

**BUILDING CODE EFFECTIVENESS GRADING SCHEDULE  
(BCEGS®) QUESTIONNAIRE**

This questionnaire is used to measure the resources and support made available to building code enforcement and the use of those resources as they apply to the mitigation of natural hazards common to the jurisdiction evaluated.

For your convenience there is a glossary included to help you complete this questionnaire.

Name of Jurisdiction: _____
Jurisdiction representative who filled out this questionnaire: Name: _____ Title: _____
PIAL representative who conducted the jurisdiction interview: Name: _____ ID: _____
12-month period of time used for information throughout the questionnaire: _____, 20 ____ to _____, 20 _____

Survey Date (for PIAL use only): \_\_\_\_\_

## BUILDING CODE EFFECTIVENESS GRADING SCHEDULE

### **BACKGROUND DATA**

1. Name of jurisdiction (for PIAL use only): \_\_\_\_\_
- 1A. Name of county \_\_\_\_\_ 1B. Name of state \_\_\_\_\_
2. Six digit National Flood Insurance Program (NFIP) number \_\_\_\_\_
3. What year was the jurisdiction established? \_\_\_\_\_  INA / DNA  
or incorporated? \_\_\_\_\_  INA / DNA
4. What year was the building department established? \_\_\_\_\_  INA / DNA
- 4A. If building codes were enforced in the jurisdiction before the current building department's establishment, what was the name of the prior enforcing agency?  
\_\_\_\_\_
- 4B. What was the first year of continuous building code enforcement? \_\_\_\_\_
5. Chief administrative officer (mayor, city manager, etc.)  
Prefix \_\_\_\_ First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
Title \_\_\_\_\_  
Physical Address \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_  
Telephone ( \_\_\_\_\_ ) \_\_\_\_\_ E-mail \_\_\_\_\_
6. Building Official  
Prefix \_\_\_\_ First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
Title \_\_\_\_\_  
Physical Address \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_  
Telephone ( \_\_\_\_\_ ) \_\_\_\_\_ E-mail \_\_\_\_\_
7. Size of jurisdiction in square miles \_\_\_\_\_
- 7A. Please provide a current map that shows the boundaries of the area served by the building department.  
Identify the map source: \_\_\_\_\_

7B. If the building department serves multiple jurisdictions, as is common with county departments and code enforcement agencies, provide the following information for the jurisdiction and contact person. Attach a separate sheet if necessary.

Jurisdiction Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Prefix: \_\_\_\_\_  
First Name: \_\_\_\_\_  
Last Name: \_\_\_\_\_  
Address 1: \_\_\_\_\_  
Address 2: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
County: \_\_\_\_\_  
NFIP Number or DNA: \_\_\_\_\_ Population or INA: \_\_\_\_\_

7C. If the building codes are enforced by another jurisdiction or a third party agency indicate the name of the enforcing agency:  Does Not Apply

Residential enforcing agency name: \_\_\_\_\_  
Commercial enforcing agency name: \_\_\_\_\_

8. Base population served by the building department \_\_\_\_\_  
Additional seasonal population, if applicable \_\_\_\_\_  
Indicate source:  2000 census  other creditable source \_\_\_\_\_ Year \_\_\_\_\_

9. Indicate the total fair market value or assessed value of all buildings in the jurisdiction served by the building department:

Fair market value \$ \_\_\_\_\_ - or - Assessed value \$ \_\_\_\_\_  
Year of most recent evaluation \_\_\_\_\_

If the value above is the assessed value, show the percentage of fair market value used. \_\_\_\_\_%

Indicate which of the following are not included in the above figure:

educational facilities       land value       other: \_\_\_\_\_  
 government buildings       military buildings  
 hospitals       religious buildings

9A. Indicate the source of the above figure:

tax assessor       other source \_\_\_\_\_  
Prefix \_\_\_\_\_ First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_  
Telephone ( \_\_\_\_\_ ) \_\_\_\_\_ E-mail \_\_\_\_\_



15A. During the reporting period, how many variances from NFIP requirements has the building department / jurisdiction issued in the floodplain? \_\_\_\_\_

15B. Are manufactured homes prohibited in the floodplain?

- yes       no       jurisdiction does not contain a floodplain

(a) If no, who regulates such placements? \_\_\_\_\_

15C. Does the jurisdiction regulate the placement of manufactured homes on foundation systems in the floodplain?

- yes       no       jurisdiction does not contain a floodplain

(a) If yes, which local government department regulates such placements?

- building department       housing department  
 health department       zoning department

15D. Does your local jurisdiction use a Geographic Information System (GIS)?

- yes       no

If yes, which of the following do you track?

- EMS stations       jurisdiction boundaries  
 fire stations       police stations  
 floodplains       water systems  
 hydrants

16. What natural hazards is your jurisdiction subject to?

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> brush / forest fire | <input type="checkbox"/> landslide / mudflow / debris flow | <input type="checkbox"/> swelling soil |
| <input type="checkbox"/> earthquake          | <input type="checkbox"/> lightning                         | <input type="checkbox"/> tornado       |
| <input type="checkbox"/> flood               | <input type="checkbox"/> snow load                         | <input type="checkbox"/> tsunami       |
| <input type="checkbox"/> riverine            | <input type="checkbox"/> soil liquefaction                 | <input type="checkbox"/> volcano       |
| <input type="checkbox"/> coastal             | <input type="checkbox"/> soil subsidence                   | <input type="checkbox"/> none          |
| <input type="checkbox"/> hail                | <input type="checkbox"/> special wind region               | <input type="checkbox"/> other _____   |
| <input type="checkbox"/> hurricane           |  |  |

17. Which of the natural hazards below are addressed in your jurisdiction's additions, deletions, or modifications to adopted building codes?

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> brush / forest fire | <input type="checkbox"/> landslide / mudflow / debris flow | <input type="checkbox"/> swelling soil |
| <input type="checkbox"/> earthquake          | <input type="checkbox"/> lightning                         | <input type="checkbox"/> tornado       |
| <input type="checkbox"/> flood               | <input type="checkbox"/> snow load                         | <input type="checkbox"/> tsunami       |
| <input type="checkbox"/> riverine            | <input type="checkbox"/> soil liquefaction                 | <input type="checkbox"/> volcano       |
| <input type="checkbox"/> coastal             | <input type="checkbox"/> soil subsidence                   | <input type="checkbox"/> none          |
| <input type="checkbox"/> hail                | <input type="checkbox"/> special wind region               | <input type="checkbox"/> other _____   |
| <input type="checkbox"/> hurricane           |  |  |

17A. Identify names and numbers of applicable ordinances. \_\_\_\_\_  
\_\_\_\_\_

18. Does the jurisdiction have a written plan or strategy that outlines mitigation activities following a natural disaster?

- yes       no

If yes, what is the name of the plan? \_\_\_\_\_

18A. Does the jurisdiction have a written plan to address the surge in building permit requests and inspections associated with post-disaster reconstruction after a catastrophic event?

- yes       no       does not apply

18B. Do you have a written agreement in place with other building code enforcement agencies to share resources when addressing post-disaster reconstruction issues?

- yes       no       does not apply

18C. Does the jurisdiction's general or comprehensive plan contain information or policies related to the construction of buildings or infrastructure within areas subject to natural hazards?

- yes       no

(a) If yes, what is the name of the plan? \_\_\_\_\_

19. Indicate the permit valuation, also known as the construction value, in the jurisdiction for the reporting period in each of the following categories. Include new construction as well as additions / renovations.

(a) Commercial \_\_\_\_\_ Multifamily \_\_\_\_\_

(b) Residential  
1 and 2 family \_\_\_\_\_ Manufactured / modular homes \_\_\_\_\_

20. How does the building department establish the permit valuation?

- model building code table without revision       builder / contractor  
 model building code table with revisions       other

If other, describe: \_\_\_\_\_

21. How does the jurisdiction fund the operations of the building code enforcement department?

- general fund       enterprise system  
 combination: general fund \_\_\_\_\_%      enterprise system \_\_\_\_\_%  
 other

If other, describe: \_\_\_\_\_

22. Please complete the **Employee Data Sheet** included at the end of the questionnaire for each code enforcement employee or contract inspector / plan reviewer.

Indicate how many employee data sheets you have completed and submitted: \_\_\_\_\_

**I. ADMINISTRATION OF CODES**

1. Indicate the model codes currently enforced and show when each became effective.

	<u>INT'L</u>	<u>NFPA</u>	<u>Other</u>	<u>Edition / Revision Year</u>	<u>Effective Year</u>
<b>(a) Building Code</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
(b) 1 and 2 Family Dwelling Code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b>(c) Commercial Electrical Code</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Residential Electrical Code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b>(d) Commercial Mechanical Code</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Residential Mechanical Code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b>(e) Commercial Fuel Gas Code</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Residential Fuel Gas Code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b>(f) Commercial Plumbing Code</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Residential Plumbing Code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b>(g) Commercial Energy Code</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Residential Energy Code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b>(h) Commercial Wildland-Urban Interface</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____ <input type="checkbox"/> DNA
Residential Wildland-Urban Interface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____ <input type="checkbox"/> DNA
<b>(i) Commercial Existing Building Code</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Residential Existing Building Code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b>(j) Other</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____

If other, describe: \_\_\_\_\_

1A. Provide the ordinance / statute number adopting the current building code:

Commercial \_\_\_\_\_ Residential \_\_\_\_\_

2. If using model codes, have the structural design provisions intended to mitigate against natural hazards been weakened by amendments statewide or locally?

Commercial  yes  no Residential  yes  no

3. Provide a copy of local amendments to the structural design provisions of the model code. Attach additional sheets if necessary.

Briefly explain the reasons for the amendments. \_\_\_\_\_

3A. Does the jurisdiction contain natural hazards requiring special attention according to the nationally recognized building code organization?

yes  no

3B. Does the jurisdiction adopt and implement codes, without structural amendments, within one year of the nationally recognized organization's publication date?

Commercial  yes  no Residential  yes  no

3C. Does your jurisdiction adopt and enforce a residential sprinkler ordinance?

yes  no

If yes attach a copy of the ordinance

**For questions 4 and 5, if you have a joint department, such as a building / zoning department or building / engineering department, exclude funds for activities other than the building department.**

4. What were the operating expenditures, including salaries and overhead, for all building department activities during the reporting period? \$ \_\_\_\_\_  INA

4A. What are the gross receipts generated through building code enforcement activity (e.g., permit fees, plan review fees and penalties)? \$ \_\_\_\_\_  INA

5. What were the building department's training expenditures in the reporting period? \$ \_\_\_\_\_  INA  
Note: Expenditures include course fees, meals, and travel expenses but not salaries for the time spent in training.

6. Does your department pay certification examination fees?

Commercial  yes  no Residential  yes  no

7. Does your department provide incentives, such as spot bonuses, salary increases, and promotions, for an employee to obtain outside training / certification?

Commercial  yes  no Residential  yes  no

If yes, describe: \_\_\_\_\_

8. Does your department fund continuing education activities or provide financial incentives for continuing education?

Commercial  yes  no Residential  yes  no

9. Does your jurisdiction have a formal appeal process?

Commercial  yes  no Residential  yes  no

(a) If yes, does it differ from that outlined in the adopted code?

Commercial  yes  no Residential  yes  no

If yes, explain: \_\_\_\_\_

10. Indicate the authority that would commonly act upon appeals to the Building Official's code interpretations:

- building code board of appeals                       city / town council  
 zoning code board of appeals                       mayor  
 city manager     other

If other, describe: \_\_\_\_\_

11. Complete the names and occupations of each board of appeals member. If code enforcement education is received by the board members list the number of hours.

Name	Occupation	Hours	Commercial Board	Residential Board
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

12. Does your state or local jurisdiction have a mandated program for construction code enforcement personnel for certification / licensing?

- Commercial     state             local             agency             none  
 Residential     state             local             agency             none

(a) If yes, indicate which codes:

**Commercial**

- building     electrical     mechanical     fuel gas     plumbing

**Residential**

- building     electrical     mechanical     fuel gas     plumbing

12A. Does the certification / licensing program require individuals to complete code-specific educational classes before they can take the exam?

- Commercial     state             local             agency             none  
 Residential     state             local             agency             none

(a) If yes, indicate which codes:

**Commercial**

- building     electrical     mechanical     fuel gas     plumbing

**Residential**

- building     electrical     mechanical     fuel gas     plumbing

12B. Does the certification / licensing program include continuing education?

Commercial    state       local       agency       none  
Residential    state       local       agency       none

(a) If yes, indicate which codes:

**Commercial**

building     electrical     mechanical     fuel gas     plumbing

**Residential**

building     electrical     mechanical     fuel gas     plumbing

12C. If the certification / licensing program requires continuing education, what is the interval for recertification?

**Commercial**

building \_\_\_\_\_      electrical \_\_\_\_\_      mechanical \_\_\_\_\_  
fuel gas \_\_\_\_\_      plumbing \_\_\_\_\_

**Residential**

building \_\_\_\_\_      electrical \_\_\_\_\_      mechanical \_\_\_\_\_  
fuel gas \_\_\_\_\_      plumbing \_\_\_\_\_

13. If there is a mandated program does it require that construction code enforcement personnel receive certification prior to employment in the field where they will work?

Commercial    state       local       agency       none  
Residential    state       local       agency       none

(a) Indicate which codes:

**Commercial**

building     electrical     mechanical     fuel gas     plumbing

**Residential**

building     electrical     mechanical     fuel gas     plumbing

(b) If not, must personnel achieve certification within a fixed period of time?

Commercial    yes    no                      Residential    yes    no

(c) If yes, specify the time period below.

**Commercial**

building \_\_\_\_\_      electrical \_\_\_\_\_      mechanical \_\_\_\_\_  
fuel gas \_\_\_\_\_      plumbing \_\_\_\_\_

**Residential**

building \_\_\_\_\_      electrical \_\_\_\_\_      mechanical \_\_\_\_\_  
fuel gas \_\_\_\_\_      plumbing \_\_\_\_\_

14. Indicate the qualifications of the current Building Official:

- CBO ICC certified Building Official or equivalent
- licensed engineer / architect
- other

If other, describe: \_\_\_\_\_

14A. Education:

- high school diploma
- College level degree:
  - associates degree
  - bachelors degree
  - masters degree
  - other type of degree \_\_\_\_\_

14B.

	Building Official's Work Experience in Years			
	No experience	Less than 2	2 to 5	More than 5
Construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Code Enforcement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Building Official	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. How does the jurisdiction select the Building Official?

- examination – describe type of exam: \_\_\_\_\_  
(for example, civil service, model code, CBO, etc.)
- peer review by other Building Officials
- promotion
- other

If other, explain: \_\_\_\_\_

16. Does a job description exist for the Building Official?

- yes       no

If yes, please attach a copy.

17, Which department reviews floodplain construction and development for compliance with minimum local National Flood Insurance Program (NFIP) standards?

- building department
- zoning department
- other
- jurisdiction does not contain a floodplain

If other, explain: \_\_\_\_\_

18. What standard(s) / ordinance(s) does the jurisdiction use for floodplain construction / development?

- |   |   |
|---|---|
| <input type="checkbox"/> building code                              | <input type="checkbox"/> other                                      |
| <input type="checkbox"/> ordinance consistent with NFIP regulations | <input type="checkbox"/> none                                       |
| <input type="checkbox"/> zoning / subdivision ordinance             | <input type="checkbox"/> jurisdiction does not contain a floodplain |

If other or none, explain: \_\_\_\_\_

19. Does your jurisdiction have special zoning or subdivision provisions related to local natural hazards other than flood?

- |                     |                              |                             |   |
|---------------------|------------------------------|-----------------------------|---|
| Commercial          | <input type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> does not apply |
| Residential         | <input type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> does not apply |
| Critical facilities | <input type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> does not apply |

If yes, describe: \_\_\_\_\_

20. Does your state or local jurisdiction require contractors, builders, and tradespeople to be licensed or registered?

- |             |                                |                                |                                 |                               |
|-------------|--------------------------------|--------------------------------|---------------------------------|-------------------------------|
| Commercial  | <input type="checkbox"/> state | <input type="checkbox"/> local | <input type="checkbox"/> agency | <input type="checkbox"/> none |
| Residential | <input type="checkbox"/> state | <input type="checkbox"/> local | <input type="checkbox"/> agency | <input type="checkbox"/> none |

(a) If required, which trades are licensed or registered?

**Commercial**

- |                                   |                                     |                                     |                                   |                                   |
|-----------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> building | <input type="checkbox"/> electrical | <input type="checkbox"/> mechanical | <input type="checkbox"/> fuel gas | <input type="checkbox"/> plumbing |
|-----------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|

**Residential**

- |                                   |                                     |                                     |                                   |                                   |
|-----------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> building | <input type="checkbox"/> electrical | <input type="checkbox"/> mechanical | <input type="checkbox"/> fuel gas | <input type="checkbox"/> plumbing |
|-----------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|

21. Does your state or local jurisdiction require contractors, builders, and tradespeople to be licensed by:

(a) examination?

- |             |                                |                                |                                 |                               |
|-------------|--------------------------------|--------------------------------|---------------------------------|-------------------------------|
| Commercial  | <input type="checkbox"/> state | <input type="checkbox"/> local | <input type="checkbox"/> agency | <input type="checkbox"/> none |
| Residential | <input type="checkbox"/> state | <input type="checkbox"/> local | <input type="checkbox"/> agency | <input type="checkbox"/> none |

Which trades require examination?

**Commercial**

- |                                   |                                     |                                     |                                   |                                   |
|-----------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> building | <input type="checkbox"/> electrical | <input type="checkbox"/> mechanical | <input type="checkbox"/> fuel gas | <input type="checkbox"/> plumbing |
|-----------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|

**Residential**

- |                                   |                                     |                                     |                                   |                                   |
|-----------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> building | <input type="checkbox"/> electrical | <input type="checkbox"/> mechanical | <input type="checkbox"/> fuel gas | <input type="checkbox"/> plumbing |
|-----------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|

(b) experience?

- Commercial    state    local    agency    none  
Residential    state    local    agency    none

Which trades require experience?

**Commercial**

- building    electrical    mechanical    fuel gas    plumbing

**Residential**

- building    electrical    mechanical    fuel gas    plumbing

22. Are bonds required for building contractors to ensure completion of a project?

- yes    no

23. Does the building department have a public awareness program for building code enforcement for new construction?

- yes    no    done by another department

(a) If yes, in which of the following areas?

- presentation to civic groups, architects, contractors, trade schools  
 Internet or web site    pamphlets for general public  
 newspaper    TV / radio  
 newsletters    other \_\_\_\_\_

(b) Indicate expenditures for this activity during the period: \$ \_\_\_\_\_

(c) Indicate the number of staff hours spent in this activity during the period: \_\_\_\_\_ hrs

24. Does the jurisdiction / building department have a public awareness program for flood mitigation for new construction or reconstruction?

- yes    no    done by another department

(a) If yes, in which of the following areas?

- presentation to civic groups, architects, contractors, trade schools  
 Internet or web site    pamphlets for general public  
 newspaper    TV / radio  
 newsletters    other \_\_\_\_\_

25. Does the building department participate in code change activities?

- yes    no

(a) If yes, in which organizations are you active?

- ICC    NFPA    State    other \_\_\_\_\_

(b) If you are active in one or more organizations, do the organizations submit changes to building codes?

yes       no

(c) If you are active in one or more organizations, which meetings do building department members attend?

midyear meetings       chapter meetings  
 annual meetings       don't attend meetings

26. Does an active Building Officials' association or code chapter exist in the jurisdiction's area?

local       state       no association or chapter

27. Which of these associations does your jurisdiction participate in?

local       state       none

28. Does the building department have written administrative policies and procedures covering items such as performance guidelines for employees and employment practices?

yes       no

29. Does the building department have written policies and procedures that cover technical code requirements?

**Note:** Policies and procedures may include standard project approval steps, references to related ordinances, interpretations of code issues, and local regulations that modify or unite the adopted code.

Commercial    yes    no      Residential    yes    no

(a) If yes, do you make policies and procedures available to the public?

**Note:** Promotional efforts can include permit counter signs, posted notices, and notes in brochures.

Commercial    yes    no      Residential    yes    no

**II. PLAN REVIEW**

1. How many plan reviews did the department perform during the reporting period? \_\_\_\_\_
2. Provide the number of plan reviews requiring inspection for each category:

Commercial / Multi Family	Building	Electrical	Fuel Gas	Mechanical	Plumbing	Total
New Buildings						
Additions						
Renovations						
Manufactured / Modular						
<sup>A</sup> Other Building Related						
<sup>B</sup> Other Non Building Related						
Commercial / Multi Family Subtotal						<sup>C</sup>

Residential	Building	Electrical	Fuel Gas	Mechanical	Plumbing	Total
New Buildings						
Additions (includes garages)						
Renovations						
Manufactured / Modular						
<sup>A</sup> Other Building Related						
<sup>B</sup> Other Non Building Related						
Residential Subtotal						<sup>C</sup>

- Note A plan reviews are building related; for example, barns, sheds, roofing, siding, decks, demolition and house moving, among others  
 Note B plan reviews are not building related; for example, pools, signs and fences  
 Note C Commercial / Multi Family Subtotal + Residential Subtotal = 1 above

3. Does the jurisdiction require plans detailing structural criteria for all multifamily and commercial projects?

yes       no       some: \_\_\_\_\_%

(a) If yes, does the Building Official or a qualified designee review the required plans for compliance with adopted codes before issuing a building permit?

yes       no

4. Does the jurisdiction require plans detailing structural criteria for all 1 and 2 family dwelling projects, other than prototypes?

yes       no       some: \_\_\_\_\_%

If some, explain: \_\_\_\_\_

\_\_\_\_\_

- 4A. Does the building department, or other authority, conduct a detailed structural building code plan review on all new 1 and 2 family dwellings?

yes       no       some: \_\_\_\_\_%

If some, explain: \_\_\_\_\_

\_\_\_\_\_

4B. When a proposed project contains complex or unusual design features, does department policy require detailed structural plan review of 1 and 2 family dwellings by the Building Official or qualified designee?

yes       no

5. Does the building department perform a detailed building code plan review when a registered design professional, certified in the appropriate field, has signed and sealed the plan?

Commercial    yes    no                      Residential    yes    no

5A. Do building department plan reviews include a review of structural design issues, such as continuous load paths, design-load assumptions, and calculation methodology?

Commercial    yes    no    some: \_\_\_\_\_%

Residential    yes    no    some: \_\_\_\_\_%

6. Does the department maintain detailed records of plan review activity as described below?

**Note:** Detailed records would eliminate the need to estimate in the plan review detail table on the previous page. Records should include number of plan reviews conducted by the department or other approved agency, type of project reviewed (e.g., new, renovation, addition), codes reviewed against (e.g., building, mechanical, fuel gas, plumbing, electrical), and date of release.

Commercial    yes    no                      Residential    yes    no

7. Does the jurisdiction require Federal Emergency Management Agency (FEMA) NFIP elevation certificates for construction and development in the floodplain?

yes       no

jurisdiction does not contain a floodplain

construction is prohibited in the floodplain

(a) If no, what elevation data does the jurisdiction collect during the permit process?

flood zone       base flood elevation       lowest floor elevation

lowest adjacent grade elevation       none

8. Does the jurisdiction require the following special design certifications for new or substantially improved construction and development in the floodplain?

(a) FEMA (coastal) V-zone design certification – CFR 60.3 e (4)

yes       no       does not apply

(b) nonresidential floodproofing design certification

yes       no       does not apply

(c) engineered flood openings certificate

yes       no       does not apply

9. Does the jurisdiction enforce and implement state regulations affecting construction and development in the floodplain?

yes       no       does not apply

(a) If yes, indicate some examples:

freeboard       more restrictive floodway       erosion setbacks       other

If other, describe: \_\_\_\_\_

9A. If another authority regulates construction and development in the floodplain, what is that authority?

\_\_\_\_\_

10. Does the building department rely on model code evaluation reports to approve new products and procedures related to building design revisions?

yes       no

(a) If yes, check applicable boxes:

ICC       NFPA       NES       State       other

(b) If no or other, how does the building department evaluate new products or procedures?

\_\_\_\_\_

11. Does department policy require the use of a detailed written checklist in the plan review process?

Commercial     yes     no                      Residential     yes     no

If yes, please attach a copy.

(a) If yes, does the checklist become a part of the permanent record?

Commercial     yes     no                      Residential     yes     no

12. How does the building department evaluate the performance of plan reviewers? Check all that apply.

performance not evaluated

general employee performance

follow-up plan review

other \_\_\_\_\_

**How often?**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

13. Does the building department use an outside plan review service, such as the state, or a third party plan review agency?

Commercial    yes    no

Residential    yes    no

(a) If yes, complete an Employee Data Sheet and explain reasons:

time constraints       complexity       special features

other: \_\_\_\_\_

\_\_\_\_\_

Name(s) of outside plan review service(s) \_\_\_\_\_

**III. INSPECTION – ENFORCEMENT**

1. Indicate the number of inspections completed for all types of inspections, including reinspections, during the reporting period: \_\_\_\_\_
2. Provide the number of inspections for each category:  
(Do not include zoning, property maintenance, and fire prevention.)

Commercial / Multi Family	Building	Electrical	Fuel Gas	Mechanical	Plumbing	Total
New Buildings						
Additions						
Renovations						
Manufactured / Modular						
<sup>A</sup> Other Building Related						
<sup>B</sup> Other Non Building Related						
Commercial / Multi Family Subtotal						<sup>C.</sup>

Residential	Building	Electrical	Fuel Gas	Mechanical	Plumbing	Total
New Buildings						
Additions (includes garages)						
Renovations						
Manufactured / Modular						
<sup>A</sup> Other Building Related						
<sup>B</sup> Other Non Building Related						
Residential Subtotal						<sup>C.</sup>

- Note A inspections are building related; for example, barns, sheds, roofing, siding, decks, demolition, and house moving, among others  
 Note B inspections are not building related; for example, pools, signs and fences  
 Note C Commercial / Multi Family Subtotal + Residential Subtotal = 1 above

3. Indicate the average number of building inspections, including building, electrical, plumbing, fuel gas, and mechanical inspections, performed each day per inspector for the period: \_\_\_\_\_

3A. Does the building department conduct building inspections on new 1 and 2 family dwellings?

- yes       no       some: \_\_\_\_\_%

If some, explain: \_\_\_\_\_

3B. Does the building department use certified building inspectors for footing, foundation, framing, sheathing or insulation, and final building inspections?

- Commercial     yes     no                      Residential     yes     no

3C. Does the building department conduct building inspections on new multifamily dwellings?

- yes       no       some: \_\_\_\_\_%

If some, explain: \_\_\_\_\_

3D. Does the building department conduct building inspections on new commercial buildings?

yes       no       some: \_\_\_\_\_%

If some, explain: \_\_\_\_\_

3E. Does the building department maintain detailed records of inspection activity as described below?

**Note:** Detailed records would eliminate the need to estimate in the inspection detail table on the previous page. Records should include number of inspections and reinspections conducted by the department or other approved agency and the codes inspected against (e.g., building, mechanical, fuel gas, plumbing, electrical).

Commercial    yes    no                      Residential    yes    no

4. Does the department use an outside inspection service, such as the state, or a third party inspection agency?

Commercial    yes    no                      Residential    yes    no

(a) If yes, complete an Employee Data Sheet and explain reasons:

time constraints       complexity       special features  
 other: \_\_\_\_\_

Name(s) of outside inspection service(s) \_\_\_\_\_

(b) Must all outside inspectors be certified?       yes    no

5. Does your jurisdiction have the authority to issue stop work orders?

yes       no       INA / DNA

If no, explain: \_\_\_\_\_

(a) If yes, how many stop work orders did the jurisdiction issue in the reporting period?

\_\_\_\_\_       INA / DNA

(b) If the jurisdiction did not issue any stop work orders in the reporting period, provide the date of the last one issued: \_\_\_\_\_       INA / DNA

6. During the reporting period, what approximate percentage of construction inspections received correction notices requiring reinspection? \_\_\_\_\_%

7. During the reporting period, what approximate percentage of construction inspection correction notices resulted in stop work orders? \_\_\_\_\_%

8. Does department policy require the use of a detailed written checklist for code compliance during on-site inspections?

Commercial    yes    no                      Residential    yes    no

If yes, please attach a copy.

(a) If yes, does the checklist become a part of the permanent record?

Commercial  yes  no

Residential  yes  no

9. Does the building department require special inspections for specific structural elements?

yes  no

If yes, list examples: \_\_\_\_\_

Attach additional sheets if necessary.

10. Does the jurisdiction require special inspectors to be certified by:

exam  experience  interview

other \_\_\_\_\_

no certification required

11. Does the jurisdiction have inspection programs that focus on construction features that mitigate the natural hazards common to your area?

**Note:** Examples of such programs include load path inspections, such as hold downs, shear wall and roof diaphragm nailing patterns, and hurricane clips.

yes  no  does not apply

If yes, explain: \_\_\_\_\_

12. Does the department perform final inspections after the building is completed and before issuing a certificate of occupancy?

Commercial:  yes  no  this building type not inspected

Residential:  yes  no  this building type not inspected

13. Does the jurisdiction require certificates of occupancy for new buildings before the building is occupied?

Commercial:  yes  no  this building type not inspected

Residential:  yes  no  this building type not inspected

14. How does the department evaluate the performance of inspectors? Check all that apply.

performance not evaluated

**How often?**

general employee performance \_\_\_\_\_

field follow-up inspection \_\_\_\_\_

other \_\_\_\_\_

## Employee Data Sheet

This form should be filled in by building code enforcement personnel. Please exclude time spent on property maintenance, zoning, etc.

Name of  Jurisdiction  County  State  Agency \_\_\_\_\_ State \_\_\_\_\_ Survey Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Employee Name \_\_\_\_\_ Title \_\_\_\_\_

**1. Continuing education & training hours (use the previous 12 months or annual compilation - see Glossary):**

Administration of codes \_\_\_\_\_ hr(s)      Legal aspect of code enforcement \_\_\_\_\_ hr(s)  
 Being mentored in application of codes \_\_\_\_\_ hr(s)      Technical aspect of code enforcement \_\_\_\_\_ hr(s)

**2. Code enforcement experience:**

Total number of years in code enforcement \_\_\_\_\_ yr(s)      Total number of years in the construction industry (exclude work as a code enforcement employee) \_\_\_\_\_ yr(s)  
 (Further break down this total number of years by activities 2a. – 2c. below)  
 Over the course of your career, how many of the above total years were dedicated to:  
 2a. Performing plan reviews \_\_\_\_\_ yr(s)      Total number of years working in this jurisdiction \_\_\_\_\_ yr(s)  
 2b. Conducting field inspections \_\_\_\_\_ yr(s)  
 2c. Administrative duties (For Building Official only) \_\_\_\_\_ yr(s)

**3. Registered design professional degrees held:**  Graduate or licensed Architect  Graduate or licensed Engineer

**4. Responsibilities - for each entry below indicate the weekly hours worked and certification status:**

Average weekly hours worked \_\_\_\_\_ Average weekly hours spent in administrative time by the building official \_\_\_\_\_  
 Note: Administrative time + A through T below should = Average weekly hours worked

Number of hours supervising plan reviewers \_\_\_\_\_ hr(s)      Number of hours supervising field inspectors \_\_\_\_\_ hr(s)  
 Note: Hours spent supervising plan reviewers or field inspectors should be included as plan reviewer or field inspector in items A through T below.

Commercial: further break down the weekly average hours into the following categories:			Certified By			PIAL use	Residential: further break down the weekly average hours into the following categories:			Certified By			PIAL use
			Adopted Code	State	Other					Adopted Code	State	Other	
A	hr(s)	Building inspector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	K	hr(s)	Building inspector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B	hr(s)	Electrical inspector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	hr(s)	Electrical inspector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C	hr(s)	Mechanical inspector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M	hr(s)	Mechanical inspector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D	hr(s)	Fuel Gas inspector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	hr(s)	Fuel Gas inspector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E	hr(s)	Plumbing inspector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	O	hr(s)	Plumbing inspector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F	hr(s)	Building plan reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	P	hr(s)	Building plan reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G	hr(s)	Electrical plan reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Q	hr(s)	Electrical plan reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H	hr(s)	Mechanical plan reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	R	hr(s)	Mechanical plan reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I	hr(s)	Fuel gas plan reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	S	hr(s)	Fuel gas plan reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J	hr(s)	Plumbing plan reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	T	hr(s)	Plumbing plan reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain "Other" if marked in A through T above: \_\_\_\_\_

# BUILDING CODE EFFECTIVENESS GRADING SCHEDULE

## GLOSSARY

Page G1 of G4

**Addition** – Construction that increases the square footage or the footprint of a building. This type of work requires structural components. Benchmarks for plan review and inspections are equivalent to those used for new buildings.

**Administration** – Time spent running the department, dealing with budget issues, coordinating with other departments, and resolving personnel problems. Administration time does not include time spent supervising individual staff members. Administration time is for Building Officials only.

**Building Official** – The head of the department that performs construction inspections and plan reviews.

**Building Code** – Jurisdictions earn credit by adopting and enforcing the latest code edition of a nationally recognized building code organization. The organization must also provide training, individual certification, and product / procedure evaluation services to be considered a nationally recognized building code organization. Jurisdictions can earn partial credit for adopted regulations not developed by a nationally recognized building code organization. Jurisdictions may also earn partial credit if state or local amendments modify or delete provisions for natural hazard mitigation within the adopted nationally recognized building codes. PIAL will compare the adopted code to the latest edition of nationally recognized building codes.

**Certified** – An individual is certified when he or she has met the minimum training and testing requirements specified by a nationally recognized building code organization or equivalent.

**Construction code enforcement personnel** – A person engaged in performing plan reviews and / or field inspections to determine compliance with a building, plumbing, mechanical, fuel gas, energy, urban / wildland, or electrical code. May also include personnel certified in an element of building code enforcement whose primary function is customer service. For the purposes of the BCEGS program, zoning code, property maintenance, and fire prevention code enforcement related to property maintenance are excluded.

**Commercial** – Includes buildings or structures or any appurtenances connected or attached to such buildings or structures i.e. industrial, multifamily.

**Critical Facilities** - Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic and / or water-reactive materials; hospitals, nursing homes, and housing likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a flood; police stations, fire stations, vehicle and equipment storage facilities, and emergency operations centers that are needed for flood response activities before, during, and after a flood; and public and private utility facilities that are vital to maintaining or restoring normal services to flooded areas before, during, and after a flood.

**Employee Data Sheet** – Complete this form, included at the end of the questionnaire, for each code enforcement employee or contract inspector / plan reviewer. You must follow the following guidelines when completing this form:

1. Only Building Officials may indicate responsibility in the **Administration** field.
2. The hours you list in the **Administration** field and items **A** through **T** should equal the total hours you spend in code enforcement.
3. If you list hours in the **Supervise Plan Review** field, you must record at least that number of hours for plan review activities in items **A** through **T**.

# BUILDING CODE EFFECTIVENESS GRADING SCHEDULE

## GLOSSARY

Page G2 of G4

4. If you list hours in the **Supervise Field Inspectors** field, you must record at least that number of hours for field inspector activities in items **A** through **T**.

**Enterprise System** – An accounting method used when fees collected by the building department provide funding for department expenses. This system is common with independent or third party agencies.

**Fair Market Value** – The agreed-upon price of a willing buyer and seller without undue pressure.

**General Fund** – An accounting method used when the jurisdiction deposits fees collected by the building department into a specific line item or a general fund. The fund provides for the department's expenses. This system is common when the department is part of the jurisdiction's governing body.

**General or Comprehensive Plan** - The local comprehensive plan is the adopted official statement of a local government's legislative body that sets forth goals, policies, and guidelines intended to direct the present and future physical, social, and economic development within its planning jurisdiction. The plan includes a unified strategy for the public and private development and conservation of land and water.

**Inspection** – A construction site visit made to determine compliance with construction standards. One inspection determines compliance for one trade. A cross-trained inspector can perform multiple inspections during a single site visit. The BCEGS program tracks the number of inspections, not the number of site visits. The inspection count should include inspections for remodel / addition projects as well as those for new construction. The inspection count should also include reinspections.

**Jurisdiction** – The common name for the area — with defined political boundaries — served by the building department. Jurisdictions include, but are not limited to, cities, towns, townships, boroughs, villages, counties, and parishes.

**Plan Review** – The plan review process shall occur before the department issues a permit. The Building Official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examination whether the construction indicated and described is in accordance with the requirements of the adopted building code and any other pertinent laws or ordinances. All buildings not classified as 1- and 2-family dwellings are commercial buildings. Due to the inherent complexity of commercial buildings, the BCEGS program does not include a guide for plan review of those structures.

### **Plan Review, 1- and 2-Family**

The following six items represent the minimum acceptable level of plan review for inclusion in the BCEGS program.

- 1) Plot Plan
  - location of the building on the site, as well as required setbacks, easements, property lines
- 2) Footing / Foundation
  - minimum frost depth
  - for basement and crawlspace construction, a description of footing material and dimensions, as well as foundation wall material and dimensions and maximum depth of unbalanced fill being supported, and dimensions of any internal piers
  - for slab-on-ground construction, a description of the slab and haunch details used

# BUILDING CODE EFFECTIVENESS GRADING SCHEDULE

## GLOSSARY

Page G3 of G4

### 3) Wood-Framed Floors

- live loads being supported, size of joists, type of joist (solid sawn or engineered), span of joists, spacing of joists, minimum required wood grade of joists, span / material / dimensions of intermediate girders, anchorage requirements (anchor bolts / straps — number, spacing, size, etc.), type / minimum required grade of floor sheathing

### 4) Wood-Framed Walls

- size (2x4, 2x6) and spacing of studs, minimum required wood grade
- size / span / material of headers
- type of lateral support (structural sheathing, let-in braces, etc.)

### 5) Wood-Framed Roofs

- live loads being supported, size of members, type of member (solid sawn, truss, or other engineered item), spacing, minimum required wood grade of members, means of anchorage to wall

### 6) In Areas of High Wind or Seismic Loading

- a description of shearwall construction / location or other means used to counteract horizontal or overturning forces
- a description of the methods used to establish continuous load paths in the structure

**Prototype Plan Review** – Jurisdictions conduct prototype plan reviews when developers propose multiple residential structures with varying floor plans and elevations but essentially identical structural components. PIAL uses special calculations to determine workloads. To expedite the process, the Building Official should gather the following information:

- the number of models per subdivision proposed during the reporting period
- the total number of units per subdivision proposed during the reporting period
- the average time spent in plan review for each model plan submitted
- the average time spent reviewing each prototype for each plan submitted

**Renovations** – The removal, replacement, or covering of existing interior or exterior finish, trim, doors, windows, or other materials, with new materials that serve the same purpose and do not change the configuration of the space. Renovations include the replacement of equipment and fixtures.

**Residential** - Detached one and two family dwellings and multiple single family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures. It is important to note that a separate means of egress is a key element in distinguishing a multifamily dwelling from a 1- and 2-family dwelling.

**Special Inspections** – When a building department does not have the expertise or equipment to conduct a special inspection, the department typically brings in private inspection agencies. Special inspections include, but are not limited to, soil compaction testing, concrete testing, steel-frame bolt inspection, and inspection of welded structural assemblies, as defined by the model codes. After each special inspection, the building department often requires a written report on the status of the inspection. Special inspections occur most frequently in commercial construction.

**Supervising Field Inspectors** – Time spent coordinating the efforts and work loads of field inspectors and helping interpret the code as it applies to specific conditions in projects under construction.

# BUILDING CODE EFFECTIVENESS GRADING SCHEDULE

## GLOSSARY

Page G4 of G4

**Supervising Plan Review Staff** – Time spent coordinating the efforts and workloads of plan reviewers and helping interpret the code as it applies to a project being reviewed.

**Third Party Agency** – A provider of building code enforcement that does not distinguish service levels based on jurisdictional boundaries. Typically, an agency can not differentiate the workload or staffing numbers for the communities they serve, nor are they able to respond to questions contained in the jurisdiction questionnaire.

**Training, Administration** – Education in the internal workings of a building department. This includes training on permit processing and tracking, budgeting, staffing, supervising, managing, and public service issues.

**Training, Legal** – Education in the aspects of code enforcement affected by, and pertaining to, the legal rights, obligations, liabilities, and immunities of code enforcement staff, building owners, and contractors.

**Training, Technical** – Education in aspects of code enforcement relating to the interpretation and enforcement of specific technical requirements as defined in the text of the various model codes.

**Training, Mentored** – One-on-one education in several aspects of code enforcement, including technical, legal, and administration. A common mentoring technique involves a senior field inspector accompanying a junior field inspector to provide construction site instruction on specific issues and conditions about performing inspections.