



WESTMINSTER

Staff Report

TO: The Mayor and Members of the City Council

DATE: June 4, 2014

SUBJECT: Briefing and Post-City Council Briefing Agenda for June 9, 2014

PREPARED BY: J. Brent McFall, City Manager

Please Note: Study Sessions and Post City Council briefings are open to the public, and individuals are welcome to attend and observe. However, these briefings are not intended to be interactive with the audience, as this time is set aside for City Council to receive information, make inquiries, and provide Staff with policy direction.

Looking ahead to Monday night's Briefing and Post-City Council meeting briefing, the following schedule has been prepared:

Dinner 6:00 P.M.

Council Briefing (*The public is welcome to attend.*) 6:30 P.M.

POST BRIEFING (*The public is welcome to attend.*)

PRESENTATIONS

1. Legislative Wrap-Up – Tomlinson & Associates (*Verbal*)
2. Westminster Backseat Budgeter On-Line Application
3. Residential Fire Sprinklers

CITY COUNCIL REPORTS

None at this time.

EXECUTIVE SESSION

None at this time.

INFORMATION ONLY

None at this time.

Items may come up between now and Monday night. City Council will be apprised of any changes to the post-briefing schedule.

Respectfully submitted,

J. Brent McFall
City Manager

NOTE: Persons needing an accommodation must notify the City Manager's Office no later than noon the Thursday prior to the scheduled Study Session to allow adequate time to make arrangements. You can call [303-658-2161](tel:303-658-2161) /TTY 711 or State Relay) or write to mbarajas@cityofwestminster.us to make a reasonable accommodation request.



Staff Report

Post City Council Meeting
June 9, 2014



SUBJECT: Westminster Backseat Budgeter On-Line Application

PREPARED BY: Aric Otzelberger, Assistant to the City Manager

Recommended City Council Action

Receive overview of a new citizen engagement budget tool, Backseat Budgeter, and provide Staff with feedback prior to launching the application.

Summary Statement

- During the development process of the Westminster Citizen Survey, City Council expressed a desire to pursue a stand-alone tool to allow citizens to provide input on budget priorities.
- Staff conducted research on available budget engagement tools and entered into a contract with Engaged Public, a local firm in Denver, to develop the Westminster Backseat Budgeter. Engaged Public has used this tool with the State of Colorado, the City and County of Denver and El Paso County.
- The Westminster Backseat Budgeter is a budget simulation tool that allows citizens to input their priorities for the City's General Fund Budget. The simulation starts with actual budget data and then allows users to make changes to reflect their spending and revenue priorities. Backseat Budgeter also provides budget education through descriptions of department functions, revenue sources and other high-level elements involved in the City budget.
- Chris Adams, President of Engaged Public, and City Staff will be present to walk through the Backseat Budgeter with City Council. City Council will be able to provide feedback and direction at the meeting. City Council will also have time following the meeting to use the tool and provide additional feedback before Backseat Budgeter goes live to the public.
- City Staff will gather information from Backseat Budgeter from the go-live date until the Public Hearing on the 2015-2016 Budget on September 8 to help inform 2015-2016 budget development efforts. Backseat Budgeter will remain available past September 8 as well and can be updated in the future with 2015 Budget information, new budget scenarios and any other desired adjustments.

Expenditure Required: \$5,000

Source of Funds: General Fund – Central Charges Operating Budget

Policy Issue

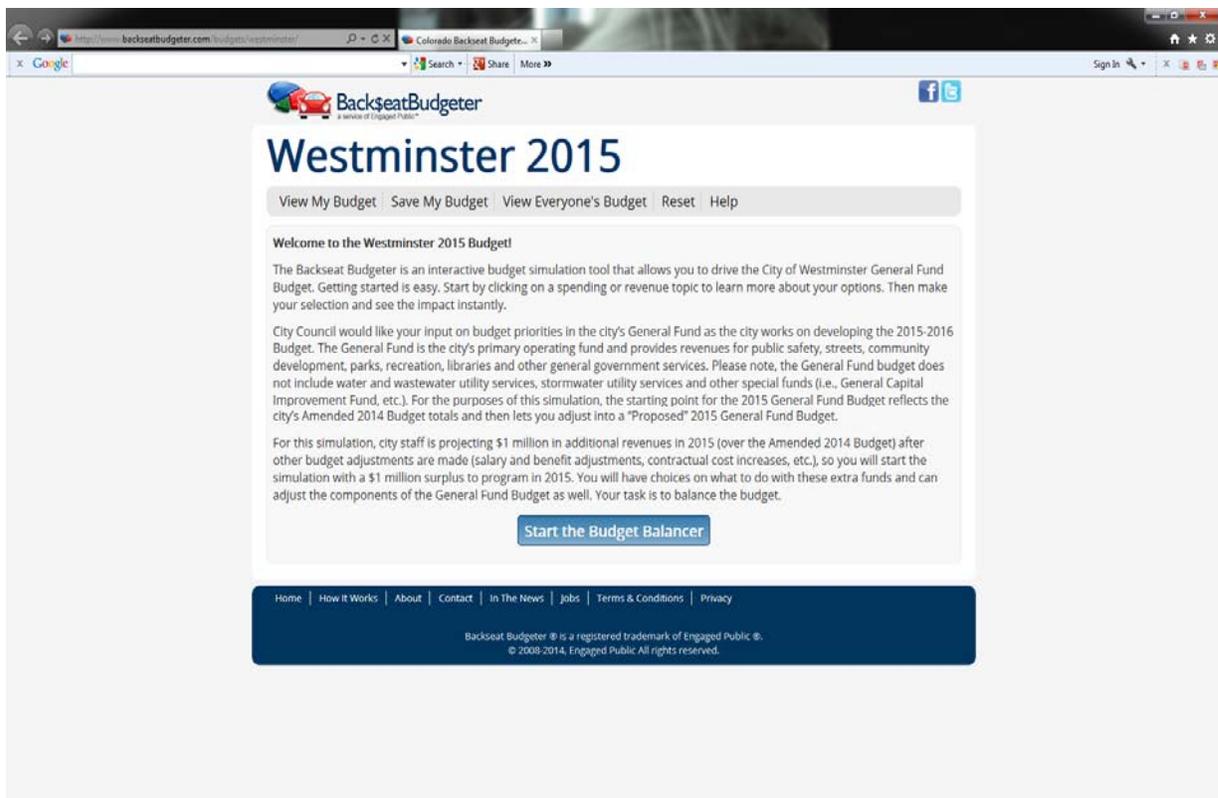
Does City Council concur with utilizing the Westminster Backseat Budgeter as a citizen engagement and education tool for the City's General Fund Budget?

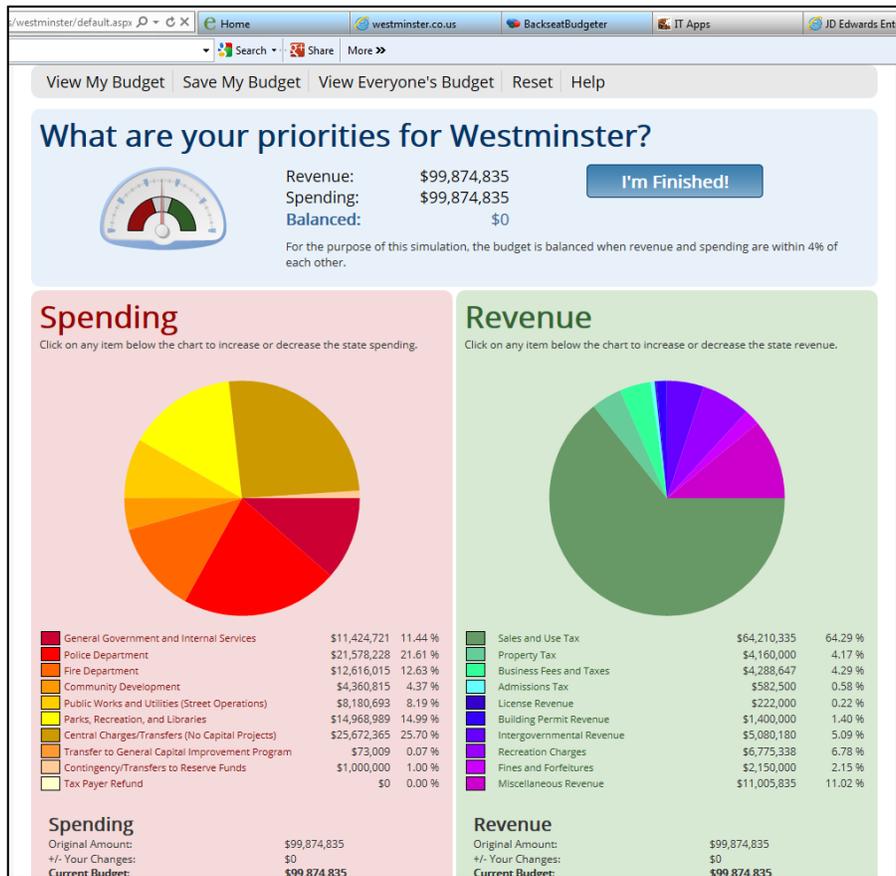
Alternative

City Council could choose not to utilize Westminster Backseat Budgeter.

Background Information

During the development process of the Westminster Citizen Survey, City Council expressed a desire to pursue a stand-alone tool to allow citizens to provide input on budget priorities. Traditionally, citizen survey efforts focus on general questions on priorities or the "if you had one dollar to spend on city services, how would you break that up" approach. Staff investigated the limited number of Web-based budget engagement tools for citizens available and approached Engaged Public, a local firm in Denver, about working on a Westminster version of their Backseat Budgeter tool. Engaged Public has worked with the State of Colorado, the City and County of Denver and El Paso County on developing versions of this tool for each entity. Backseat Budgeter is a simulation tool that enables citizens to communicate their spending and revenue priorities while gaining an understanding of the tradeoffs associated with spending public dollars. Citizens are presented with pie charts for expenditures and revenues and are then able to find out more information about each category and ultimately make adjustments based on their priorities. Screen shots of the Backseat Budgeter follow:





The Westminster Backseat Budgeter focuses on the City’s General Fund expenditures and revenues. Citizens will see actual figures that reflect Amended 2014 Budget totals, since the Proposed 2015 is currently under development. Citizens are then able to make adjustments based on their priorities to expenditure and revenue categories based on a list of options, including increased transfers to reserves, capital projects or taxpayer refunds. In general, options for expenditures include 5% or 10% increases or decreases and options for revenues include increases or decreases based on percentage or mill adjustments. There is also a function to add individual budget suggestions under each category. The overall task for citizens is to set their priorities while maintaining a balanced budget. This simulation is geared towards development of the 2015 General Fund budget, so citizens are given an extra \$1 million in revenues at the start of the simulation to program based on their priorities.

Citizens are able to save their budgets and view budgets developed by others, but they must create a user account to do so. Information requested includes a sign in name, password, email address and zip code as shown in the screen shot below.

The screenshot shows a web browser window with the URL 'createUser.aspx?ReturnUrl=9'. The page title is 'Create a Backseat Budgeter Account'. It features a navigation menu with 'Home', 'How It Works', 'About', and 'Contact'. Below the title, there is a yellow highlighted box with the text 'Sign in name, email, and password (required)'. The form includes fields for 'Sign in name:', 'Choose Password:', 'Re-enter Password:', 'Email Address:' (with a note '(your email address is not published)'), 'Re-enter Email Address:', and a 'Timezone:' dropdown menu set to '(GMT -07:00) Mountain Time (US & Canada)'. A CAPTCHA image is displayed with the instruction 'Enter code above:'. Below the CAPTCHA is a 'Zip code:' field. At the bottom, there are three checkboxes: 'Please sign me up for news and updates about Backseat Budgeter.', 'I'd like to learn more about Engaged Public.', and 'I've got a public budget (e.g. school district, city, county, state) that would be great to put on Backseat Budgeter. Please tell me more about how

Chris Adams, President of Engaged Public, and City Staff will be present to demonstrate the Backseat Budgeter with City Council. City Council will be able to provide feedback and direction at the meeting. City Council will also have time following the meeting to use the tool and provide additional feedback before Backseat Budgeter goes live to the public. Staff will gather information from Backseat Budgeter from the go-live date until the Public Hearing on the 2015-2016 Budget on September 8 to help inform 2015-2016 budget development efforts. While this will provide insights from participants, it is not a scientifically valid measurement of public sentiment and should be taken into advisement as part of the budget development process but not as the sole indicator of public requests. Backseat Budgeter will remain available past September 8 as well and can be updated in the future with 2015 Budget information, new budget scenarios and any other desired adjustments. Staff is proposing a go-live date several days after the Post Council meeting, but will ask for City Council direction on an exact date. Once the application is available on-line, Staff will utilize the City's various communication mediums to publicize the availability of this tool.

Backseat Budgeter supports City Council's Strategic Plan Goals of Comprehensive Community Engagement and Excellence in City Services.

Respectfully submitted,

J. Brent McFall
City Manager



WESTMINSTER

Staff Report

Post City Council Meeting
June 9, 2014



SUBJECT: Residential Fire Sprinklers

PREPARED BY: Bob Hose, Fire Marshal
Dave Horras, Chief Building Official

Recommended City Council Action

No specific action is requested of City Council at this time. Listen to staff briefing on the background and the rationale of residential fire sprinklers as required in the City of Westminster.

Summary Statement

At the April 7, 2014 City Council study session, City Council requested that City staff schedule a study session item to discuss the rationale of the City of Westminster building code requirement to provide residential fire sprinklers in all new residential dwellings. Staff from the Building Division within the Department of Community Development and the Fire Department will present the background and rationale behind the current requirements for fire sprinklers in residential units.

Expenditure Required: \$0

Source of Funds: N/A

Policy Issue

No policy change is proposed as part of this presentation.

Alternative

If City Council would like to consider changes to the current residential fire sprinkler requirements, staff will be available to discuss options based on City Council direction.

Background Information

The City of Westminster adopted the 2009 International Residential Code (IRC) in September of 2010. The IRC is the residential building code that is published and updated by the International Code Conference (ICC) every three years and is the primary residential building code used in the United States. A new provision of the 2009 IRC was the requirement to install residential fire sprinklers in all residential dwellings, including single-family detached dwellings. Prior to the adoption of the 2009 IRC, staff discussed the changes to the IRC, including the fire sprinkler requirement, with the Board of Building Code Appeals as well as City Council in a study session. The staff report and the agenda memo from the study session and council meeting are attached.

City Council considered the information provided, including input from the Board of Building Code Appeals and the Denver Metropolitan Home Builders Association, and voted to adopt the 2009 IRC without removing the provisions requiring residential fire sprinklers. The code language was amended to allow for additional time to implement the new sprinkler requirements, moving the effective date for fire sprinklers back to January 1, 2013. In October of 2012, staff presented an information only staff report to City Council reminding them of the upcoming effective date of the fire sprinkler requirement (attached).

In 2010, when staff was reviewing the new requirements contained in the 2009 IRC, specifically the fire sprinkler requirements, there were a number of other jurisdictions also considering adoption of the same requirements. A Joint Ad-Hoc Residential Sprinkler Committee made up of representatives of the Fire Marshal's Association of Colorado, the Colorado Chapter of the International Code Council, industry experts and other stakeholders including fire protection engineers, plumbing contractors, water purveyors and the Home Builders Association of Metro Denver formed to address issues associated with the adoption of the sprinkler requirements as required in the 2009 IRC. At that time there were many local jurisdictions proposing adoption of the new standards. However, at the time the residential sprinkler requirement became effective in the City of Westminster, only the jurisdictions of Golden, Englewood, Federal Heights and Boulder County were still proceeding with implementing the fire sprinkler requirements. Other jurisdictions proceeded with the adoption of the 2009 IRC, but amended or modified the code to remove or relax the fire sprinkler requirements, lessening the fire safety provisions of the national code.

The International Building Codes, of which the IRC is one part, is developed in an open process where anyone can submit a proposed code change. However, the final vote determining if a proposal becomes a code requirement is left to building and fire code officials. Although the 2009 IRC was the first edition of the code to require fire sprinklers in single-family dwellings, it was not a new concept. The fire sprinkler requirements first showed up in the 2006 IRC as an elective requirement and had been discussed and disapproved in proposals as early as 2000. Since the fire sprinkler requirement

became a requirement of the IRC, there has not been a proposal voted on during either the 2012 or 2015 code development cycle to remove the requirement from the code.

In Colorado, the adoption of residential sprinkler codes is still in its infancy. The City of Westminster is one of the first in Colorado to require residential fire sprinklers, however, there are many jurisdictions that have adopted, in one form or another, fire sprinkler requirements. These agencies are detailed below:

One- and Two-Family Dwellings and Townhouses

Boulder County – also require additions/remodels over 4,800 square feet to provide sprinkler systems

Westminster

Snowmass Village

Golden

Ft. Collins (duplexes only)

Federal Heights

Louisville

Cherry Hills Village

Superior

Townhouses

Morgan County

Grand County

Greeley

Ft. Collins

Colorado Springs

Boulder

Castle Pines

Sprinkler Option

Castle Pines (one- and two-family dwellings)

Threshold Requirement

Greenwood Village – total building area in excess of 7,700 square feet

Aspen – 5,000 square feet or greater

Summit County – 6,000 square feet or greater

There are a number of jurisdictions nationwide that have adopted similar requirements, many prior to the requirements of the 2009 IRC. Scottsdale, Arizona adopted a residential sprinkler ordinance in 1986, and after a 15-year study found that there were no fire deaths in dwellings that were protected by sprinklers, but 13 fire deaths in dwellings not protected. The average dollar loss from fire was also markedly decreased with residential sprinklers. The average loss in a sprinkler installed dwelling was \$2,166 versus \$45,000 in non-sprinkler protected dwellings. The study also found that contrary to the myth that “when a fire occurs, every fire sprinkler head discharges water,” that 2 or less sprinkler heads controlled more than 92 percent of the fires that occurred in fire sprinkler protected properties

More recent studies of two other major areas show similar results. In Prince Georges County, Maryland, an ordinance requiring sprinkler installation in single-family and townhome dwellings was passed in 1992. Over the next 15 years, 45,000 permits were issued for these dwellings. There were 101 deaths and 328 civilian injuries in non-sprinkled single-family and townhome dwelling units during this time. There were no deaths and six injuries in the same type of dwelling units protected by sprinklers. During these 15 years, 245 incidents involving sprinkler activations were handled. During these incidents, 446 residents were present in their homes, including over 80 that were present between the highest risk hours for fire deaths, 10:00 PM through 6:00 AM. The total dollar loss for properties protected by residential sprinklers was \$1,352,820. The potential loss from these fires was \$42,578,420. The average cost of residential sprinkler systems at the time of this report (August

2009) was \$2.00 per square foot. The current national average cost is \$1.61 per square foot per the National Fire Protection Association.

Another locale that underwent an extensive study was in Bucks County, Pennsylvania. The county had multiple jurisdictions that adopted sprinkler ordinances over a period of time. From 1988 through 2010, there were 90 fire deaths in non-sprinkler protected one- and two-family dwellings. During this same time, there were no deaths in sprinkler protected dwellings. There were five specific documented incidents in which the presence of a residential sprinkler system saved five lives. The average fire loss in dwellings not protected by a sprinkler system was \$179,896. The average fire loss in sprinkler protected homes was \$14,000.

In Westminster, there have been two incidents in the past two years where a single sprinkler head activated and averted any life loss while minimizing damage. Although these both took place in multi-family dwellings, the premise is that these systems are effective in life safety and also with limiting property damage.

South Metro Fire Rescue has reported three incidents where a single fire sprinkler activated in a multi-family dwelling unit saving the property. These incidents occurred in January and February of 2014. In March of 2014, the Contra Costa Fire Department in California reported two fires on the same day that had very different results. One in a sprinkler-protected facility resulted in very limited damage and no deaths or injuries; the other was in a non-sprinkler protected facility and resulted in injuries to civilians. There are many instances that take place not only nationally, but locally, involving sprinkler activations and the saving of lives and limiting of property damage. Unfortunately, these fires are so limited that they do not warrant extensive news coverage and go largely unnoticed.

The National Institute for Standards and Technology in a recent study indicated that in the 1970's the average time to safely escape a home fire was 17 minutes. Today safe escape time is only three minutes because of more combustible synthetic materials in home furnishings and overall greater fuel loads. The City of Westminster Fire Department target for response is within 5 minutes of receiving the alarm. Therefore, staff believes that there is a greater need for residential sprinklers now more than ever. The changes are due to the types of construction, size of houses, open area floor plans, void spaces, and furnishings that are made of synthetic and highly flammable materials. Many equate the safety of sprinklers working along with smoke alarms to riding in a car, using seat belts along with having air bags installed. With both systems in place, the safety of the occupants has increased dramatically, just as the safety of the home occupants also increases with both safety systems in place.

National Sprinkler Associations have not reported any concerns or incidents of sprinkler-related issues in cold weather climates. Several areas within Colorado that have a colder climate have not reported issues from cold weather affecting sprinkler systems.

A major advantage for the City of Westminster in its adoption and implementation of residential sprinklers was the fact that the major stakeholder groups in the implementation of the requirement were all in-house. The Fire Department and the Public Works and Utilities Department were both involved from the beginning, which was a major reason that the implementation has gone relatively smoothly. Unlike many of the other local jurisdictions, staff did not have to work with multiple fire or utility districts trying to come to agreement on implementation questions or issues.

The IRC provides two options for providing fire sprinklers for a residential dwelling. Typical fire sprinkler systems are "stand alone" or separate systems from the structure's plumbing systems. New

provisions in the IRC allow for use of a “multi-purpose” fire sprinkler system that is part of the home plumbing system. What staff has learned during the implementation process is that the costs are typically lower than quoted by the homebuilders, but currently higher than quoted by the fire and sprinkler organizations. The cost of residential stand-alone sprinkler systems according to the stated valuations on the permit applications has been \$2.62/square foot based on the 30 permits issued through March of 2014. The cost for installing a multi-purpose system is more difficult to determine because it is included within the cost estimate for the plumbing system. Staff realizes that there is an initial added cost for installation, but as the studies indicate, the overall economic benefit to the community, although unknown at this time, has the potential to be substantial.

Additionally, it is evident that the City staff can be, and is, a valuable resource for builders and contractors as they plan and install these new systems into their homes. Additional training and experience, especially for the plumbers installing multi-purpose systems, is needed to help reduce these costs further.

The adoption of the 2009 International Building and Fire Codes, and specifically the residential fire sprinkler requirements, support the Strategic Plan goal of Excellence in City Services by leading the region in a culture of innovation.

Respectfully submitted,

J. Brent McFall
City Manager

Attachments

- A-Staff Report, August 2, 2010 -Adoption of the 2009 International Building and Fire Codes
- B-Agenda Memo, Second Reading of Councillor’s Bill No. 45 re Adoption of the 2009 International Building and Fire Codes
- C-Information Only Staff Report, Residential Sprinklers



Staff Report

ATTACHMENT "A"

City Council Study Session Meeting
August 2, 2010



SUBJECT: Adoption of the 2009 International Building and Fire Codes

PREPARED BY: Dave Horras, Chief Building Official
Gary Pedigo, Fire Marshal

Recommended City Council Action:

Direct Staff to prepare an ordinance for first reading of the adoption of the 2009 Editions of the International Building and Fire Codes at the August 23, 2010 City Council meeting.

Summary Statement:

- Staff is asking City Council to adopt, by reference, the 2009 editions of the International Building Codes developed and published by the International Code Council (ICC) as the building and fire codes for the City of Westminster. These codes would replace the 2006 edition of the International Codes that have been adopted as the City's building and fire codes since January 1, 2007.
- Staff is proposing the adoption of the following codes published by the International Code Council:
 - The International Building Code, 2009 edition
 - The International Fire Code, 2009 edition
 - The International Residential Code, 2009 edition
 - The International Plumbing Code, 2009 edition
 - The International Mechanical Code, 2009 edition
 - The International Fuel Gas Code, 2009 edition
 - The International Energy Conservation Code, 2009 edition
 - The International Existing Buildings Code, 2009 edition
- In addition to the above referenced codes, staff is also proposing the adoption of the 2008 edition of the National Electrical Code (NEC). The NEC is published by the National Fire Protection Association and is established as the Colorado adopted electrical code as adopted by the State of Colorado State Electrical Board.
- Staff is also proposing revisions to an administrative section of the current code addressing information required on construction documents and a section of the Rental Property Maintenance Code that will require carbon monoxide alarms.

Expenditure Required: Approximately \$5,000 for code books and new handout materials

Source of Funds: Building Division and Fire Department operating budgets

Policy Issue:

Should the City of Westminster adopt, by reference, the most current editions of the International Codes as the building and fire codes for the City?

Alternative(s):

- Continue with the currently adopted 2006 edition of the International Codes. This alternative would allow staff to continue to enforce codes with which they are very familiar. This alternative would also not require the purchase of new code books. However, the building and fire code development process is designed to evolve along with constantly changing building processes. This alternative would not keep the adopted building and fire codes current with the latest technologies or provide for the use of advancements in building construction techniques or materials. This could discourage owners and developers from building in Westminster. Westminster would soon become an exception within the metropolitan area as other jurisdictions adopted the most current versions of the codes.
- Adopt the codes as proposed but modify the effective date of the new requirement for residential fire sprinklers as recommended by the Board of Building Code Appeals (BBCA) from January 1, 2013 to July 1, 2013. Staff is not recommending this alternative because it is believed that it is important to follow the recommended effective date of January 1, 2013 as proposed by the Joint Ad-Hoc Residential Sprinkler Committee.
- Modify the proposed code amendments or code adoption to address any specific concerns. Staff does not have any specific concerns with the codes proposed that Staff believe warrant amendments.

Background Information:

The City of Westminster has adopted the International Codes (I-Codes) since they were first published in 2000. The City of Westminster adopted the 2000 I-Codes effective in September of 2002 and most recently adopted the 2006 I-Codes effective January of 2007.

The 2009 edition of the International Codes represent the most current, comprehensive, integrated set of building and fire safety code regulations. The International Codes are an all-inclusive set of building construction codes covering all aspects of construction, including fire protection, mechanical, plumbing, energy conservation, and accessibility. The International Codes apply to new construction or alteration of existing structures and typically do not apply retroactively to existing structures.

Building code and fire protection technology is constantly evolving and code and standards require continual updating to keep pace with new ideas and products. The City of Westminster needs to update the adopted building and fire codes so that owners, designers and contractors will not be restricted from taking advantage of new technologies and building practices. The I-Codes are currently the only published set of codes available to adopt as a correlated, contemporary set of building code regulations and represent the most up-to-date set of codes governing building construction.

It is proposed to adopt the I-Codes by reference, which will result in hundreds of changes in the minimum standards. The great majority of these changes will not be noticeable to the general public, however, some provisions that are new to the 2009 International Codes which may generate some comments from the public are:

- A requirement for all residential dwelling units, including single family and townhomes, to be provided with fire sprinkler systems.
- Increased energy efficiency requirements for both residential and commercial construction by approximately 15%.
- A requirement for carbon monoxide detectors to be installed in new dwelling units.

The most controversial item that has generated the most debate in the proposed codes is the requirement to install residential fire sprinklers in all new residential dwelling units, including single family homes. This requirement, as written in the International Residential Code (IRC), will require sprinklers to be installed in all homes effective as of January 1, 2011. Staff is in support of this new code requirement but is proposing an amendment to change the effective date to January 1, 2013. This recommended change to the effective date is based on a recommendation of a Joint Ad-Hoc Committee. The Joint Ad-Hoc Residential Sprinkler Committee was formed by the Fire Marshal's Association of Colorado and the Colorado Chapter of the International Code Council to address issues associated with the wide-spread adoption of the sprinkler requirements. The committee was made up of representatives of both organizations as well as industry experts and stakeholders including fire protection engineers, plumbing contractors, water purveyors, and the Denver Metro Home Builders Association. This committee has determined that a delay will provide time to address necessary legislative changes, train personnel, reduce system costs, and gain more acceptance for wide-spread residential sprinkler system installation.

The Westminster Board of Building Code Appeals reviewed the residential fire sprinkler requirements and supported the requirements with an effective date of July 1, 2013. The BBKA decision was based on additional time to determine what, if any, changes will appear in the 2012 edition of the IRC that will be published by the effective date of the residential sprinkler requirement. However, the changes to the 2012 edition of the IRC have since been finalized and the 2012 edition will not include any changes to the residential sprinkler requirements.

Changes to the International Energy Conservation Code (IECC) continue to increase energy conservation requirements. Energy conservation is a priority of the U. S. Department of Energy and the code development process and the IECC reflect these priorities. Future editions of the codes will continue to reflect these priorities and it is expected that future energy conservation requirements will become more demanding.

A requirement to install carbon monoxide alarms in single family, duplex and townhome dwelling units has been added to the IRC. This requirement is similar to what was approved by the state during the 2008 legislative session and will allow the enforcement of these alarm provisions. In addition, it is proposed to amend the Rental Property Maintenance Code to include enforcement provision for rental properties retroactively as required by the state standards.

In addition, Staff has proposed a limited number of amendments to the proposed Codes. All of the proposed amendments fall into one of the following categories:

- Amendments to “fill in the blanks” in the model codes to localize them to the City of Westminster based on weather factors and soil conditions.

- Amendments unique to the City of Westminster such as our restriction on the installation of solid fuel burning devices or the allowing of State “permissible fireworks” for a limited number of days.
- Amendments retaining previously adopted building codes that proved effective and are no longer included as part of the current International Codes.

It is proposed to amend the Fire Code portion of the City Municipal Code to reflect new Chapter and Section numbers of the 2009 code as well as move the City’s already adopted standard for Emergency Responder Radio Coverage from the Electrical Code section to the Fire Code.

Solar photovoltaic systems installations have increased in the City in recent months. A series of meetings was held with the vendors and City staff to establish some minimum clearance and marking requirements to allow roof operations of Fire personnel. It is proposed to add an amendment reflecting these requirements.

It is proposed to establish the City of Westminster’s adopted electrical code to be the National Electrical Code as adopted by the State of Colorado State Electrical Board. Staff is proposing this change based on the passage of House Bill #10-1225 which requires that Colorado jurisdictions adopt the same minimum standards as the State Electrical Board within twelve months of the any State electrical code adoption.

As with almost all new code provisions, new code requirements will only apply to new buildings or buildings that are undergoing a renovation. With the exception of smoke and carbon dioxide detectors, new provisions do not retroactively apply to existing buildings approved under a previous version of the codes. The fire code is used to maintain existing buildings from a building and fire safety perspective.

The International Codes have been adopted by the majority of jurisdictions in the State. Locally, most jurisdictions, including Arvada, Thornton, Broomfield and Jefferson County are either in the process, or have already have, updated to the 2009 editions of the I-Codes.

The adoption of the full family of International Codes is fully endorsed by many prominent national organizations. Some of the organizations that have formally shown support for the International Codes include:

- The American Institute of Architects (AIA)
- The National Association of Home Builders (NAHB)
- The Federal Emergency Management Agency (FEMA)
- The American Gas Association (AGA)
- The Building Owners and Managers Association (BOMA)
- The U.S. Department of Housing and Urban Development (HUD)
- The U. S. Department of Energy (DOE)
- The International City/County Management Association (ICMA)

The proposed adoption and local code amendments have been reviewed by the Westminster Board of Building Code Appeals and is currently being reviewed by the Denver Metro Home Builders Association. The Board of Building Code Appeals has indicated support for the adoption of the 2009 Editions of the International Codes, subject to delaying the residential sprinkler requirements an additional 6 months, beyond January 1, 2013 (which Staff is not recommending), and it is expected that the Home Builders Association will likely support the adoption as well.

The adoption of the 2009 International Codes is consistent with the goal of a Safe and Secure Community as outlined in the Strategic Plan. If City Council concurs with the staff recommendation, a proposal for adoption of the 2009 building and fire codes the ordinance will be presented to City Council for introduction at first reading and the scheduling of a public hearing at the August 23, 2010 City Council meeting.

Respectfully submitted,

J. Brent McFall
City Manager

Agenda Item 10 B&C

ATTACHMENT "B"

Agenda Memorandum

City Council Meeting
September 13, 2010



SUBJECT: Hearing and Second Reading of Councillor's Bill No. 45 re Adoption of the 2009 International Building and Fire Codes

Prepared By: Dave Horras, Chief Building Official
Gary Pedigo, Fire Marshal

Recommended City Council Action

1. Hold a public hearing.
2. Adopt Councillor's Bill No. 45 on second reading adopting the 2009 editions of the International Building and Fire Codes, the 2008 edition of the National Electric Code and other minor miscellaneous revisions to the codes.

Summary Statement

- Staff is requesting City Council to adopt, by reference, the 2009 editions of the International Building Codes developed and published by the International Code Council (ICC) as the building and fire codes for the City of Westminster. These codes would replace the 2006 edition of the International Codes that have been adopted as the City's building and fire codes since January 1, 2007.
- Staff is proposing the adoption of the following codes published by the International Code Council:
 - The International Building Code, 2009 edition
 - The International Fire Code, 2009 edition
 - The International Residential Code, 2009 edition
 - The International Plumbing Code, 2009 edition
 - The International Mechanical Code, 2009 edition
 - The International Fuel Gas Code, 2009 edition
 - The International Energy Conservation Code, 2009 edition
 - The International Existing Buildings Code, 2009 edition
- In addition to the above referenced codes, staff is also proposing the adoption of the 2008 edition of the National Electrical Code (NEC). The NEC is published by the National Fire Protection Association and is recognized as the Colorado adopted electrical code by the State Electrical Board.
- Staff is also proposing revisions to an administrative section of the current code addressing information required on construction documents and a section of the Rental Property Maintenance Code that will require carbon monoxide alarms.
- Staff has attached a letter from the Denver Metropolitan Home Builders Association (HBA) that was received after adoption of the code changes by City Council on first reading, which expresses the HBA's concerns with the residential sprinkler requirements. In the letter they do state that the delayed implementation of the requirements is an acceptable interim solution.

Expenditure Required: Approximately \$5,000 for code books and new handout materials

Source of Funds: General Fund - Building Division and Fire Prevention Operating Budgets

Policy Issue

Should the City of Westminster adopt, by reference, the most current editions of the International Codes as the building and fire codes for the City?

Alternatives

1. Continue with the currently adopted 2006 edition of the International Codes. This alternative would allow staff to continue to enforce codes with which they are very familiar. This alternative would also not require the purchase of new code books. However, the building and fire code development process is designed to evolve along with constantly changing building processes. This alternative would not keep the adopted building and fire codes current with the latest technologies nor provide for the use of advancements in building construction techniques or materials. This could discourage owners and developers from building in Westminster. Westminster would soon become an exception within the metropolitan area as other jurisdictions adopt the most current versions of the codes.
2. Adopt the codes as proposed but modify the effective date of the new requirement for residential fire sprinklers as recommended by the Board of Building Code Appeals (BBCA) from January 1, 2013 to July 1, 2013. Staff is not recommending this alternative because it is believed that it is appropriate to follow the recommended effective date of January 1, 2013 as proposed by the Joint Ad-Hoc Residential Sprinkler Committee.
3. Modify the proposed code amendments or code adoption to address any specific concerns. Staff does not have any specific concerns with the proposed codes that would warrant any substantive amendments.

Background Information

The City of Westminster has adopted the International Codes (I-Codes) since they were first published in 2000. The City of Westminster adopted the 2000 I-Codes effective in September of 2002 and most recently adopted the 2006 I-Codes effective January of 2007.

The 2009 edition of the International Codes represents the most current, comprehensive, integrated set of building and fire safety code regulations. The International Codes are an all-inclusive set of building construction codes covering all aspects of construction, including fire protection, mechanical, plumbing, energy conservation, and accessibility. The International Codes apply to new construction or alteration of existing structures and typically do not apply retroactively to existing structures.

Building code and fire protection technology is constantly evolving, and code and standards require continual updating to keep pace with new ideas and products. The City of Westminster needs to update the adopted building and fire codes so that owners, designers and contractors will not be restricted from taking advantage of new technologies and building practices. The I-Codes are currently the only published set of codes available to adopt as a correlated, contemporary set of building code regulations and represent the most up-to-date set of codes governing building construction.

It is proposed to adopt the I-Codes by reference, which will result in hundreds of changes in the minimum standards. The great majority of these changes will not be noticeable to the general public, however, some provisions that are new to the 2009 International Codes that may generate some comments from the public are:

- A requirement for all new residential dwelling units, including single family and townhomes, to be provided with fire sprinkler systems.
- Requirements to increase energy efficiency for both residential and commercial construction by approximately 15%.
- A requirement for carbon monoxide detectors to be installed in new dwelling units.

The most controversial item that has generated the most debate is the requirement to install residential fire sprinklers in all new residential dwelling units, including single family homes. This requirement, as written in the International Residential Code (IRC), will require sprinklers to be installed in all new homes effective as of January 1, 2011. Staff is in support of this new code requirement but is proposing an amendment to change the effective date to January 1, 2013. This recommended change to the effective date is based on a recommendation of a Joint Ad-Hoc Committee. The Joint Ad-Hoc Residential Sprinkler Committee was formed by the Fire Marshals' Association of Colorado and the Colorado Chapter of the International Code Council to address issues associated with the wide-spread adoption of the sprinkler requirements. The committee was made up of representatives of both organizations as well as industry experts and stakeholders including fire protection engineers, plumbing contractors, water purveyors, and the Denver Metro Home Builders Association. This committee has determined that a delay will provide time to address necessary legislative changes, train personnel, reduce system costs, and gain more acceptance for wide-spread residential sprinkler system installation.

The Westminster Board of Building Code Appeals reviewed the residential fire sprinkler requirements and supported the requirements with an effective date of July 1, 2013. The BBCA decision was based on additional time to determine what, if any, changes will appear in the 2012 edition of the IRC that will be published by the effective date of the residential sprinkler requirement. However, the changes to the 2012 edition of the IRC have since been finalized, and the 2012 edition will not include any changes to the residential sprinkler requirements.

Changes to the International Energy Conservation Code (IECC) continue to increase energy conservation requirements. Energy conservation is a priority of the U. S. Department of Energy, and the code development process and the IECC reflect these priorities. Future editions of the codes will continue to reflect these priorities. It is expected that future energy conservation requirements will become more demanding.

A requirement to install carbon monoxide alarms in single family, duplex and townhome dwelling units has been added to the IRC. This requirement is similar to what was approved by the state during the 2008 legislative session and will allow the enforcement of these alarm provisions. In addition, it is proposed to amend the Rental Property Maintenance Code to include enforcement provision for rental properties retroactively as required by the state standards.

In addition, Staff has proposed a limited number of amendments to the proposed Codes. All of the proposed amendments fall into one of the following categories:

- Amendments to "fill in the blanks" in the model codes to localize them to the City of Westminster based on weather factors and soil conditions.
- Amendments unique to the City of Westminster such as our restriction on the installation of solid fuel burning devices or the allowance of State "permissible fireworks" for a limited number of days.
- Amendments retaining previously adopted building codes that proved effective and are no longer included as part of the current International Codes.

It is proposed to amend the Fire Code portion of the City Municipal Code to reflect new Chapter and Section numbers of the 2009 code as well as move the City's already adopted standard for Emergency Responder Radio Coverage from the Electrical Code section to the Fire Code.

Solar photovoltaic systems installations have increased in the City in recent months. A series of meetings was held with the vendors and City staff to establish some minimum clearance and marking requirements to allow roof operations of Fire personnel. It is proposed to add an amendment reflecting these requirements.

It is proposed to establish the National Electrical Code as adopted by the State of Colorado State Electrical Board as the City of Westminster's adopted electrical code. Staff is proposing this change based on the passage of House Bill 10-1225 which requires that Colorado jurisdictions adopt the same minimum standards as the State Electrical Board within twelve months of the State electrical code adoption.

As with almost all new code provisions, new code requirements will only apply to new buildings or buildings that are undergoing a renovation. With the exception of smoke and carbon monoxide detectors, new provisions do not retroactively apply to existing buildings approved under a previous version of the codes. The fire code is used to maintain existing buildings from a building and fire safety perspective.

The International Codes have been adopted by the majority of jurisdictions in the State. Locally, most jurisdictions, including Arvada, Thornton, Broomfield and Jefferson County are either in the process, or have already updated to the 2009 editions of the I-Codes.

The adoption of the full family of International Codes is fully endorsed by many prominent national organizations. Some of the organizations that have formally shown support for the International Codes include:

- The American Institute of Architects (AIA)
- The National Association of Home Builders (NAHB)
- The Federal Emergency Management Agency (FEMA)
- The American Gas Association (AGA)
- The Building Owners and Managers Association (BOMA)
- The U.S. Department of Housing and Urban Development (HUD)
- The U. S. Department of Energy (DOE)
- The International City/County Management Association (ICMA)

The proposed adoption and local code amendments have been reviewed by the Westminster Board of Building Code Appeals and is currently being reviewed by the Denver Metro Home Builders Association. The Board of Building Code Appeals has indicated support for the adoption of the 2009 Editions of the International Codes, subject to delaying the residential sprinkler requirements an additional six months, beyond January 1, 2013 (which Staff is not recommending). The Home Builders Association would prefer that all of the residential sprinkler requirements be amended out of International Residential Code but indicate, in the attached letter, that the proposed delayed implementation is an acceptable interim solution.

The adoption of the 2009 International Codes is consistent with the goal of a Safe and Secure Community as outlined in the Strategic Plan. State Statute sets forth the timing for adoption of codes by reference. It dictates that the public hearing be held on second reading of the ordinance. City Council passed the attached Councillor's Bill on first reading during the August 23, 2010 City Council meeting. As required by State Statute notice of the public hearing was published in the Westminster Window 15 days, and again 8 days, prior to this meeting. If approved by City Council on second reading the revised coded will become effective October 1, 2010.

Respectfully submitted,

J. Brent McFall
City Manager

Attachments
- Councillor's Bill
- Home Builders Association Letter



WESTMINSTER

Staff Report

ATTACHMENT "C"

Information Only Staff Report
October 1, 2012



SUBJECT: Residential Fire Sprinklers
PREPARED BY: Dave Horras, Chief Building Official
Bob Hose, Fire Marshal

Summary Statement

This report is for City Council information only and requires no action by City Council.

As part of the 2009 International Building and Fire Codes adoption approved by City Council in September 2010 there are requirements for all new single family, duplex and townhome structures to be provided with residential fire sprinklers. This requirement will apply to new residential units only and will not be required when completing additions, modifications, or alterations. As part of that adoption ordinance the effective date of the residential fire sprinkler requirement was pushed back to an effective date of 1/1/2013. As the effective date approaches staff wanted to remind City Council of the new requirements and to provide an update of actions that are being taken in preparation.

Background Information

The City of Westminster building code for residential construction, the 2009 International Residential Code (2009 IRC), was adopted by action of City Council in September of 2010 with an effective date of October 1, 2010. One of the new requirements of the 2009 IRC was that all new residential dwelling units, including single family homes, duplexes and townhomes, be provided with residential fire sprinkler systems. This requirement will only apply to new residential units and will not be required when completing additions, modifications, or alterations. To accommodate and allow for some lead time for developers, builders and contractors the effective date of the fire sprinkler requirement was amended and pushed back to January 1, 2013. This additional time was to allow for designer, installer and inspector training to take place, legislative changes to be made in Colorado State Statutes regarding licensing and certification programs, coordination with water purveyors, and adequate lead time for homebuilders to price and budget for the required changes.

In preparation for this fire sprinkler code change a Joint Ad-Hoc Residential Sprinkler Committee was formed by the Fire Marshals Association of Colorado and the Colorado Chapter of the International Code Council and included industry experts and stakeholders including fire protection engineers, plumbing contractors, water purveyors and the Denver Metro Homebuilders Association. January 1, 2013 was the recommended effective date established by this joint committee.

While the Denver Metropolitan Home Builders Association would still prefer not to have a residential fire sprinkler requirement, the immediate concern expressed is that the new requirement not negatively impact the plan review and building permitting process. Staff has been working over the past months to address these concerns by establishing clear submittal requirements and developing streamlined processes for the review and issuance of residential fire sprinkler permits. All current homebuilders with projects in the City of Westminster have been notified of the upcoming requirements.

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October 1, 2012
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At the time of adoption in 2010 there were a number of local jurisdictions considering implementing the same residential sprinkler requirements on January 1, 2013. Currently the following Colorado jurisdictions have adopted the same requirements with the upcoming January effective date: Denver, Boulder County, Centennial, Federal Heights, Glenwood Springs, Golden, and Rifle.

Staff is not asking City Council to reconsider the action taken in 2010, but simply wanted to remind City Council of the requirements that will go into effect January 1, 2013, and the steps staff has taken to make this transition smoother.

Respectfully submitted,

J. Brent McFall
City Manager