

TECHNICAL PUBLICATION NO. 14

081-156

Impact of Codes and Regulations on
Construction Costs in Alachua County



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1982



IDENTIFICATION OF SOME CODES AND REGULATIONS
WHICH ADD UNNECESSARILY
TO THE COST OF CONSTRUCTION IN ALACHUA COUNTY

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A report developed by the Graduate School
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INTRODUCTION

The following report was compiled by the Graduate School of Building Construction of the University of Florida at the request of the Florida Construction Industry Advisory Committee. This report has been designed to help finalize a pilot study for Alachua County, Florida. Upon recommendations by a member of the Advisory Committee, as well as research consultants, it was a mutual understanding that a supplementary report should be carried out in Alachua County. The supplementary report would better define the methodology of research and complete the development of survey questions to be used before expanding this project statewide.

This report focuses on a certain number of codes and regulations that show need for revision. The underlying purpose of this report was to develop the first series of sample questions and apply an approved methodology to the pilot, and for that reason its importance lies in the quality of research that follows. That is to say that, through experimentation with different surveys and methods of polling the general contractors of Alachua County, a final instrument will be developed that will effectively work statewide as a scientific survey.

METHODOLOGY

The questionnaire was formulated through research on related topics from government, literature, sponsored research reports, pertinent library information, and interviews with contractors and public officials, among other sources.

Our method of contact was a mail-out survey which included a cover letter explaining our purpose. The survey was sent to each contractor listed by the Alachua County Building Department. The county list was cross-referenced with the county phone book, Gainesville Home Builders Association member list, and the Gainesville Construction directory.

Of the nearly 500 surveys sent out, only 342 can be considered possible contacts due to the county's failure to keep current addresses. A strong return for a mail survey was achieved at 21.3%. The results of this survey are combined within.

SUMMARY OF RESULTS AND DISCUSSION

The results of this initial study tend to confirm the underlying feeling in the construction industry that over regulation, control and inspection do indeed tend to delay the construction process and to increase the cost of construction. If this pilot study, in its first phase, tends to confirm builders' innate feelings about codes and regulations, this report becomes a valuable tool for possible use in the legislative process to revise stifling regulations and statutes. The purpose then is to develop a study that is scientifically done; that it withstand any challenge as to its validity so that it may be used as a tool to initiate change that may help resolve one of the principal problems facing the construction industry, namely, ever increasing building costs.

The response from the pilot produced a number of complaints and suggestions concerning certain codes and regulations. This led to a gathering of information that has been documented in this report.

The pilot was a preliminary indicator of contractors' views, and indicates the need for a supplementary study, for many new questions have been brought up which should be investigated. An expansion of the project into the future would yield more definitive and concrete answers to existing weakness and problems.

INSPECTIONS

The inspection process received the greatest amount of criticism. Duplicity of inspections, and separate inspections of building, plumbing and electric, slab inspections, curb-break inspections, driveway inspections, waiting and on-the-job inspectors were all cited as problem areas.

Solutions such as combining city and county building inspection departments, using the "Homeowners Warranty" as an alternate to government inspection, and allowing a licensed person in control to certify code compliance with a letter, were suggested.

It is imperative to understand limitations imposed on the inspection process at any level. The contractors agree on the need for improvement. To what degree should the improvement reach? Is it a matter of facilitating the inspector's reporting? Is there a need for state-wide change, or just changes at the county or city level?

Where the study initially surveyed only licensed general contractors, it would seem to be advantageous and beneficial to survey the inspectors. Their views and suggestions would prove informative and quantitative, as did the contractors', who presented excellent ideas on inspection.

"Grant contractors professional status, as well as the responsibility that goes along with it. Inspections could be eliminated. That is to say that contractors would be solely responsible for their work and policed by a strong licensing board. This could be similar to the Real Estate Board." This would undoubtedly necessitate considerably higher registration standards and perhaps compulsory bonding.

"Have random inspections on buildings, as opposed to inspecting each and every building. This would cut down on permit and inspection costs."

PERMITS & CODES

Permits presented problems of time. Contractors spend a great deal of time obtaining multiple permits for a single job, and it is suggested that "permits should cover an entire project as opposed to different sections."

Complaints of wait periods for processing were evident. The desire was to reduce application and processing time.

Lack of uniformity was a chief complaint concerning codes. A company stated that they "build in 32 counties and basically none of the codes are the same. One area wants larger windows for escape (from fire), while another says to cut glass area down (for energy considerations)." Example:

1. Glass area codes should be uniform throughout the state to encompass fire escape routes as well as energy considerations.
2. New materials should be reviewed sooner for adoption by the code enforcing agencies to cut down on lag time.

3. Energy codes directly conflict with the 8' ceiling height requirement. The 8' height must be reviewed to comply with efficient energy codes.
4. Another code for review should be the city curb-cut rule. The city makes the contractor take out the whole curb at prescribed 10' cut marks. The county lets them take it out anywhere, and only requires the top of the curb to be removed.

The diversity of codes and their way of complicating construction is clearly evident, particularly in the case of out-of-town contracts where a different code must be adhered to.

The possibility of a statewide uniform code is remote, but not unattainable. As one reflected: "If all cities and counties could be the same, the cost of code enforcement would be minimal for the protection it gives the consumer. Any good builder wants a strong code to assure that poor builders will be forced to compete."

Along with the lack of uniformity of codes there is no single enforcing agency. It is suggested that Florida should adopt one code with one enforcing agency.

How far off is this ideal? Are there feasible solutions? Are there solutions which could be uniform regionally? It is difficult to judge one way or the other because of the disparity among codes and regulations. Consider, for example, various regulations that must be complied with by the VA, FHA, HUD, MPS, FNMA, SBCC and BOCA, as well as the builders' codes.

What effect would lifting the requirements for service cable to be in conduit have on the inspection process? Would allowing aluminum service wires in place of copper wire speed up inspection? Should PVC

be allowed in place of cast iron plumbing?

There is a need to measure an individual action in terms of its effect on the whole. It is essential to realize that by changing one code it could have an effect on other codes of other areas of the same code, or affect other codes in general.

One important issue brought up concerning bonds was the double bond issue. It was agreed that the double bond requirements for specialty crafts be eliminated.

SPECIFIC COMMENTS

Reviewing comments on specific survey statements provided a contrast of business approach.

Statement 7. Cost savings resulting from decreased regulations would be shared by the consumer as well as the contractor. One answered: "This should be the case if all parties allow net cost to level." Another went on to say: "The consumer would get 100% of the savings." Finally: "Cost savings are never shared by the contractor for the same reason that the contractor never pays unreimbursed cost, that is, if he knows what his costs are going to be ahead of time. How the public can be sold on the idea that increasing or decreasing a contractor's cost will increase or decrease his (contractor's) earnings is beyond me. Estimating is pure arithmetic if a builder knows how to build, and he earns a profit based on his estimated costs. The public gets hurt when they deal with a builder that convinces them that he can build for 20% less than the competition. The contractor has underestimated and can't pay the subs; the contractor

goes out of business; the subs lien the property and the owner pays anyway. The bad thing is that it is so easy to get a license that four more will replace him when he goes."

Information gathered from the first survey brought out the following:

"If contractors were granted professional status, as well as the responsibility that goes along with it, inspections could be eliminated. That is to say that contractors would be solely responsible for their work and policed by a strong licensing board."

"Have random inspections on buildings, as opposed to inspecting each and every building. This would cut down on permit and inspection costs."

"Florida should adopt one code with one enforcing agency."

"Glass area codes should be uniform throughout the state to encompass fire escape routes as well as energy considerations."

"New materials should be reviewed sooner for adoption by the code enforcing agencies to cut down on lag time."

"The 8' ceiling height requirement could be reviewed to comply with efficient energy codes"

"Present curb cutting regulations should be reviewed due to their duplicity."

"Aluminum service wires should be allowed in place of copper ones."

"Wire incased in conduit should not be required in any dwellings."

"PVC should be allowed in place of cast iron plumbing pipe."

"Double bond requirements for specialty crafts should be eliminated."

Meetings with professional researchers and a member of the Advisory Committee have also brought up many new questions that should be investigated in the future. Answers may be found from a re-survey of building contractors, inspectors, enforcing agencies and regulatory agencies.

RECOMMENDATIONS

It is recommended that this first pilot study be expanded to include questions raised by the first survey and that the study be extended for one year to complete a final survey that can be utilized statewide, based on information gathered in Alachua County. This future report, combining the first and second pilot studies, will be prepared for use by the Advisory Committee. It will be a scientific report that can be used in Tallahassee as a representative document in the possible revamping of unnecessary building codes and regulations in Alachua County and the State of Florida.

SURVEY

Annual Business Volume

- \$0-250,000
- \$250,000-500,000
- \$500,000-1,000,000
- \$1,000,000-5,000,000
- \$5,000,000 & greater

Residential

- 1&2 Family
- Apartments
- Condominiums
- Other _____

Commercial

- Office/Business
- Warehouse
- Institutional
- Industrial
- Other _____

Developer

- Land
- Residential
- Commercial
- Other _____

Please apply the following key to the statements below:

- a. I strongly agree
- b. I agree
- c. I am undecided
- d. I disagree
- e. I strongly disagree

- 1. Building codes and regulations are necessary to protect public health and safety. a b c d e
- 2. The existing inspection process efficiently assures compliance with codes and regulations. a b c d e
- 3. The existing permit application process is efficient. a b c d e
- 4. Certain unnecessary codes and regulations exist. a b c d e
- 5. If you agree with question 4, then by eliminating the unnecessary codes and regulations, public health and safety would not be affected. a b c d e
- 6. Higher costs of building within the city limits of Gainesville are a result of differences between city and county regulations and inspection procedures. a b c d e
- 7. Cost savings resulting from decreased regulations would be shared by the consumer as well as the contractor. a b c d e
- 8. These same savings would allow contractors to be more competitive. a b c d e
- 9. What percentage, if any, of your annual business volume is spent on compliance with unnecessary codes and regulations? _____
- 10. Could you identify 2 or 3 of these codes or regulations?

Any personal recommendations for decreasing construction costs that are code or regulation related would be greatly appreciated.

COMMENTS:

SURVEY RESULTS

OVERALL

73 responses out of 342 possible contacts = 21.3% return.

SURVEY QUESTIONS

- 1) Building codes and regulations are necessary to protect public health and safety.

<u>%</u>	
51	Strongly agree
37	Agree
4	Undecided
6	Disagree
2	Strongly disagree

- 2) The existing inspection process efficiently assures compliance with codes and regulations.

<u>%</u>	
10	Strongly agree
37	Agree
10	Undecided
31	Disagree
12	Strongly disagree

- 3) The existing permit application process is efficient.

<u>%</u>	
11	Strongly agree
35	Agree
21	Undecided
23	Disagree
9	Strongly disagree

- 4) Certain unnecessary codes and regulations exist.

<u>%</u>	
49	Strongly agree
25	Agree
7	Undecided
15	Disagree
4	Strongly disagree

- 5) If you agree with Question 4, then by eliminating the unnecessary codes and regulations, public health and safety would not be affected.

<u>%</u>	
47	Strongly agree
40	Agree
9	Undecided
5	Disagree
0	Strongly disagree

- 6) Higher costs of building within the city limits of Gainesville are a result of differences between city and county regulations and inspection procedures.

<u>%</u>	
34	Strongly agree
31	Agree
13	Undecided
15	Disagree
7	Strongly disagree

- 7) Cost savings resulting from decreased regulations would be shared by the consumer as well as the contractor.

<u>%</u>	
38	Strongly agree
38	Agree
7	Undecided
10	Disagree
6	Strongly disagree

- 8) These same savings would allow contractors to be more competitive.

<u>%</u>	
22	Strongly agree
37	Agree
9	Undecided
25	Disagree
6	Strongly disagree

RESPONSES BY ANNUAL BUSINESS VOLUME

\$0-250,000

8 RESPONDENTS

- 1) Building codes and regulations are necessary to protect public health and safety.

<u>%</u>	
75	Strongly agree
12	Agree
0	Undecided
13	Disagree
0	Strongly disagree

- 2) The existing inspection process efficiently assures compliance with codes and regulations.

<u>%</u>	
0	Strongly agree
37	Agree
25	Undecided
38	Disagree
0	Strongly disagree

- 3) The existing permit application process is efficient.

<u>%</u>	
0	Strongly agree
50	Agree
12	Undecided
38	Disagree
0	Strongly disagree

- 4) Certain unnecessary codes and regulations exist.

<u>%</u>	
38	Strongly agree
50	Agree
0	Undecided
12	Disagree
0	Strongly disagree

- 5) If you agree with Question 4, then by eliminating the unnecessary codes and regulations, public health and safety would not be affected.

<u>%</u>	
43	Strongly agree
43	Agree
14	Undecided
0	Disagree
0	Strongly disagree

- 6) Higher costs of building within the city limits of Gainesville are a result of differences between city and county regulations and inspection procedures.

<u>%</u>	
12	Strongly agree
25	Agree
25	Undecided
38	Disagree
0	Strongly disagree

- 7) Cost savings resulting from decreased regulations would be shared by the consumer as well as the contractor.

<u>%</u>	
25	Strongly agree
50	Agree
0	Undecided
25	Disagree
0	Strongly disagree

- 8) These same savings would allow contractors to be more competitive.

<u>%</u>	
12	Strongly agree
50	Agree
0	Undecided
38	Disagree
0	Strongly disagree

\$250,000-500,000

11 RESPONDENTS

QUESTION NUMBER

1	2	3	4	5	6	7	8	
45	0	10	60	30	27	30	20	Strongly agree
27	20	20	20	40	54	40	30	Agree
0	10	30	0	20	9	10	10	Undecided
9	50	40	20	10	0	10	20	Disagree
18	20	0	0	0	9	10	20	Strongly disagree

ALL NUMBERS ARE PERCENTAGES

\$500,000-1,000,000

13 RESPONDENTS

QUESTION NUMBER

1	2	3	4	5	6	7	8	
69	15	23	31	50	46	33	25	Strongly agree
23	31	39	8	25	23	33	50	Agree
0	15	15	39	12	8	0	8	Undecided
8	23	8	15	13	23	33	17	Disagree
0	15	15	8	0	0	0	0	Strongly disagree

\$1,000,000-5,000,000

15 RESPONDENTS

QUESTION NUMBER

1	2	3	4	5	6	7	8	
47	7	7	60	47	20	27	20	Strongly agree
47	60	27	33	47	33	53	47	Agree
7	13	33	0	7	20	13	7	Undecided
0	20	27	7	0	20	0	20	Disagree
0	0	7	0	0	7	7	7	Strongly disagree

RESPONSES CLASSIFIED BY ANNUAL BUSINESS VOLUME

\$5,000,000 and greater
7 RESPONDENTS

<u>QUESTION NUMBER</u>								
1	2	3	4	5	6	7	8	
57	0	0	71	83	29	71	0	Strongly agree
43	57	71	14	17	29	14	29	Agree
0	0	0	0	0	14	0	29	Undecided
0	14	14	14	0	14	0	43	Disagree
0	29	14	0	0	14	14	0	Strongly disagree

ALL NUMBERS ARE PERCENTAGES

RESPONSES CLASSIFIED BY CONSTRUCTION TYPE

RESIDENTIAL CONTRACTORS
20 RESPONDENTS

<u>QUESTION NUMBER</u>								
1	2	3	4	5	6	7	8	
50	11	5	50	53	44	47	37	Strongly agree
40	37	40	25	41	33	26	11	Agree
5	5	15	5	6	6	5	16	Undecided
0	37	40	15	0	17	21	32	Disagree
5	11	0	5	0	0	0	4	Strongly disagree

COMMERCIAL CONTRACTORS
7 RESPONDENTS

<u>QUESTION NUMBER</u>								
1	2	3	4	5	6	7	8	
71	14	14	16	40	14	14	0	Strongly agree
29	57	43	34	40	29	43	50	Agree
0	0	14	16	20	14	29	0	Undecided
0	14	0	34	0	29	14	50	Disagree
0	15	28	0	0	14	0	0	Strongly disagree

RESPONSES CLASSIFIED BY CONSTRUCTION TYPEDEVELOPERS
2 RESPONDENTS

<u>QUESTION NUMBER</u>								
1	2	3	4	5	6	7	8	
50	0	0	50	50	50	50	50	Strongly agree
0	0	100	50	50	50	50	50	Agree
0	100	0	0	0	0	0	0	Undecided
50	0	0	0	0	0	0	0	Disagree
0	0	0	0	0	0	0	0	Strongly disagree

COMBINATION CONTRACTORS
RESIDENTIAL AND COMMERCIAL
13 RESPONDENTS

<u>QUESTION NUMBER</u>								
1	2	3	4	5	6	7	8	
62	0	15	46	33	23	8	8	Strongly agree
38	31	15	31	33	23	60	60	Agree
0	15	38	15	22	15	8	0	Undecided
0	46	23	0	11	23	8	16	Disagree
0	8	8	8	0	15	16	16	Strongly disagree

ALL NUMBERS ARE PERCENTAGES

COMBINATION CONTRACTORS
RESIDENTIAL, COMMERCIAL, AND DEVELOPER
20 RESPONDENTS

<u>QUESTION NUMBER</u>								
1	2	3	4	5	6	7	8	
40	11	5	63	53	35	58	26	Strongly agree
40	37	32	21	32	30	32	37	Agree
5	11	26	5	5	25	5	11	Undecided
10	26	26	11	11	10	5	26	Disagree
5	16	11	0	0	0	0	0	Strongly disagree

SECTION II
CONTRACTOR'S COMMENTS

Inspections

The inspection process was the single-most cited problem by contractors replying to the survey. The entire regulatory system is represented by the physical presence of an inspector on a job site. This close proximity to governmental authority proved to raise widely diversified responses as to the process's efficiency and worth.

Problems

Note: The number in parentheses at the end of each statement indicates the number of contractors citing that particular problem or suggestion. This applies to this subsection only.

1. The requirement for separate building, plumbing, electrical, and HVAC inspections on one- and two-family structures in the City of Gainesville is unnecessary. (2)
2. There is a duplication of inspections in the city and also by other regulatory agencies. (2)
3. Slab inspections, curb break inspections, that is, having the city determine exactly where a driveway may intersect the street; and driveway inspections were cited as problem areas. (1)

4. Waiting for inspections. (5)

5. The actual number of inspections was cited. One contractor said: "The houses being built in the county are as well constructed as those in the city. They are built with approximately twenty to twenty-five less inspections. The additional time involved building in the city is very costly. We are moving away from construction within the city for these reasons."

6. Another contractor stated that a major time cost-factor caused by delays in processing and inspection is work that has to be suspended one to two days on the job even when every aspect of that job is performed correctly. Poor logistical planning by the building department results in inspectors being unable to respond promptly. This causes unproductive labor time and is a complete waste. He was joined by another contractor in the opinion that the above causes much supervision time to be spent on scheduling around inspections, which is not cost-effective flow-through construction. It also takes supervision time away from where it is really needed, i.e., quality control.

7. Two contractors agreed that the responsibility for following necessary standards (codes) for construction should fall on the contractor's shoulders, and licensing regulations already in effect can assure that competent people are in fact in charge of construction.

Suggestions

1. It was felt that the city of Gainesville should use Alachua county inspection procedures. (2)
2. One builder felt the city and county building inspection departments should be combined: "Our present county system is an efficient, well-run department. The city system is the worst sort of authority to be forced on anyone. They are absolutely lost in a maze of regulations and are not competent to regulate".
3. The suggestion was made that on-site inspections are unnecessary where a licensed person in control would certify code compliance with a letter.
4. A retired general contractor said: "In my opinion all codes and regulations are necessary."
5. In an interview, a local builder suggested the Home Owners Warranty (HOW) program would be an alternative to government inspection.

Inspectors

Inspectors took the brunt of the comments that were of a personal nature. Such terms as "prima donna" and "incompetent" were two of the most negative. These were certainly not representative of a general consensus of opinion, however. The comments varied widely as in the previous subsection.

Problems

1. Two comments were made about inspectors expanding their authority into "gray" areas not specifically covered by the code. The builders felt they had no real recourse against the inspectors that attempted the vague areas of the code, thus putting themselves in a disadvantageous position.

2. One said the regulations in the city are unrealistic and the inspectors in the county are lax. The county needs to have more qualified personnel.

3. The following is a compilation of three contractors' thoughts on inspectors: All but one or two of the inspectors are dropouts in that they couldn't make it in their own business and they seem to be trying to keep other small businesses from surviving. However, considering the pay, both city and county inspectors are good; but more pay would attract a better class of inspector. The present ones inspect because they could not make it as a contractor--if they failed at it, how can they tell other contractors what to do?

4. An Orlando contractor said local regulations are such that out of town electrical and plumbing subcontractors find it very difficult to work in the Alachua County area. "The local inspectors say pressure is put on them by their superiors to make things very difficult, it's brought on by local associations of electrical and plumbing subcontractors."

Suggestion

Allow city and county inspectors to inspect sanitary sewers.

Permits

A total of twelve responses were made concerning building permits. In a relative sense, the permit application process did not appear to be as much of a problem as the inspection process.

Problems

1. A local remodeling contractor found it extremely inefficient and expensive to have to buy a roofing permit separate from the building permit on a small project. This double permit requirement was said to be mandatory even if the roof was of the sheathing, felt, and shingles type as opposed to the more complex built-up type utilized on leak-prone flat roofs.
2. Three comments were made about the time that it takes to apply for and receive a permit of any kind. The times ranged from five to fourteen days from application date.
3. The cost of all permits, specifically the requirement for each separate subcontractor to spend time and money purchasing a permit was said to increase the overall building cost.
4. Driveway permits are not only an extra expense in terms of the fee required, but as one contractor stated in an interview, he has to use his own time to apply for a permit which must be charged to that particular job.

The eventual owner pays for a professional to drive downtown, wait in line, fill out the paper work, and drive back home.

Suggestions

1. Permits are unnecessary for licensed contractors.
2. Reduce local permit cost by having spot checks on a random number of building permits rather than paying a force of inspectors to check each building.
3. An ulterior motive for city of Gainesville building permit fees: "I believe you will find that the city collects more in building construction permits than is needed to fund this part of the city function. In effect the building department collects a hidden tax for the city to fund other things with."
4. "The permit application process is bulky and bureaucratic because of detailed checks made by the various departments in government that should be taken care of with 'in-field' inspections, particularly on smaller projects."

Codes

This group of responses centered mainly on the question of lack of uniformity among building codes in terms of numbers of code enforcement jurisdictions, and conflicts within local codes. Specific parts of the building code being cited as troublesome were noticably absent. Only one section of the code was mentioned by number: a complaint

about section 1802 of the Standard Building Code, the sheet-rock nailing requirements.

Problems

1. The conflict among and within codes for the various sub-contracting specialties.
2. The laxity of the mobile home code as opposed to the conventional building codes. Contractors feel mobile home builders should be forced to build by the same standards as conventional home builders.
3. A company states that they..."build in 32 counties and basically none of the codes are the same. One area wants larger windows for escape [from fire] while another says cut glass area down [for energy considerations]."
4. "The problem is there is no one code and no single enforcing agency. The VA, FHA, HUD, MPS, FNMA, SBCC, and BOCA should all be merged into one code."
5. One respondent was concerned with the length of time it takes the codes to allow for the use of new materials. Two to five years was stated as the lag time in the city of Gainesville.
6. Steel in stem walls is unnecessary, according to one contractor.
7. City curb-cut rule: the city makes the contractor take out the whole curb at prescribed 10' cut marks. The county lets them take it out anywhere, and only requires the top of the curb to be removed.
8. Double top plate--trusses directly bearing on studs

should eliminate this requirement.

9. Handrail requirements--especially on exterior decks.
10. Lack of enforcement that a licensed journeyman be on the job at all times.

Suggestions

1. Adopt statewide handicap and fire codes. As it stands now each municipality interprets the codes the way they want.
2. Eliminate all codes not directly affecting health and safety.
3. Allow local governments to modify standard codes for local conditions on items not directly affecting health and safety.
4. Have a South Florida code and a North Florida code and use zoning for local variations.
5. Use the Southern Standard Building Code as the basis for all codes.
6. "If all cities and counties could be the same the cost of code enforcement would be minimal for the protection it gives the consumer. Any good builder wants a strong code to assure that poor builders will be forced to compete."
7. Revise all building codes.

Energy

Builders are beginning to realize they must construct energy-efficient buildings not only because of the prevailing

national attitude toward energy independence, but also because the consumer demands it. Inefficient buildings just do not sell.

Problems

1. The code-required 8' ceiling height minimum conflicts with good energy conservation practice for residential structures.
2. The requirement for energy calculations on even very small additions (96SF).

Suggestions

1. Simplify the form required for energy information on each structure. One contractor says it takes two hours for each house.
2. "Model Energy Code is a time waster. Energy requirements could be met by simply requiring the following examples:

Stud walls---3-1/2" batts
Ceiling-----6" batts
Insulating windows
Zonolite in concrete block cells

If the builder/owner did not want to do the above, the weighing factors available in the energy code could be applied at their option."

3. Force subcontractors to use the same energy-efficient systems and techniques as the builder must use.

General comments

1. "The new energy codes are for all our benefit, and our

children, and we are going in the right direction to always become safer and more efficient."

2. One contractor said the new energy-efficient homes are actually less efficient than their old ones. Hot water, air conditioning systems, heating systems, lighting facilities, were all mentioned as trouble areas.

3. "The Model Energy Code is a laughing matter in most residential construction. As educated as the public is becoming in energy matters, there is no need to do the calculations and paperwork to process a permit and inspect the project, when the code requirements are about 50% of what will sell on the open market."

Zoning and Subdivision Regulations

Zoning and subdivision regulations and approval procedures reflect the community's basic attitudes toward growth. A no-growth policy can be implemented by local governments through complex site plan review schedules, low density zoning, utilities hook-up charges and many other factors which increase the cost of a project. Areas trying to foster growth have less restrictive regulations but cannot supply as wide a range of services and facilities. Some developers in Gainesville feel there is a no-growth attitude present here.

Problems

1. Street right-of-way widths: two contractors feel that

this regulation is particularly out of line.

2. Set-back requirements were mentioned three separate times as a problem.
3. Mandatory land dedication.
4. Curbs and gutters as a mandatory requirement.
5. The time it takes to receive all the necessary approvals.
6. The city Site Plan Review Board schedule and requirements.
7. The red tape involved with variances.
8. "Zoning procedures in the city are political and restrictive rather than rational or market-oriented. Well connected developers make excessive profits."
9. The landlord ordinance which requires everyone who rents property to register and pay a fee.
10. The Land Use Plan: it is, in effect, a second layer of zoning.
11. Newly proposed housing code: upon sale, any house, no matter what age, must meet all present codes or it cannot be sold.
12. Land use regulation: dictating to developers the amount of required green space, runoff retention area, and parking.
13. Density restrictions.
14. Limiting business types in a given area.

Suggestions

1. "The cost of lots has skyrocketed in recent years, look here for unnecessary codes and regulations."
2. Develop better procedures for utilities hookups: the

present system takes ten days to three weeks.

Fire Resistance and Means of Egress

The main concern here is the conflict between fire access and energy conservation.

Problems

1. Operable window size requirements.
2. Egress requirements in windows above the ground floor.
3. Fire wall interpretation.
4. Large windows for firemen.
5. Large windows for escape which result in a high energy loss.
6. Fire sprinkler systems in underground parking areas.
7. Furnishing fireproof fixtures and interior finishes in a fire-rated leased shell.
8. Interpretation of "means of egress".

Suggestions

1. Secondary means of egress through storefront openings.
2. Allow for non-fire-rated sheetrock in duplexes as well as single-family structures.

Handicap Requirements

This is among the Reagan Administration's latest group of regulations to be scrutinized for its efficiency and overall benefit. It is one of thirty rules which will

probably undergo major changes within the next few years.

Problems

1. Wheel chair ramps in 4-unit apartment buildings.
2. The requirement that 25% of all units meet handicap requirements.
3. Excessive requirements for the handicapped in small multi-family projects.
4. The overall number of handicap provisions.

Electrical

Problems

1. The requirement for service cable to all residential structures to be in conduit.
2. The requirement for copper electrical service wire as opposed to aluminum.
3. That all wire must be in conduit for all structures other than single-family homes.
4. Unnecessary outlets.
5. "Outlets could well be a given number to an area as opposed to requiring them a certain distance apart; this would help where glass covers a full wall."
6. Use of ground fault circuit interrupters in garage and other areas.

Plumbing

Problems

1. The requirement for a floor drain even though the possibility of overflow is from an air conditioning system condensate drain.
2. The requirement for washer-dryer hook-ups in all residences.
3. The maximum distance from traps to vents on drain lines.
4. Cast iron plumbing pipe.

Landscape Requirements and Tree Permits

Problems

1. The number and type of drawings necessary to comply with the landscape ordinance.
2. The landscape ordinance itself.
3. One developer complained about the necessity of a tree permit in such a wooded area as Alachua County.

Bonds

Problems

1. The necessity for a sidewalk concrete bond for contractors in the City of Gainesville.
2. Double bond requirement: contractor's bond should be able to cover roofing and include other specialty crafts rather than requiring a separate bond for each.

Comments on Specific Survey Statements

Statement 6.

Higher costs of building within the city limits of Gainesville are a result of differences between city and county regulations and inspection procedures.

1. "If a cost difference exists it is due to thoroughness of inspections in the city."
2. "I do a lot of small renovations and additions in the city and in the county. I estimate one day's 'down time' per inspection on a project. With a \$15,000 addition in the city, if you have a bedroom and bath addition with gas service, that amounts to about thirteen inspections."
3. A contractor commented that the same situation occurs between the city of St. Augustine and its surrounding county as in the Gainesville area.

Statement 7.

Cost savings resulting from decreased regulations would be shared by the consumer as well as the contractor.

1. "For a contractor to bid successfully and therefore stay in business, all cost savings-in the bid stage-will almost have to be passed on to the consumer."
2. "This should be the case if all parties allow net costs to level."
3. "Construction is very competitive, to the point of being destructive. No one controls the marketplace in local construction. The consumer would get 100% of any savings."
4. "Cost savings are never shared by the contractor for the same reason that the contractor never pays unreimbursed

cost. That is, if he knows what his costs are going to be ahead of time. How the public can be sold on the idea that increasing or decreasing a contractor's costs will increase or decrease his earnings is beyond me. Estimating is pure arithmetic if a builder knows how to build; and he earns a profit based on his estimated costs. When the public gets hurt is when they deal with a builder that convinces them that he can build for 20% less than the competition. The contractor has underestimated and can't pay the subs; the contractor goes out of business, the subs lien the property, and the owner pays anyway. The bad thing is that it is so easy to get a license that four more will replace him when he goes."

Statement 8.

These same savings would allow contractors to be more competitive.

1. "If regulations affect everyone equally it won't affect competition."
2. "Easing the code should reduce costs."
3. "These savings would allow Gainesville to be more competitive with other geographical areas such as Ocala, Tampa, and Palatka."
4. "Only if the competition is across jurisdictional lines."
5. "Insofar as they actually reduce his costs."

Statement 9.

What percentage, if any, of your annual business volume is spent on compliance with unnecessary codes and regulations?

Fifty respondents ventured a guess at this question out of the total of seventy-three responses to the survey. The other twenty-three either left the question blank (17), or filled it in with a question mark (6). Ten percent was the single most often cited percentage (13), with 9.16% as the mean if the twenty-three non-observations were left out of the sample.

To give some idea as to the dollar volume this could mean to contractors and consumers, we took the city and county's estimated construction cost from building permit data for 1978, 1979, 1980, and 1981. This total was multiplied by the mean percentage:

$$\$312,382,986 \times 9.16\% = \$28,614,282$$

This figure is not based on actual data taken from contractor's records. This type of information is not available through conventional cost accounting systems. It is merely a result of guesswork on the contractor's part. It should not be taken as hard scientific data.

However, of the fifty observations on statement number nine, forty-three respondents gave an answer of 1% or greater. This indicates that 86% of those contractors answering the question felt that some part of their annual business volume was spent on complying with unnecessary codes or regulations.

Comments on Statement 9.

1. "It's extremely hard to assess. The unnecessary codes and regulations become part and parcel of trying to do

business in the city. Situations like going in front of the city's site plan approval occupy 12 to 24 hours per project depending on the situation."

2. "10% as a wild guess. The big costs are the indirect costs, such as the break in job rhythm while the entire job is prepared for an inspection. Example: all insulation must be installed and inspected before any interior walls can be installed."

3. "I don't believe this can be estimated except possibly by the time value of money which is certainly of consideration at today's construction loan interest rate. Field inspections very rarely reveal any serious infractions of the codes. For the most part they are changes that the contractor simply didn't know about yet, or human error on the job. In either case it will have been estimated as a part of his markup as an experienced cost of doing business."

General Comments and Suggestions

1. "Have the state require each contractor to buy bond insurance for the life of the house or building. After each successful suit against him, raise the bond cost, or revoke his license."

2. "Double restroom facilities in retail facilities are unnecessary."

3. "The temporary toilets requirement at construction sites should be looked at."

4. "The amount of information required to be submitted for

any commercial project."

5. "Compliance with regulations requires hiring lawyers, accountants, engineers, architects, surveyors, which costs tens of thousands in fees on a single modest subdivision project and less than ten percent of what they do has any intrinsic value.

"The time top management spends weaving through the maze adds to cost because production is decreased due to lack of top management time, and mistakes are made in construction by lower echelon that generally would be caught by management."

6. "Many areas are vague as to interpretation and misunderstandings occur too often--usually to the contractor's detriment. These should be clarified prior to the permit's being issued--not after the fact. Some sort of an arbitration board should be set up to administer to those 'gray areas' immediately. At present the building inspector has total discretionary power."

7. "The requirement that an architect must draw the plans for a quadraplex."

8. "No regulation is totally worthless. We need government regulation to overcome individuals who cannot govern themselves. The dishonest have to be governed."

9. "The county system is better, the city is unbelievably frustrating."

10. "Too much red tape."

11. "Unnecessary additional cost: city crews that work

a four-day work week. There is no way to get vital information on Fridays from these departments. It takes as many as six days to have sewer 'Ys' staked. Originally, when this job was created, we were promised it would be one day. Construction work demands a five or six-day work week. Why should our work have to suffer because they prefer to be different and work four days?"

12. "I was active in construction from 1936 to 1980. Before codes and regulations were enforced, I witnessed some hazards and wrongdoings in construction. I assisted in gathering information that resulted in the creation of the Construction Industry Licensing Board, and the codes and regulations that were necessary to protect the public from shoddy construction. In my opinion all codes and regulations and inspections are necessary."