, there is no complete data base from which to obtain either the number of existing workers that could qualify as journeymen or the numbers so employed. Finally, data received and presented elsewhere in the report on the number of workers in various construction trades do not coincide with the "gut" feeling of those in the construction

industry. Interviews with individual contractors, trade associations, and building departments result in the unmistakable concern that there are insufficient trained workers available. Unlike scientifically provable fact (the derivation of $\prod$ comes to mind) the facts were not uncovered to support a conclusion in this area.

Recommendations

The authors make the following specific recommendations based upon the facts and the conclusions set forth in the report:

1. That appropriate state-wide law or regulations be formulated to codify the requirement for a specific level of training, experience, examination, and licensure before an individual may be considered to be a journeyman in the construction trades.

As described in the report, there is a lack of commonality of definition, examination and licensure requirements for journeymen among the various counties in Florida. The current situation parallels that which led to the establishment of the Construction Industry Licensing Board.

2. That an appropriate state-wide policy be established, and codified if required, as to the requirement for the employment of journeymen on construction sites.

At present there is not a consensus as to the rationale for certain local jurisdictions requiring journeymen on the construction site while other do not. If the rationale is for public safety and welfare, then the requirement should be state-wide. If the rationale is for improvement of the construction process, then the intrusion of the government into the contractual relationship between the contractor and the customer is unwarranted. In this latter case, the responsibility for workmanship and quality remains with the contractor and the requirement for a journeyman on site does not shift the responsibility.

3. An in depth study of the availability of trained construction industry tradesmen in Florida should be undertaken.

The construction industry is one of the largest industries in the State of Florida. The availability and use of trained professionals is the means to ensure quality construction. The study is required to know the actual deficit, if one exists, so that adequate training programs can be put in place.

END NOTES

1. For a discussion of the damage caused by Hurricane Andrew the reader is referred to the proceedings of a symposium held at Florida International University on March 1 & 2, 1993. Copies of "Lessons Learned from Hurricane Andrew" may be obtained from the Department of Construction Management, Florida International University, Miami, FL 33199, for the cost of reproduction.

2. Proceedings, "The Aspen Summit, May 18 & 19, 1995". National Center for Construction Education & Research: 1300 N 17th St., Rossyln, VA 22209.

3. A survey of architectural and engineering firms within the State, completed in 1991, indicated that only 43% of the respondents considered that building inspectors were qualified in their respective areas. However, when building officials were asked to rate their personnel, not one single individual rated inspectors as unqualified. BCIAC report "Code Enforcement: Scope and Extent of Problem and Recommendations for Solutions." Barnes, W.C., Mitrani, J.D., & Dye, J. M. (1992). Technical Publication No. 105, p 25. Miami: Florida International University Department of Construction Management.

4. For a discussion of the role of the qualifying agent, see Barnes, W. C., & Leiby, L. R. (1993). The Role and Liability of the Qualifying Agent in a Corporate Structure. Technical Publication No. 110. Miami: Florida International University Department of Construction Management.

5. South Florida Building Code, Broward County edition, 1994 revision. Sec. 4507.1

6. South Florida Building Code, Dade Country edition, 1994 revision. Sec. 307.2

7. A tabulation of typical exclusions and the differences between the codes is presented in the BCIAC report "Building Permit Requirements in Dade and Broward Counties: Framework for a Model Permitting System." Dye, J. M., Mitrani, J.D., and Glasser, C. (1995). Technical Publication No. 118, pg 14+. Miami: Florida International University Department of Construction Management.

8. The Concise Oxford Dictionary of Current English, 9th ed., p --- (1995). City: Clarendon Press.

9. The American Heritage Dictionary p 691 (1985). Boston: Houghton Mifflin Company.

10. The Oxford English Dictionary, 2nd edt. (1989). New York: Clarendon Press.

11. Associated Builders and Contractors representative.

12. Associated General Contractors representative.

13. International Union of Electrical Workers, Local 349, representative.

14. Chapter 446, FS, Sect 446.021(4)

15. "Officially Recognized Apprenticable Occupations List" (April, 1996). Bureau of Apprenticeship and Training, U. S. Department of Labor.

16. "Officially Recognized Apprenticable Occupations List" (April, 1996). Bureau of Apprenticeship and Training, U. S. Department of Labor.

17. Code of Metropolitan Dade County § 10-2X.

18. Murphy v N Sinha Corp., 644 So2d 983 (Fla 1994).

19. §489.1195, Fla. Stat. (1993)

20. The American Heritage Dictionary p 1221 (1985). Boston: Houghton Mifflin Company.

21. "Issues Associated with Proposed Establishment of a Voluntary, State-wide Journeyman Electrician's License."(January 1991), pg 7. Staff Report of the Florida House of Representatives Committee on Regulatory Reform.

22. "Jurisdictional Control Over Statewide Contractors." (1996). Staff Report of the Florida House of Representatives Committee on Regulatory Reform.

23. ibid, pg 11-12.

24. §1-5, Code of Metropolitan Dade County, Fla.

25. §489.129, Fla. Stat. (1993)

26. 2Fla, Jur 2d Agency and Employment §122 (1977)

27. 2Fla, Jur 2d Agency and Employment §203 (1977)

28. §489.119, Fla. Stat. (1993)

29. §489.107, Fla. Stat. (1993)

30. Murthy v. N Sinha Corp., 644 So2d 983 (Fla. 1994)

31. §489.1195, Fla. Stat. (1993)

32. Random House College Dictionary (1977). Random House: New York

33. §489.105, Fla. Stat. (1993)

34. Code of Metropolitan Dade County, Fla. §1-5.

35. Population data were taken from "Florida Estimates of Population, April 1, 1995" (Feb 1., 1996). Bureau of Economic and Business Research. Gainesville: University of Florida.

36. The total number of different categories of licenses issued by the State and the separate jurisdictions is probably not known. One county recently surveyed had over one hundred and forty different categories. For a discussion of the problem, see Morad, A. A., & Mitrani, J. D. (1992). "Local Licensing in the State of Florida."Technical Publication 106. Miami: Florida International University Department of Construction Management.

37. As an example: Fisk, E. R. (1992). Construction Project Administration, 4th edt., p 108-9. Prentice Hall: Englewood Cliffs, NJ.

38. Trianon v. City of Hialeah, Fl Supreme Ct. No.63115 (Fla. 1985)

39. "Florida Industry and Occupational Projections: 1994-2005." (June 1996). Florida Department of Labor, Bureau of Labor Market Information, Suite 200, Hartman Building, 2012 Capital Circle, SE, Tallahassee, FL 32399-2151.

40. ibid., pg 11.

41. Data furnished by Bureau of Labor Market Information Florida Department of Labor and Employment Security, on October 29, 1996.

Appendix A
Survey Instrument Utilized by the Florida House of Representatives
Committee on Regulatory Reform

_____COUNTY

NAME OF RESPONDENT:

TITLE/POSITION:

ADDRESS:

PHONE #'S, including SUNCOM and FAX:

NAME OF AGENCY/DEPARTMENT/OFFICE:

1.) **Does <u>your</u> jurisdiction issue a journeyman license?**

_____YES _____NO

If no, indicate response, and go to question #5.

If yes:

a) How many licensees are there in each of the following categories?

Electrical _____ Plumbing _____ Mechanical _____ Other _____

b) What are the license criteria?

1. Examination? _____YES _____NO

   a. If yes, who produces examination?

   b. What is the examination fee?

   c. What is the license/application fee(s)?

   d. Any specialized or unique elements to the exam (i.e., practical component to examination, questions specially adapted to the local building code, etc.)? If yes, please explain.

e. Does the exam test business knowledge (knowledge necessary to run your own business)?

_____YES _____ NO

2. Is experience required before sitting for exam? If yes, how much? Any special conditions or proof required?

3. Any other licensure qualification requirements?

2) Is there a requirement that a journeyman be present on each job site?

_____ YES _____NO

If no, indicate response, and go to question #3.

If yes:

a) Please describe the ordinance (including the trade categories it applies to), and provide a copy. When was it first enacted?

b) Is the journeyman ordinance within the county's "general" ordinances, or in the building code?

_____General Ordinances _____Building Code

c) If in the building code, what year it was placed there: _____

d) If in the building code, do you enforce it against state certified contractors?

_____YES _____NO

e) In the last year, how many complaints were filed, disciplinary cases conducted, actual discipline imposed, and permit-pulling privileges restricted or revoked against state-certified contractors, locally licensed contractors, and journeymen

Appendix A
Survey Instrument Utilized by the Florida House of Representatives
Committee on Regulatory Reform

For journeymen violations:

	# of complaints filed	# with legal sufficiency found, disciplinary cases conducted	#of any type of actual discipline imposed	#of permit-pulling privileges restricted or revoked
State-certified contractors	_____	_____	_____	_____
Locally-licensed contractors	_____	_____	_____	_____
Journeymen	_____	_____	_____	_____

f) Are there any other locally-created professional licensure ordinance provisions In the building code (i.e., continuing education, disciplinary grounds, examination requirements, etc.)? If yes, please describe.

3) **Does your county reciprocate (accept the journeymen license issued by any other jurisdictions)?**

_____YES _____NO

If no, indicate response, and go to question #5.

If yes:

a) List the other jurisdictions with whom there is reciprocity:

b) On exactly what elements, and with what limitations, is there reciprocity?

1. Simply accept another jurisdiction's license, and make no other conditions or fees?

2. Accept another jurisdiction's license, but charge a "fee" for the clerical expense of registration or investigation, if so, how much?

3. Waive exam only (and only if from same examination vendor), but still have other requirements (such as years of experience) that must be complied with?

   If yes, what other requirements must be complied with, including fees?

4)(a) Describe the process - including expected time frame - for a person licensed as a contractor or journeyman elsewhere to be allowed to work as a journeyman in your jurisdiction. Do you provide some avenue to allow them to work temporarily while they pursue full compliance? If yes, please describe.

b) Do you accept a **certified** contractor in the particular trade as a journeyman, for purposes of complying with your journeyman-on-site requirement?

c) Do you accept a **registered** contractor (registered in your county or elsewhere) in the particular trade as a journeyman, for purposes of complying with your journeyman-on-site requirement?

Appendix A
Survey Instrument Utilized by the Florida House of Representatives
Committee on Regulatory Reform

5) **Do you support, oppose, or have no opinion on the issue of whether it would be acceptable for the state to offer a statewide journeyman license, (on a voluntary basis) as an alternative to local journeyman licensure requirements?**

_____ SUPPORT

_____ SUPPORT, provided the examination and experience standards for journeyman licensure are as high as are provided in this county.

_____OPPOSE

_____ NO OPINION

If you oppose, please provide the reasons for your opposition.

6) **Do you believe that there are a sufficient number of locally licensed journeymen for the construction needs in your jurisdiction, if one or more were required to be on every construction job site relating to that trade? Please explain.**

Appendix A
Survey Instrument Utilized by the Florida House of Representatives
Committee on Regulatory Reform

7) **Do you believe that local jurisdictions should have the legal authority to require a specific number of journeymen on each job site?**

8) **Do you believe that local jurisdictions should be able to place journeyman requirements in their building code, thereby possibly asserting disciplinary authority and control over state certified contractors?**

9) **Do you believe that local jurisdictions should be able to place <u>other</u> local professional and regulatory provisions (in addition to journeyman requirements) in their building code, thereby possibly asserting disciplinary authority and a variety of control over state certified contractors?**

10) **Please provide, for the last year, the number (approximate, if necessary) of:**

a) Building permits issued (all categories)
b) Electrical permits issued
c) Plumbing permits issued
d) Mechanical/AC permits issued

Appendix A
Survey Instrument Utilized by the Florida House of Representatives Committee on Regulatory Reform

11) Please provide any other comments or information you wish to include.

APPENDIX B:
SURVEY RESULTS REPORTED BY COUNTIES THAT LICENSE JOURNEYMEN AND HAVE A JOS REQUIREMENT

County Name	Number of Electrical	Number of Mechanical	Number of Plumbing	Exam req.	Who writes exam	Exam Fee - $	License Fee - $	Experience req. (yrs)	Code or general law	Do you recipro-cate?	Opinion - voluntary statewide Jman license	Sufficient jman available?	Set # of jman on job?	# Permits (all categories) issued - recent year
Alachua	no info													
Brevard	479	133	154	yes	Block	50	50	4	gen	yes	support	?	yes	7,883
Broward	1114	611	889	yes	both	58-65	?	3-4	both	yes	support if	NA	yes	NA
Charlotte	177	69	4	yes	Block	45	50	4	gen	no	support	?	yes	13,182
Clay	1077	342	401	yes	Block	50	20	4	gen	yes	support if	yes	no	3,453
Dade	3192	1471	2224	yes	NAI	240	NA	3	code	yes	support if	yes	yes	34,950
Duval (1)	1823	754	987	yes	NAI	65	?	4	gen	yes	?	?	?	19,447
Escambia (2)	20	135	0	yes	Block	100	?	4	gen	yes	support if	yes	no	7,700
Gilchrist	1	1	1	yes	Board	10	10	10	code	yes	no opinion	yes	no	521
Indian River	337	133	na	yes	Block	45	1	4	gen	yes	support if	yes	yes	3,863
Leon	455	325	na	yes	Block	45	75	4	gen	no	support if	yes	yes	1,870
Manatee	na	118	na	yes	Block	45	40	3	gen	yes	oppose	no	yes	10,000
Marion	3	3	3	yes	Block	45	80	4	gen	yes	support if	?	yes	9,783
Martin	662	240	na	yes	Block	50	25	4	gen	yes	support	yes	yes	781
Monroe	199	22	35	yes	Block	150	none	3	gen	yes	support if	no	yes	4,237
Osceola	351	83	90	yes	Block	50	20	3	gen	yes	support if	no	no	6,204
Palm Beach (5)	2300	2100	na	yes	Block	45	100	4	code	yes	oppose	yes	no	25,747
Pinellas (3)	?	?	?	yes	Block	?	50	4	code	yes	support if	yes	?	?
Polk (4)	10	0	0	yes	Block	50	25	2	code	yes	oppose	no	yes	3,092
Putman	103	31	28	yes	Block	35	65	4	gen	yes	support if	no	no	1,366
Sarasota	no data													
Volusia	846	344	118	yes	Block	50	25	3-4	gen	yes	support	yes	yes	5,147
Total	13,149	6,915	4,934											

APPENDIX C:
SURVEY RESULTS REPORTED BY COUNTIES THAT LICENSE JOURNEYMEN BUT HAVE NO JOS REQUIREMENT

County Name	Number of Electrical	Number of Mechanical	Number of Plumbing	Exam req.	Who writes exam	Exam Fee -$	License Fee -$	Experience req. (yrs)	Code or general law?	Do you reciprocate?	Opinion-voluntary statewide Jman license?	Sufficient jman available?	Set # of jman on job?	# Permits (all categories) issued - recent year
Baker	13	4	6	yes	Block	50--125	25	4	?	yes	no opinion	no	yes	622
Bay	214	84	42	yes	Block	45	55	3	?	yes	yes	yes	no	2,504
Bradford	10	5	5	yes	Block	45	30	?	?	yes	support	no	yes	1,186
Collier	184	47	30	yes	Block	70	15	4	?	yes	?	?	?	16,529
Gadsden														
Hernando														
Highlands	28	12	0	yes	Block	45	25	4	?	yes	?	yes	yes	10,000
Hillsborough	409	236	-	yes	Block	45	100	4	?	yes	support	yes	yes	23,467
Holmes	3	3	5	yes	Bu Off	25	?	?	?	yes	support if	?	?	160
Lake	67	4	-	yes	Block	45	?	?	?	?	?	?	?	?
Lee	206	64	0	yes	Block	95	0	4	?	no	oppose	no	no	12,150
Levy	218	136	45	yes	Block	40	10	3	?	yes	support	no	yes	1,300
Nassau	898	209	301	yes	Block	50	25	2	?	yes	support if	no	yes	944
Okeechobee	?	?	?	?	?	?	?	?	?	no	support	no	yes	3,567
Seminole	300	350	200	yes	Block	?	15	4	code	yes	support	no	no	14,768
St. Johns	771	289	222	yes	Block	95	?	?	gen	yes	support if	yes	yes	4,093
St. Lucie	155	10	na	yes	Block	45	25	none	?	yes	support	no	yes	2,552
Wakulla	?	?	-	Yes	Block	?	20	4	?	no	support if	yes	yes	1,102

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

The following is a numerical tabulation of individual inspection records provided by:

Charlotte County Management Information Systems
18500 Murdock Circle, Room 409
Port Charlote, FL 33948
(941) 743-1587

Additional information concerning the raw data is available from that office.

Legend of abbeviations:

Permit type code	**Meaning of code**
RA	Residential additionBuilding
SF	Single Family - new
Usage class	
Res	Residential
Com	commercial
Inspection type code	
BF	Building final
BR	Building rough framing
ER	Electrical rough
PR	Plumbing rough

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
RA	COM	BF	Fail	3
RA	COM	BF	Pass	9
RA	COM	BI	Pass	1
RA	COM	CI	Pass	1
RA	COM	DI	blank	1
RA	COM	DR	blank	1
RA	COM	DR	Pass	2
RA	COM	Final elec	Pass	1
RA	COM	FINCO	Pass	1
RA	COM	FIRE	Pass	1
RA	COM	FR	Fail	4
RA	COM	FR	Pass	9
RA	COM	Framing	blank	1
RA	COM	Framing	Pass	3
RA	COM	FTG	Pass	2
RA	COM	Lintel	Pass	1
RA	COM	PR	Pass	1
RA	COM	PT	Pass	1
RA	COM	Rough elec	blank	1
RA	COM	Rough elec	Pass	1
RA	COM	SFB	blank	9
RA	COM	SFB	Pass	1
RA	COM	SFE	blank	1
RA	COM	Slab	C	2
RA	COM	Slab	Pass	3
RA	COM	Z	Pass	1
RA	COM	ZTREE	Pass	1
RA	RES	BC	Pass	4
RA	RES	BF	C	10
RA	RES	BF	Fail	48
RA	RES	BF	I	8
RA	RES	BF	N	2
RA	RES	BF	Pass	667
RA	RES	BI	Fail	3
RA	RES	BI	I	3
RA	RES	BI	Pass	43
RA	RES	CAGEF	blank	2

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
RA	RES	CAGEF	C	1
RA	RES	CAGEF	Fail	17
RA	RES	CAGEF	I	1
RA	RES	CAGEF	Pass	74
RA	RES	CI	C	4
RA	RES	CI	Fail	9
RA	RES	CI	I	6
RA	RES	CI	N	1
RA	RES	CI	Pass	181
RA	RES	CO	Pass	3
RA	RES	DI	blank	120
RA	RES	DI	C	6
RA	RES	DI	Fail	5
RA	RES	DI	I	4
RA	RES	DI	Pass	182
RA	RES	DP	Pass	1
RA	RES	DR	blank	115
RA	RES	DR	C	11
RA	RES	DR	Fail	5
RA	RES	DR	I	5
RA	RES	DR	Pass	224
RA	RES	DW	C	1
RA	RES	DW	Pass	10
RA	RES	ETP	Pass	1
RA	RES	ETS	I	1
RA	RES	ETS	Pass	2
RA	RES	Final elec	C	2
RA	RES	Final elec	Fail	6
RA	RES	Final elec	I	5
RA	RES	Final elec	N	1
RA	RES	Final elec	Pass	263
RA	RES	FINCO	blank	37
RA	RES	FINCO	Pass	167
RA	RES	FR	blank	61
RA	RES	FR	C	11
RA	RES	FR	Fail	49
RA	RES	FR	I	9

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
RA	RES	FR	N	3
RA	RES	FR	Pass	488
RA	RES	Framing	blank	87
RA	RES	Framing	C	16
RA	RES	Framing	Fail	46
RA	RES	Framing	I	10
RA	RES	Framing	N	1
RA	RES	Framing	Pass	452
RA	RES	FTG	C	6
RA	RES	FTG	Fail	9
RA	RES	FTG	I	16
RA	RES	FTG	N	5
RA	RES	FTG	Pass	149
RA	RES	HF	blank	1
RA	RES	HF	C	2
RA	RES	HF	I	1
RA	RES	HF	Pass	47
RA	RES	HR	blank	1
RA	RES	HR	C	4
RA	RES	HR	Fail	3
RA	RES	HR	I	5
RA	RES	HR	N	1
RA	RES	HR	Pass	138
RA	RES	Lintel	C	6
RA	RES	Lintel	Fail	9
RA	RES	Lintel	I	1
RA	RES	Lintel	Pass	107
RA	RES	PBC	Pass	1
RA	RES	PBL	Pass	1
RA	RES	PBR	C	1
RA	RES	PBR	Fail	2
RA	RES	PBR	Pass	18
RA	RES	PBS	Pass	3
RA	RES	PDI	Pass	1
RA	RES	PEF	C	2
RA	RES	PEF	Fail	1
RA	RES	PEF	N	1

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
RA	RES	PEF	Pass	27
RA	RES	PER	Pass	4
RA	RES	PF	C	2
RA	RES	PF	Fail	3
RA	RES	PF	I	1
RA	RES	PF	Pass	47
RA	RES	PHR	Pass	2
RA	RES	PI	blank	1
RA	RES	PI	C	1
RA	RES	PI	Fail	1
RA	RES	PI	I	6
RA	RES	PI	Pass	23
RA	RES	PPR	Pass	6
RA	RES	PPS	Pass	2
RA	RES	PPT	Pass	5
RA	RES	PR	C	5
RA	RES	PR	Fail	12
RA	RES	PR	I	4
RA	RES	PR	Pass	111
RA	RES	PS	Fail	5
RA	RES	PS	I	1
RA	RES	PS	Pass	65
RA	RES	PT	C	4
RA	RES	PT	Fail	12
RA	RES	PT	I	3
RA	RES	PT	Pass	108
RA	RES	PTD	Pass	3
RA	RES	PW	C	1
RA	RES	PW	I	2
RA	RES	PW	Pass	30
RA	RES	RF	C	1
RA	RES	RF	Fail	2
RA	RES	RF	N	1
RA	RES	RF	Pass	11
RA	RES	RFM	Pass	1
RA	RES	RLG	Pass	10
RA	RES	Rough elec	blank	91

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
RA	RES	Rough elec	C	10
RA	RES	Rough elec	Fail	17
RA	RES	Rough elec	I	8
RA	RES	Rough elec	Pass	374
RA	RES	RP	C	1
RA	RES	RP	I	1
RA	RES	RP	Pass	8
RA	RES	RPEX	Pass	1
RA	RES	SFB	blank	718
RA	RES	SFB	C	7
RA	RES	SFB	Fail	10
RA	RES	SFB	I	8
RA	RES	SFB	N	1
RA	RES	SFB	Pass	253
RA	RES	SFE	blank	106
RA	RES	SFE	C	6
RA	RES	SFE	Fail	5
RA	RES	SFE	I	6
RA	RES	SFE	N	1
RA	RES	SFE	Pass	218
RA	RES	SFG	blank	1
RA	RES	SFG	I	1
RA	RES	SFH	blank	1
RA	RES	SFH	C	2
RA	RES	SFH	Fail	1
RA	RES	SFH	I	2
RA	RES	SFH	N	2
RA	RES	SFH	Pass	81
RA	RES	SFI	I	1
RA	RES	SFI	Pass	8
RA	RES	SFP	blank	1
RA	RES	SFP	C	3
RA	RES	SFP	I	3
RA	RES	SFP	N	1
RA	RES	SFP	Pass	88
RA	RES	SFPS	C	1
RA	RES	SFPS	Pass	2

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
RA	RES	Slab	blank	53
RA	RES	Slab	C	39
RA	RES	Slab	Fail	42
RA	RES	Slab	I	6
RA	RES	Slab	N	1
RA	RES	Slab	Pass	706
RA	RES	SPE	I	1
RA	RES	SPF	Pass	1
RA	RES	SPR	blank	1
RA	RES	SWO	Fail	20
RA	RES	SWO	Pass	5
RA	RES	TD	C	4
RA	RES	TD	Fail	2
RA	RES	TD	I	1
RA	RES	TD	Pass	37
RA	RES	Z	N	6
RA	RES	Z	Pass	1
RA	RES	ZTREE	blank	1
RA	RES	ZTREE	I	1
SF	RES	1	C	1
SF	RES	BAR	Pass	1
SF	RES	BC	C	2
SF	RES	BC	Fail	2
SF	RES	BC	Pass	51
SF	RES	BF	blank	1
SF	RES	BF	I	2
SF	RES	BF	Pass	2
SF	RES	BI	C	7
SF	RES	BI	Fail	8
SF	RES	BI	I	3
SF	RES	BI	N	2
SF	RES	BI	Pass	72
SF	RES	CAGEF	I	1
SF	RES	CI	blank	706
SF	RES	CI	C	21
SF	RES	CI	Fail	78
SF	RES	CI	I	24

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
SF	RES	CI	N	4
SF	RES	CI	Pass	977
SF	RES	CN	blank	1
SF	RES	CO	Pass	22
SF	RES	DI	blank	1137
SF	RES	DI	C	34
SF	RES	DI	Fail	38
SF	RES	DI	I	16
SF	RES	DI	N	5
SF	RES	DI	Pass	357
SF	RES	DP	blank	2
SF	RES	DP	N	1
SF	RES	DR	blank	291
SF	RES	DR	C	67
SF	RES	DR	Fail	29
SF	RES	DR	I	6
SF	RES	DR	Pass	1601
SF	RES	ETP	C	1
SF	RES	ETP	Fail	3
SF	RES	ETP	I	3
SF	RES	ETP	Pass	87
SF	RES	ETS	C	4
SF	RES	ETS	Fail	22
SF	RES	ETS	I	7
SF	RES	ETS	N	1
SF	RES	ETS	Pass	328
SF	RES	Final elec	blank	1
SF	RES	Final elec	I	3
SF	RES	Final elec	Pass	2
SF	RES	FINCO	blank	50
SF	RES	FINCO	Pass	293
SF	RES	FIRE	I	2
SF	RES	FIRE	Pass	1
SF	RES	FR	blank	329
SF	RES	FR	C	13
SF	RES	FR	Fail	76
SF	RES	FR	I	14

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
SF	RES	FR	N	5
SF	RES	FR	Pass	1482
SF	RES	Framing	blank	294
SF	RES	Framing	C	95
SF	RES	Framing	Fail	466
SF	RES	Framing	I	14
SF	RES	Framing	N	3
SF	RES	Framing	Pass	1618
SF	RES	FTG	C	29
SF	RES	FTG	Fail	14
SF	RES	FTG	I	6
SF	RES	FTG	N	4
SF	RES	FTG	Pass	194
SF	RES	FW	C	2
SF	RES	FW	N	1
SF	RES	FW	Pass	2
SF	RES	GE	blank	1
SF	RES	GE	C	5
SF	RES	GE	Fail	1
SF	RES	GE	I	3
SF	RES	GE	Pass	78
SF	RES	HF	I	1
SF	RES	HF	Pass	3
SF	RES	HR	blank	296
SF	RES	HR	C	33
SF	RES	HR	Fail	36
SF	RES	HR	I	17
SF	RES	HR	N	8
SF	RES	HR	Pass	1605
SF	RES	Lintel	blank	325
SF	RES	Lintel	C	163
SF	RES	Lintel	Fail	117
SF	RES	Lintel	I	8
SF	RES	Lintel	N	5
SF	RES	Lintel	Pass	1617
SF	RES	NE	Pass	5
SF	RES	PBC	Pass	4

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
SF	RES	PBL	C	2
SF	RES	PBL	I	1
SF	RES	PBL	Pass	29
SF	RES	PBR	C	2
SF	RES	PBR	Fail	3
SF	RES	PBR	Pass	14
SF	RES	PBS	C	3
SF	RES	PBS	Fail	1
SF	RES	PBS	Pass	5
SF	RES	PDI	N	1
SF	RES	PDI	Pass	1
SF	RES	PER	I	1
SF	RES	PER	Pass	1
SF	RES	PF	blank	221
SF	RES	PF	Fail	1
SF	RES	PF	I	1
SF	RES	PF	N	1
SF	RES	PF	Pass	2
SF	RES	PFTG	C	5
SF	RES	PFTG	Fail	1
SF	RES	PFTG	Pass	6
SF	RES	PI	blank	952
SF	RES	PI	C	13
SF	RES	PI	Fail	58
SF	RES	PI	I	21
SF	RES	PI	N	4
SF	RES	PI	Pass	612
SF	RES	PPR	Pass	7
SF	RES	PPS	Pass	28
SF	RES	PPT	C	3
SF	RES	PPT	Fail	2
SF	RES	PPT	I	2
SF	RES	PPT	N	2
SF	RES	PPT	Pass	28
SF	RES	PPW	blank	1
SF	RES	PPW	C	1
SF	RES	PPW	Fail	4

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
SF	RES	PPW	I	5
SF	RES	PPW	N	3
SF	RES	PPW	Pass	258
SF	RES	PR	blank	2
SF	RES	PR	C	114
SF	RES	PR	Fail	237
SF	RES	PR	I	7
SF	RES	PR	N	5
SF	RES	PR	Pass	1786
SF	RES	PS	blank	390
SF	RES	PS	C	37
SF	RES	PS	Fail	72
SF	RES	PS	I	14
SF	RES	PS	N	6
SF	RES	PS	Pass	1464
SF	RES	PT	blank	296
SF	RES	PT	C	60
SF	RES	PT	Fail	113
SF	RES	PT	I	27
SF	RES	PT	N	18
SF	RES	PT	Pass	1713
SF	RES	PTD	I	2
SF	RES	PTD	Pass	5
SF	RES	PW	blank	558
SF	RES	PW	C	27
SF	RES	PW	Fail	23
SF	RES	PW	I	16
SF	RES	PW	N	5
SF	RES	PW	Pass	1300
SF	RES	RBI	blank	1
SF	RES	RBI	C	3
SF	RES	RBI	I	1
SF	RES	RBI	Pass	82
SF	RES	RBR	blank	2
SF	RES	RBR	C	3
SF	RES	RBR	Fail	20
SF	RES	RBR	I	1

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
SF	RES	RBR	Pass	63
SF	RES	RCB	Pass	4
SF	RES	RF	blank	4
SF	RES	RF	C	74
SF	RES	RF	Fail	290
SF	RES	RF	I	17
SF	RES	RF	N	1
SF	RES	RF	Pass	1074
SF	RES	RFM	C	1
SF	RES	RFM	Fail	1
SF	RES	RFM	Pass	10
SF	RES	RLG	blank	21
SF	RES	RLG	C	32
SF	RES	RLG	I	13
SF	RES	RLG	N	1
SF	RES	RLG	Pass	1223
SF	RES	RLGO	Pass	1
SF	RES	RLGX	Pass	6
SF	RES	RMEET	blank	1
SF	RES	ROP	Pass	9
SF	RES	Rough elec	blank	297
SF	RES	Rough elec	C	58
SF	RES	Rough elec	Fail	130
SF	RES	Rough elec	I	17
SF	RES	Rough elec	N	4
SF	RES	Rough elec	Pass	1611
SF	RES	RP	blank	3
SF	RES	RP	C	33
SF	RES	RP	Fail	28
SF	RES	RP	I	9
SF	RES	RP	Pass	1174
SF	RES	RPEX	C	1
SF	RES	RPEX	Fail	2
SF	RES	RPEX	I	1
SF	RES	RPEX	Pass	30
SF	RES	RPRP	Pass	1
SF	RES	RPS	Pass	1

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
SF	RES	RPT	blank	3
SF	RES	RPT	Pass	14
SF	RES	RSK	C	1
SF	RES	RSK	Pass	4
SF	RES	RSKCD	C	1
SF	RES	RSKCD	Pass	9
SF	RES	RSP	Fail	1
SF	RES	RSP	Pass	9
SF	RES	S	I	1
SF	RES	SFB	blank	327
SF	RES	SFB	C	17
SF	RES	SFB	Fail	104
SF	RES	SFB	I	21
SF	RES	SFB	Pass	1458
SF	RES	SFE	blank	329
SF	RES	SFE	C	16
SF	RES	SFE	Fail	99
SF	RES	SFE	I	16
SF	RES	SFE	Pass	1458
SF	RES	SFG	blank	358
SF	RES	SFG	C	15
SF	RES	SFG	Fail	32
SF	RES	SFG	I	17
SF	RES	SFG	N	1
SF	RES	SFG	Pass	1402
SF	RES	SFH	blank	329
SF	RES	SFH	C	15
SF	RES	SFH	Fail	45
SF	RES	SFH	I	7
SF	RES	SFH	Pass	1461
SF	RES	SFI	blank	1
SF	RES	SFI	C	8
SF	RES	SFI	Fail	17
SF	RES	SFI	I	5
SF	RES	SFI	Pass	563
SF	RES	SFP	blank	330
SF	RES	SFP	C	15

APPENDIX D
CHARLOTTE COUNTY DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Permit type	Usage class	Inspection type	Disposition	Count of disposition
SF	RES	SFP	Fail	33
SF	RES	SFP	I	7
SF	RES	SFP	Pass	1461
SF	RES	SFPS	C	2
SF	RES	SFPS	Fail	8
SF	RES	SFPS	I	1
SF	RES	SFPS	N	1
SF	RES	SFPS	Pass	90
SF	RES	SFPW	blank	1
SF	RES	SFPW	C	3
SF	RES	SFPW	Fail	8
SF	RES	SFPW	I	3
SF	RES	SFPW	Pass	301
SF	RES	SFW	blank	1
SF	RES	SFW	C	7
SF	RES	SFW	Fail	87
SF	RES	SFW	I	3
SF	RES	SFW	N	1
SF	RES	SFW	Pass	146
SF	RES	Slab	blank	266
SF	RES	Slab	C	258
SF	RES	Slab	Fail	99
SF	RES	Slab	I	14
SF	RES	Slab	N	2
SF	RES	Slab	Pass	1719
SF	RES	SP	I	2
SF	RES	SPE	blank	2
SF	RES	SPE	I	3
SF	RES	SPF	blank	2
SF	RES	SPF	I	2
SF	RES	SPF	N	1
SF	RES	SPS	blank	2
SF	RES	SWO	blank	1
SF	RES	SWO	Fail	134
SF	RES	SWO	I	2
SF	RES	SWO	N	1
SF	RES	SWO	Pass	83

APPENDIX D
CHARLOTTE COUNTY DATA
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Permit type	Usage class	Inspection type	Disposition	Count of disposition
SF	RES	TD	C	5
SF	RES	TD	Fail	14
SF	RES	TD	I	5
SF	RES	TD	N	1
SF	RES	TD	Pass	115
SF	RES	Z	blank	1
SF	RES	Z	I	5
SF	RES	Z	N	2
SF	RES	Z	Pass	41
SF	RES	ZLAND	N	1
SF	RES	ZTREE	blank	332
SF	RES	ZTREE	C	27
SF	RES	ZTREE	Fail	153
SF	RES	ZTREE	I	16
SF	RES	ZTREE	N	2
SF	RES	ZTREE	Pass	1454

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

The following is a numerical tabulation of individual inspection records provided by:

Department of Public Works
Building and Zoning Inspection Division
220 E. Bay Street
Jacksonville, FL 32202-3401

Additional information concerning the raw data is available from that office.

Legend of abbreviations:

Property type code	**Meaning of code**
B	Building
E	Electrical
Improvement type code	self explanatory
Inspection type code	self explanatory
Disposition code	**Meaning of code**
Passed	self explanatory
Canceled	self explanatory
Overturned	Unclear

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Property type	Improvement type	Inspection type	Disposition	Count of Disposition
B	ADDITION	CONSULTATION	CANCELED	1
B	ADDITION	CONSULTATION	OVERTURNED	1
B	ADDITION	CONSULTATION	PASSED	85
B	ADDITION	COURTESY INSPECTION	CANCELED	1
B	ADDITION	COURTESY INSPECTION	PASSED	8
B	ADDITION	COVER-UP	CANCELED	2
B	ADDITION	COVER-UP	PASSED	15
B	ADDITION	EXPIRED PERMIT	OVERTURNED	35
B	ADDITION	EXPIRED PERMIT	PASSED	2878
B	ADDITION	FINAL INSPECTION	CANCELED	253
B	ADDITION	FINAL INSPECTION	FAILED	118
B	ADDITION	FINAL INSPECTION	OVER TURNED FINAL	12
B	ADDITION	FINAL INSPECTION	OVERTURNED	23
B	ADDITION	FINAL INSPECTION	PASSED	714
B	ADDITION	FOOTING INSPECTION	CANCELED	132
B	ADDITION	FOOTING INSPECTION	FAILED	159
B	ADDITION	FOOTING INSPECTION	OVER TURNED FINAL	13
B	ADDITION	FOOTING INSPECTION	OVERTURNED	9
B	ADDITION	FOOTING INSPECTION	PASSED	1121
B	ADDITION	FRAMING	CANCELED	116
B	ADDITION	FRAMING	FAILED	242
B	ADDITION	FRAMING	OVER TURNED FINAL	15
B	ADDITION	FRAMING	OVERTURNED	11
B	ADDITION	FRAMING	PASSED	1278
B	ADDITION	FRAMING-PARTIAL	CANCELED	1
B	ADDITION	FRAMING-PARTIAL	PASSED	1
B	ADDITION	INSULATION	CANCELED	52
B	ADDITION	INSULATION	FAILED	74
B	ADDITION	INSULATION	OVER TURNED FINAL	2
B	ADDITION	INSULATION	OVERTURNED	5
B	ADDITION	INSULATION	PASSED	744
B	ADDITION	LANDSCAPE INSPECTION	CANCELED	1
B	ADDITION	LETTER OF COMPLIANCE	CANCELED	1

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

B	ADDITION	OTHER	CANCELED	12
B	ADDITION	OTHER	FAILED	6
B	ADDITION	OTHER	PASSED	197
B	ADDITION	RATED WALL	CANCELED	3
B	ADDITION	RATED WALL	FAILED	1
B	ADDITION	RATED WALL	PASSED	4
B	ADDITION	ROOF	FAILED	1
B	ADDITION	ROUGH INSPECTION	CANCELED	6
B	ADDITION	ROUGH INSPECTION	PASSED	4
B	ADDITION	SATISFACTORY ZONING SIGN(S)	CANCELED	2
B	ADDITION	SATISFACTORY ZONING SIGN(S)	PASSED	1
B	ADDITION	SITE CLEARING	CANCELED	8
B	ADDITION	SITE CLEARING	OVERTURNED	2
B	ADDITION	SITE CLEARING	PASSED	16
B	ADDITION	SLAB	CANCELED	42
B	ADDITION	SLAB	FAILED	79
B	ADDITION	SLAB	OVER TURNED FINAL	6
B	ADDITION	SLAB	OVERTURNED	3
B	ADDITION	SLAB	PASSED	659
B	ADDITION	SWIMMING POOL	CANCELED	2
B	ADDITION	SWIMMING POOL	PASSED	5
B	ADDITION	TESTING	CANCELED	3
B	ADDITION	TIE-BEAM INSPECTION	CANCELED	19
B	ADDITION	TIE-BEAM INSPECTION	FAILED	32
B	ADDITION	TIE-BEAM INSPECTION	OVER TURNED FINAL	1
B	ADDITION	TIE-BEAM INSPECTION	OVERTURNED	5
B	ADDITION	TIE-BEAM INSPECTION	PASSED	299
B	ADDITION	WATER AND SEWER	CANCELED	1
B	CONV. USE	EXPIRED PERMIT	PASSED	4
B	CONV. USE	FINAL INSPECTION	PASSED	1
B	CONV. USE	FOOTING INSPECTION	PASSED	1
B	CONV. USE	FRAMING	PASSED	1
B	FOUNDATION ONLY	CONSULTATION	PASSED	4
B	FOUNDATION ONLY	COVER-UP	PASSED	4

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

B	FOUNDATION ONLY	EXPIRED PERMIT	PASSED	199
B	FOUNDATION ONLY	FINAL INSPECTION	OVERTURNED	1
B	FOUNDATION ONLY	FINAL INSPECTION	PASSED	9
B	FOUNDATION ONLY	FOOTING INSPECTION	CANCELLED	5
B	FOUNDATION ONLY	FOOTING INSPECTION	FAILED	38
B	FOUNDATION ONLY	FOOTING INSPECTION	OVERTURNED	1
B	FOUNDATION ONLY	FOOTING INSPECTION	PASSED	203
B	FOUNDATION ONLY	FRAMING	FAILED	1
B	FOUNDATION ONLY	FRAMING	OVERTURNED	5
B	FOUNDATION ONLY	FRAMING	PASSED	37
B	FOUNDATION ONLY	INSULATION	FAILED	4
B	FOUNDATION ONLY	INSULATION	OVERTURNED	2
B	FOUNDATION ONLY	INSULATION	PASSED	20
B	FOUNDATION ONLY	OTHER	FAILED	1
B	FOUNDATION ONLY	OTHER	PASSED	7
B	FOUNDATION ONLY	ROUGH INSPECTION	FAILED	1
B	FOUNDATION ONLY	SLAB	CANCELLED	12
B	FOUNDATION ONLY	SLAB	FAILED	41
B	FOUNDATION ONLY	SLAB	PASSED	191
B	FOUNDATION ONLY	TIE-BEAM INSPECTION	FAILED	1
B	FOUNDATION ONLY	TIE-BEAM INSPECTION	OVER TURNED FINAL	1
B	FOUNDATION ONLY	TIE-BEAM INSPECTION	OVERTURNED	1

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

B	FOUNDATION ONLY	TIE-BEAM INSPECTION	PASSED	6
B	NEW BLDG.	CONSULTATION	CANCELLED	32
B	NEW BLDG.	CONSULTATION	FAILED	14
B	NEW BLDG.	CONSULTATION	OVERTURNED	4
B	NEW BLDG.	CONSULTATION	PASSED	201
B	NEW BLDG.	COURTESY INSPECTION	CANCELLED	3
B	NEW BLDG.	COURTESY INSPECTION	FAILED	1
B	NEW BLDG.	COURTESY INSPECTION	PASSED	21
B	NEW BLDG.	COVER-UP	CANCELLED	62
B	NEW BLDG.	COVER-UP	FAILED	137
B	NEW BLDG.	COVER-UP	OVERTURNED	3
B	NEW BLDG.	COVER-UP	PASSED	880
B	NEW BLDG.	EXPIRED PERMIT	OVERTURNED	60
B	NEW BLDG.	EXPIRED PERMIT	PASSED	6626
B	NEW BLDG.	FINAL INSPECTION	CANCELLED	209
B	NEW BLDG.	FINAL INSPECTION	FAILED	115
B	NEW BLDG.	FINAL INSPECTION	OVER TURNED FINAL	5
B	NEW BLDG.	FINAL INSPECTION	OVERTURNED	31
B	NEW BLDG.	FINAL INSPECTION	PASSED	1341
B	NEW BLDG.	FOOTING INSPECTION	CANCELLED	241
B	NEW BLDG.	FOOTING INSPECTION	FAILED	305
B	NEW BLDG.	FOOTING INSPECTION	OVER TURNED FINAL	8
B	NEW BLDG.	FOOTING INSPECTION	OVERTURNED	36
B	NEW BLDG.	FOOTING INSPECTION	PASSED	2112
B	NEW BLDG.	FRAMING	CANCELLED	949
B	NEW BLDG.	FRAMING	FAILED	2987
B	NEW BLDG.	FRAMING	OVER TURNED FINAL	33
B	NEW BLDG.	FRAMING	OVERTURNED	65
B	NEW BLDG.	FRAMING	PASSED	7217
B	NEW BLDG.	FRAMING-PARTIAL	CANCELLED	2
B	NEW BLDG.	FRAMING-PARTIAL	FAILED	3
B	NEW BLDG.	FRAMING-PARTIAL	PASSED	20
B	NEW BLDG.	INSULATION	CANCELLED	471
B	NEW BLDG.	INSULATION	FAILED	1308
B	NEW BLDG.	INSULATION	OVER TURNED FINAL	17

APPENDIX E
DUVAL COUNTY INSPECTION DATA
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B	NEW BLDG.	INSULATION	OVERTURNED	54
B	NEW BLDG.	INSULATION	PASSED	6288
B	NEW BLDG.	LANDSCAPE INSPECTION	CANCELLED	5
B	NEW BLDG.	LETTER OF COMPLIANCE	CANCELLED	4
B	NEW BLDG.	LETTER OF COMPLIANCE	PASSED	4
B	NEW BLDG.	NO FINAL INSPECTION (MECHANICAL)	PASSED	1
B	NEW BLDG.	OTHER	CANCELLED	758
B	NEW BLDG.	OTHER	FAILED	410
B	NEW BLDG.	OTHER	OVER TURNED FINAL	7
B	NEW BLDG.	OTHER	OVERTURNED	13
B	NEW BLDG.	OTHER	PASSED	2355
B	NEW BLDG.	PICTURES ON FILE	OVERTURNED	1
B	NEW BLDG.	PICTURES ON FILE	PASSED	1
B	NEW BLDG.	RATED WALL	CANCELLED	23
B	NEW BLDG.	RATED WALL	FAILED	1
B	NEW BLDG.	RATED WALL	OVERTURNED	1
B	NEW BLDG.	RATED WALL	PASSED	67
B	NEW BLDG.	RE-PIPE	CANCELLED	2
B	NEW BLDG.	RE-PIPE	PASSED	1
B	NEW BLDG.	ROOF	CANCELLED	9
B	NEW BLDG.	ROOF	FAILED	5
B	NEW BLDG.	ROOF	PASSED	14
B	NEW BLDG.	ROUGH INSPECTION	CANCELLED	7
B	NEW BLDG.	ROUGH INSPECTION	FAILED	18
B	NEW BLDG.	ROUGH INSPECTION	PASSED	2
B	NEW BLDG.	SATISFACTORY ZONING SIGN(S)	PASSED	1
B	NEW BLDG.	SITE CLEARING	CANCELLED	6
B	NEW BLDG.	SITE CLEARING	OVERTURNED	1
B	NEW BLDG.	SITE CLEARING	PASSED	9
B	NEW BLDG.	SLAB	CANCELLED	668
B	NEW BLDG.	SLAB	FAILED	1494
B	NEW BLDG.	SLAB	OVER TURNED FINAL	29
B	NEW BLDG.	SLAB	OVERTURNED	39
B	NEW BLDG.	SLAB	PASSED	6305
B	NEW BLDG.	SUBSTANTIAL COMPLETION INSPECTION	OVERTURNED	12

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

B	NEW BLDG.	SUBSTANTIAL COMPLETION INSPECTION	PASSED	891
B	NEW BLDG.	SWIMMING POOL	CANCELLED	1
B	NEW BLDG.	SWIMMING POOL	OVERTURNED	1
B	NEW BLDG.	SWIMMING POOL	PASSED	5
B	NEW BLDG.	TEMPORARY FINAL	CANCELLED	4
B	NEW BLDG.	TEMPORARY FINAL	FAILED	2
B	NEW BLDG.	TEMPORARY FINAL	PASSED	1
B	NEW BLDG.	TIE-BEAM INSPECTION	CANCELLED	73
B	NEW BLDG.	TIE-BEAM INSPECTION	FAILED	83
B	NEW BLDG.	TIE-BEAM INSPECTION	OVERTURNED	5
B	NEW BLDG.	TIE-BEAM INSPECTION	PASSED	508
B	NEW BLDG.	TOP-OUT	CANCELLED	2
B	NEW BLDG.	TOP-OUT	PASSED	2
B	NEW BLDG.	TRAILER/HANDICAP TEMPORARY FINAL	OVERTURNED	1
B	NEW BLDG.	TRAILER/HANDICAP TEMPORARY FINAL	PASSED	2
B	NEW BLDG.	WATER AND SEWER	CANCELLED	1
B	NEW BLDG.	WATER AND SEWER	PASSED	1
B	OTHER	CONSULTATION	PASSED	7
B	OTHER	COURTESY INSPECTION	PASSED	1
B	OTHER	COVER-UP	PASSED	2
B	OTHER	EXPIRED PERMIT	OVERTURNED	3
B	OTHER	EXPIRED PERMIT	PASSED	145
B	OTHER	FINAL INSPECTION	CANCELLED	3
B	OTHER	FINAL INSPECTION	FAILED	1
B	OTHER	FINAL INSPECTION	PASSED	30
B	OTHER	FOOTING INSPECTION	CANCELLED	6
B	OTHER	FOOTING INSPECTION	FAILED	6
B	OTHER	FOOTING INSPECTION	PASSED	27
B	OTHER	FRAMING	CANCELLED	7
B	OTHER	FRAMING	FAILED	13
B	OTHER	FRAMING	OVER TURNED FINAL	1
B	OTHER	FRAMING	OVERTURNED	1
B	OTHER	FRAMING	PASSED	35
B	OTHER	INSULATION	CANCELLED	2
B	OTHER	INSULATION	FAILED	7

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

B	OTHER	INSULATION	PASSED	29
B	OTHER	OTHER	CANCELLED	1
B	OTHER	OTHER	FAILED	1
B	OTHER	OTHER	PASSED	13
B	OTHER	ROOF	CANCELLED	1
B	OTHER	ROUGH INSPECTION	FAILED	1
B	OTHER	SITE CLEARING	PASSED	1
B	OTHER	SLAB	CANCELLED	2
B	OTHER	SLAB	FAILED	4
B	OTHER	SLAB	OVERTURNED	1
B	OTHER	SLAB	PASSED	26
B	OTHER	SUBSTANTIAL COMPLETION INSPECTION	PASSED	1
B	OTHER	TIE-BEAM INSPECTION	FAILED	1
B	OTHER	TIE-BEAM INSPECTION	PASSED	5
B	SITE CLEARING	EXPIRED PERMIT	PASSED	19
B	SITE CLEARING	FINAL INSPECTION	PASSED	2
B	SITE CLEARING	FOOTING INSPECTION	PASSED	1
B	SWIM POOL	CONSULTATION	PASSED	9
B	SWIM POOL	COURTESY INSPECTION	PASSED	1
B	SWIM POOL	COVER-UP	PASSED	1
B	SWIM POOL	EXPIRED PERMIT	OVERTURNED	7
B	SWIM POOL	EXPIRED PERMIT	PASSED	413
B	SWIM POOL	FINAL INSPECTION	CANCELLED	91
B	SWIM POOL	FINAL INSPECTION	FAILED	19
B	SWIM POOL	FINAL INSPECTION	OVER TURNED FINAL	4
B	SWIM POOL	FINAL INSPECTION	OVERTURNED	7
B	SWIM POOL	FINAL INSPECTION	PASSED	221
B	SWIM POOL	FOOTING INSPECTION	CANCELLED	4
B	SWIM POOL	FOOTING INSPECTION	FAILED	13
B	SWIM POOL	FOOTING INSPECTION	OVER TURNED FINAL	2
B	SWIM POOL	FOOTING INSPECTION	OVERTURNED	3
B	SWIM POOL	FOOTING INSPECTION	PASSED	84
B	SWIM POOL	FRAMING	FAILED	1
B	SWIM POOL	FRAMING	OVERTURNED	2

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

B	SWIM POOL	FRAMING	PASSED	13
B	SWIM POOL	INSULATION	CANCELLED	3
B	SWIM POOL	INSULATION	FAILED	2
B	SWIM POOL	INSULATION	OVER TURNED FINAL	1
B	SWIM POOL	INSULATION	OVERTURNED	2
B	SWIM POOL	INSULATION	PASSED	7
B	SWIM POOL	LANDSCAPE INSPECTION	CANCELLED	1
B	SWIM POOL	OTHER	CANCELLED	3
B	SWIM POOL	OTHER	FAILED	4
B	SWIM POOL	OTHER	OVER TURNED FINAL	1
B	SWIM POOL	OTHER	OVERTURNED	2
B	SWIM POOL	OTHER	PASSED	46
B	SWIM POOL	RATED WALL	CANCELLED	1
B	SWIM POOL	RATED WALL	PASSED	1
B	SWIM POOL	RE-PIPE	PASSED	1
B	SWIM POOL	SITE CLEARING	CANCELLED	1
B	SWIM POOL	SITE CLEARING	PASSED	1
B	SWIM POOL	SLAB	CANCELLED	3
B	SWIM POOL	SLAB	FAILED	3
B	SWIM POOL	SLAB	OVER TURNED FINAL	1
B	SWIM POOL	SLAB	OVERTURNED	1
B	SWIM POOL	SLAB	PASSED	13
B	SWIM POOL	SWIMMING POOL	CANCELLED	103
B	SWIM POOL	SWIMMING POOL	FAILED	124
B	SWIM POOL	SWIMMING POOL	OVER TURNED FINAL	7
B	SWIM POOL	SWIMMING POOL	OVERTURNED	15
B	SWIM POOL	SWIMMING POOL	PASSED	1220
B	SWIM POOL	TIE-BEAM INSPECTION	PASSED	2
B	TREE REMOVAL	EXPIRED PERMIT	PASSED	7
B	TREE REMOVAL	FINAL INSPECTION	PASSED	6
E	INCR-SERVICE	CONSULTATION	CANCELLED	5
E	INCR-SERVICE	CONSULTATION	PASSED	37
E	INCR-SERVICE	COURTESY INSPECTION	CANCELLED	2
E	INCR-SERVICE	COURTESY INSPECTION	PASSED	8

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

E	INCR-SERVICE	COVER-UP	CANCELLED	3
E	INCR-SERVICE	COVER-UP	PASSED	11
E	INCR-SERVICE	EXPIRED PERMIT	OVERTURNED	6
E	INCR-SERVICE	EXPIRED PERMIT	PASSED	94
E	INCR-SERVICE	FINAL INSPECTION	CANCELLED	214
E	INCR-SERVICE	FINAL INSPECTION	FAILED	66
E	INCR-SERVICE	FINAL INSPECTION	OVER TURNED FINAL	1
E	INCR-SERVICE	FINAL INSPECTION	OVERTURNED	6
E	INCR-SERVICE	FINAL INSPECTION	PASSED	431
E	INCR-SERVICE	OTHER	CANCELLED	5
E	INCR-SERVICE	OTHER	PASSED	47
E	INCR-SERVICE	PICTURES ON FILE	PASSED	5
E	INCR-SERVICE	ROUGH INSPECTION	CANCELLED	4
E	INCR-SERVICE	ROUGH INSPECTION	OVERTURNED	1
E	INCR-SERVICE	ROUGH INSPECTION	PASSED	69
E	INCR-SERVICE	TEMPORARY FINAL	CANCELLED	2
E	INCR-SERVICE	TEMPORARY FINAL	FAILED	1
E	INCR-SERVICE	TEMPORARY FINAL	OVERTURNED	8
E	INCR-SERVICE	TEMPORARY FINAL	PASSED	12
E	INCR-SERVICE	TRAILER/HANDICAP TEMPORARY FINAL	CANCELLED	1
E	NEW BUILDING	CONSULTATION	CANCELLED	8
E	NEW BUILDING	CONSULTATION	OVERTURNED	1
E	NEW BUILDING	CONSULTATION	PASSED	82
E	NEW BUILDING	COURTESY INSPECTION	CANCELLED	4
E	NEW BUILDING	COURTESY INSPECTION	FAILED	2
E	NEW BUILDING	COURTESY INSPECTION	PASSED	62
E	NEW BUILDING	COVER-UP	CANCELLED	975
E	NEW BUILDING	COVER-UP	FAILED	216
E	NEW BUILDING	COVER-UP	OVER TURNED FINAL	5

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

E	NEW BUILDING	COVER-UP	OVERTURNED	17
E	NEW BUILDING	COVER-UP	PASSED	6775
E	NEW BUILDING	EXPIRED PERMIT	OVERTURNED	50
E	NEW BUILDING	EXPIRED PERMIT	PASSED	366
E	NEW BUILDING	FINAL INSPECTION	CANCELLED	1996
E	NEW BUILDING	FINAL INSPECTION	FAILED	385
E	NEW BUILDING	FINAL INSPECTION	OVER TURNED FINAL	3
E	NEW BUILDING	FINAL INSPECTION	OVERTURNED	72
E	NEW BUILDING	FINAL INSPECTION	PASSED	6915
E	NEW BUILDING	HANDICAP LETTER ON FILE	OVERTURNED	1
E	NEW BUILDING	HANDICAP LETTER ON FILE	PASSED	1
E	NEW BUILDING	INSPECTION CARD NOT ON JOB SITE	PASSED	437
E	NEW BUILDING	INSULATION	CANCELLED	1
E	NEW BUILDING	OTHER	CANCELLED	79
E	NEW BUILDING	OTHER	FAILED	4
E	NEW BUILDING	OTHER	OVERTURNED	1
E	NEW BUILDING	OTHER	PASSED	509
E	NEW BUILDING	PICTURES ON FILE	OVERTURNED	7
E	NEW BUILDING	PICTURES ON FILE	PASSED	6150
E	NEW BUILDING	RATED WALL	CANCELLED	1
E	NEW BUILDING	RE-PIPE	CANCELLED	4
E	NEW BUILDING	ROOF	OVERTURNED	1

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

E	NEW BUILDING	ROOF	PASSED	1
E	NEW BUILDING	ROUGH INSPECTION	CANCELLED	355
E	NEW BUILDING	ROUGH INSPECTION	FAILED	40
E	NEW BUILDING	ROUGH INSPECTION	OVERTURNED	46
E	NEW BUILDING	ROUGH INSPECTION	PASSED	6667
E	NEW BUILDING	SLAB	PASSED	101
E	NEW BUILDING	SWIMMING POOL	CANCELLED	3
E	NEW BUILDING	SWIMMING POOL	FAILED	2
E	NEW BUILDING	SWIMMING POOL	OVER TURNED FINAL	1
E	NEW BUILDING	SWIMMING POOL	PASSED	49
E	NEW BUILDING	TEMPORARY FINAL	CANCELLED	35
E	NEW BUILDING	TEMPORARY FINAL	FAILED	7
E	NEW BUILDING	TEMPORARY FINAL	OVER TURNED FINAL	1
E	NEW BUILDING	TEMPORARY FINAL	OVERTURNED	113
E	NEW BUILDING	TEMPORARY FINAL	PASSED	235
E	NEW BUILDING	TOP-OUT	PASSED	2
E	NEW BUILDING	TRAILER/HANDICAP TEMPORARY FINAL	CANCELLED	17
E	NEW BUILDING	TRAILER/HANDICAP TEMPORARY FINAL	PASSED	3
E	NEW BUILDING	WATER AND SEWER	PASSED	1
E	NEW SERVICE	CONSULTATION	CANCELLED	1
E	NEW SERVICE	CONSULTATION	PASSED	5
E	NEW SERVICE	COVER-UP	CANCELLED	3
E	NEW SERVICE	COVER-UP	PASSED	27
E	NEW SERVICE	EXPIRED PERMIT	OVERTURNED	2

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

E	NEW SERVICE	EXPIRED PERMIT	PASSED	28
E	NEW SERVICE	FINAL INSPECTION	CANCELLED	27
E	NEW SERVICE	FINAL INSPECTION	FAILED	6
E	NEW SERVICE	FINAL INSPECTION	OVERTURNED	1
E	NEW SERVICE	FINAL INSPECTION	PASSED	105
E	NEW SERVICE	INSPECTION CARD NOT ON JOB SITE	PASSED	3
E	NEW SERVICE	OTHER	CANCELLED	2
E	NEW SERVICE	OTHER	PASSED	16
E	NEW SERVICE	PICTURES ON FILE	PASSED	15
E	NEW SERVICE	ROUGH INSPECTION	CANCELLED	10
E	NEW SERVICE	ROUGH INSPECTION	FAILED	1
E	NEW SERVICE	ROUGH INSPECTION	PASSED	25
E	NEW SERVICE	SLAB	PASSED	6
E	NEW SERVICE	TEMPORARY FINAL	CANCELLED	1
E	NEW SERVICE	TEMPORARY FINAL	OVERTURNED	4
E	NEW SERVICE	TEMPORARY FINAL	PASSED	9
E	NEW SERVICE	TRAILER/HANDICAP TEMPORARY FINAL	CANCELLED	4
E	OLD BUILDING	CONSULTATION	CANCELLED	70
E	OLD BUILDING	CONSULTATION	FAILED	2
E	OLD BUILDING	CONSULTATION	OVER TURNED FINAL	1
E	OLD BUILDING	CONSULTATION	OVERTURNED	1
E	OLD BUILDING	CONSULTATION	PASSED	406
E	OLD BUILDING	COURTESY INSPECTION	CANCELLED	15
E	OLD BUILDING	COURTESY INSPECTION	FAILED	1
E	OLD BUILDING	COURTESY INSPECTION	PASSED	57
E	OLD BUILDING	COVER-UP	CANCELLED	140
E	OLD BUILDING	COVER-UP	FAILED	29
E	OLD BUILDING	COVER-UP	OVERTURNED	5
E	OLD BUILDING	COVER-UP	PASSED	1312
E	OLD BUILDING	EXPIRED PERMIT	OVERTURNED	73
E	OLD BUILDING	EXPIRED PERMIT	PASSED	1595
E	OLD BUILDING	FINAL INSPECTION	CANCELLED	3426
E	OLD BUILDING	FINAL INSPECTION	FAILED	923
E	OLD BUILDING	FINAL INSPECTION	OVER TURNED FINAL	21
E	OLD BUILDING	FINAL INSPECTION	OVERTURNED	144

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

E	OLD BUILDING	FINAL INSPECTION	PASSED	16622
E	OLD BUILDING	FOOTING INSPECTION	PASSED	1
E	OLD BUILDING	INSPECTION CARD NOT ON JOB SITE	PASSED	115
E	OLD BUILDING	LETTER OF COMPLIANCE	CANCELLED	1
E	OLD BUILDING	OTHER	CANCELLED	96
E	OLD BUILDING	OTHER	FAILED	4
E	OLD BUILDING	OTHER	OVERTURNED	2
E	OLD BUILDING	OTHER	PASSED	636
E	OLD BUILDING	PICTURES ON FILE	PASSED	25
E	OLD BUILDING	RE-PIPE	CANCELLED	1
E	OLD BUILDING	RE-PIPE	PASSED	1
E	OLD BUILDING	ROUGH INSPECTION	CANCELLED	262
E	OLD BUILDING	ROUGH INSPECTION	FAILED	27
E	OLD BUILDING	ROUGH INSPECTION	OVER TURNED FINAL	1
E	OLD BUILDING	ROUGH INSPECTION	OVERTURNED	6
E	OLD BUILDING	ROUGH INSPECTION	PASSED	873
E	OLD BUILDING	SLAB	CANCELLED	7
E	OLD BUILDING	SLAB	FAILED	3
E	OLD BUILDING	SLAB	OVERTURNED	1
E	OLD BUILDING	SLAB	PASSED	254
E	OLD BUILDING	SWIMMING POOL	CANCELLED	15
E	OLD BUILDING	SWIMMING POOL	FAILED	1
E	OLD BUILDING	SWIMMING POOL	PASSED	104
E	OLD BUILDING	TEMPORARY FINAL	CANCELLED	23
E	OLD BUILDING	TEMPORARY FINAL	FAILED	1
E	OLD BUILDING	TEMPORARY FINAL	OVERTURNED	63
E	OLD BUILDING	TEMPORARY FINAL	PASSED	155
E	OLD BUILDING	TOP-OUT	CANCELLED	1
E	OLD BUILDING	TRAILER/HANDICAP TEMPORARY FINAL	CANCELLED	11
E	OLD BUILDING	TRAILER/HANDICAP TEMPORARY FINAL	PASSED	3
E	REPAIR	CONSULTATION	CANCELLED	4
E	REPAIR	CONSULTATION	PASSED	27
E	REPAIR	COURTESY INSPECTION	PASSED	1
E	REPAIR	COVER-UP	CANCELLED	1
E	REPAIR	COVER-UP	PASSED	12

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

E	REPAIR	EXPIRED PERMIT	OVERTURNED	1
E	REPAIR	EXPIRED PERMIT	PASSED	193
E	REPAIR	FINAL INSPECTION	CANCELLED	77
E	REPAIR	FINAL INSPECTION	FAILED	24
E	REPAIR	FINAL INSPECTION	OVERTURNED	5
E	REPAIR	FINAL INSPECTION	PASSED	535
E	REPAIR	INSPECTION CARD NOT ON JOB SITE	PASSED	2
E	REPAIR	OTHER	FAILED	2
E	REPAIR	OTHER	PASSED	16
E	REPAIR	ROUGH INSPECTION	CANCELLED	6
E	REPAIR	ROUGH INSPECTION	PASSED	11
E	REPAIR	TEMPORARY FINAL	OVERTURNED	1
E	REPAIR	TEMPORARY FINAL	PASSED	5
E	REPAIR	TRAILER/HANDICAP TEMPORARY FINAL	FAILED	1
E	REWIRE	CONSULTATION	PASSED	11
E	REWIRE	COVER-UP	CANCELLED	6
E	REWIRE	COVER-UP	FAILED	6
E	REWIRE	COVER-UP	PASSED	46
E	REWIRE	EXPIRED PERMIT	OVERTURNED	1
E	REWIRE	EXPIRED PERMIT	PASSED	49
E	REWIRE	FINAL INSPECTION	CANCELLED	43
E	REWIRE	FINAL INSPECTION	FAILED	11
E	REWIRE	FINAL INSPECTION	OVER TURNED FINAL	1
E	REWIRE	FINAL INSPECTION	OVERTURNED	2
E	REWIRE	FINAL INSPECTION	PASSED	135
E	REWIRE	INSPECTION CARD NOT ON JOB SITE	PASSED	1
E	REWIRE	OTHER	CANCELLED	3
E	REWIRE	OTHER	PASSED	18
E	REWIRE	PICTURES ON FILE	PASSED	2
E	REWIRE	ROUGH INSPECTION	CANCELLED	14
E	REWIRE	ROUGH INSPECTION	FAILED	2
E	REWIRE	ROUGH INSPECTION	OVERTURNED	2
E	REWIRE	ROUGH INSPECTION	PASSED	29
E	REWIRE	SLAB	PASSED	1
E	REWIRE	SWIMMING POOL	PASSED	1

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

E	REWIRE	TEMPORARY FINAL	CANCELLED	2
E	REWIRE	TEMPORARY FINAL	OVERTURNED	4
E	REWIRE	TEMPORARY FINAL	PASSED	7
E	ROOM ADDITION	CONSULTATION	CANCELLED	8
E	ROOM ADDITION	CONSULTATION	PASSED	65
E	ROOM ADDITION	COURTESY INSPECTION	CANCELLED	2
E	ROOM ADDITION	COVER-UP	CANCELLED	37
E	ROOM ADDITION	COVER-UP	FAILED	11
E	ROOM ADDITION	COVER-UP	OVER TURNED FINAL	1
E	ROOM ADDITION	COVER-UP	PASSED	294
E	ROOM ADDITION	EXPIRED PERMIT	OVERTURNED	3
E	ROOM ADDITION	EXPIRED PERMIT	PASSED	163
E	ROOM ADDITION	FINAL INSPECTION	CANCELLED	153
E	ROOM ADDITION	FINAL INSPECTION	FAILED	26
E	ROOM ADDITION	FINAL INSPECTION	OVERTURNED	5
E	ROOM ADDITION	FINAL INSPECTION	PASSED	422
E	ROOM ADDITION	INSPECTION CARD NOT ON JOB SITE	PASSED	5
E	ROOM ADDITION	OTHER	CANCELLED	6
E	ROOM ADDITION	OTHER	PASSED	36
E	ROOM ADDITION	PICTURES ON FILE	OVERTURNED	1
E	ROOM ADDITION	PICTURES ON FILE	PASSED	2
E	ROOM ADDITION	ROUGH INSPECTION	CANCELLED	118
E	ROOM ADDITION	ROUGH INSPECTION	FAILED	8

APPENDIX E
DUVAL COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

E	ROOM ADDITION	ROUGH INSPECTION	PASSED	133
E	ROOM ADDITION	SLAB	PASSED	2
E	ROOM ADDITION	TEMPORARY FINAL	CANCELLED	1
E	ROOM ADDITION	TEMPORARY FINAL	OVERTURNED	8
E	ROOM ADDITION	TEMPORARY FINAL	PASSED	11
E	ROOM ADDITION	TRAILER/HANDICAP TEMPORARY FINAL	CANCELLED	3
E	SIGN	EXPIRED PERMIT	PASSED	4
E	SIGN	FINAL INSPECTION	CANCELLED	1
E	SIGN	FINAL INSPECTION	FAILED	1
E	SIGN	FINAL INSPECTION	PASSED	9

APPENDIX F
PINELLAS COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

The following is a numerical tabulation of individual inspection records provided by:

Management Information Systems
Pinellas County, Florida
315 Court Street
Clearwater, Florida 34616
(813) 464-3995

Additional information concerning the raw data is available from that office.

Legend of abbreviations:

Division code	**Meaning of code**
B	Building
E	Electrical
Inspection type code	self explanatory
Disposition code	**Meaning of code**
C	Canceled
Y	Yellow Tag - minor corrections usually of a minor nature are required; work may continue; procedural corrections e.g. a missing Notice of Commencement would be in this category
R	RED tag - substantial, substantive corrections required before work may proceed; must pay reinspection fee (before final) of $15
Pass	inspection approved

APPENDIX F
PINELLAS COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

Division	Inspection type	Disposition	Count of Disposition
B		C	1
B		R	1
B	COLUMN	C	28
B	COLUMN	Pass	250
B	COLUMN	R	20
B	COLUMN	Y	9
B	DECK	C	197
B	DECK	Pass	1975
B	DECK	R	262
B	DECK	Y	164
B	DRVWAY	C	398
B	DRVWAY	Pass	2483
B	DRVWAY	R	221
B	DRVWAY	Y	138
B	DRYWL	C	790
B	DRYWL	Pass	4824
B	DRYWL	R	780
B	DRYWL	Y	285
B	FINAL	C	1619
B	FINAL	Pass	15749
B	FINAL	R	1445
B	FINAL	Y	3838
B	FIRE WL	C	137
B	FIRE WL	Pass	1528
B	FIRE WL	R	164
B	FIRE WL	Y	108
B	FOOTER	C	346
B	FOOTER	Pass	2605
B	FOOTER	R	485
B	FOOTER	S	1
B	FOOTER	Y	333
B	FRAME	C	1382
B	FRAME	Pass	5602
B	FRAME	R	2562
B	FRAME	Y	1798
B	LINTEL	C	665
B	LINTEL	Pass	3747

APPENDIX F
PINELLAS COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

B	LINTEL	R	795
B	LINTEL	Y	286
B	OTHER	C	296
B	OTHER	Pass	5806
B	OTHER	R	282
B	OTHER	Y	570
B	PRTFNL	C	5
B	PRTFNL	Pass	80
B	PRTFNL	R	8
B	PRTFNL	Y	10
B	SETBACK	C	1
B	SETBACK	Pass	63
B	SETBACK	R	6
B	SETBACK	Y	8
B	SHEATH	C	566
B	SHEATH	Pass	3894
B	SHEATH	R	595
B	SHEATH	Y	333
B	SLAB	C	682
B	SLAB	Pass	4483
B	SLAB	R	951
B	SLAB	Y	469
B	STEEL	C	276
B	STEEL	Pass	1955
B	STEEL	R	302
B	STEEL	Y	90
E		Pass	1
E	1ST RGH	C	418
E	1ST RGH	Pass	5932
E	1ST RGH	R	787
E	1ST RGH	Y	240
E	BOND	C	209
E	BOND	Pass	2079
E	BOND	R	194
E	BOND	Y	228
E	CHNG	C	3
E	FINAL	C	925
E	FINAL	Pass	14968

APPENDIX F
PINELLAS COUNTY INSPECTION DATA
(Requested dates: July 1, 1994 through June 31, 1996)

E	FINAL	R	2817
E	FINAL	Y	1762
E	OTHER	C	97
E	OTHER	Pass	1054
E	OTHER	R	534
E	OTHER	Y	383
E	PRTFNL	C	12
E	PRTFNL	Pass	134
E	PRTFNL	R	18
E	PRTFNL	Y	12
E	SAWPOLE	Pass	51
E	SAWPOLE	R	36
E	SAWPOLE	Y	6
E	SLAB	C	84
E	SLAB	Pass	1745
E	SLAB	R	74
E	SLAB	Y	19