

# **2022**

# **ANNUAL REPORT**

## **Bellevue Fire Prevention**



Serving the communities of:

Bellevue • Newcastle • Medina • Clyde Hill • Hunts Point • Yarrow Point • Beaux Arts



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## What is Bellevue doing to prevent fires in 2022?

The Fire Prevention Division serves the public by providing fire and life safety inspections, community education, and investigation services to help prevent fires, enhance public safety in all buildings, and improve emergency responders ability to manage an incident. By doing this, we help achieve a safe, vibrant, and economically sustainable community.

- Plan Review
- New Construction Inspections
- Maintenance Inspections
- Origin and Cause Investigation
- Education

### FIRES

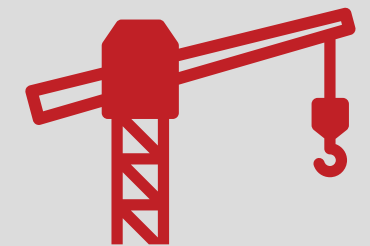
We experienced  
**364**  
fires  
for a total of  
**\$4,309,302**  
in fire related damage.



Fire Prevention Staff  
investigated  
**38**  
complex fires.

### NEW DEVELOPMENT

**4309**  
Hours of  
Development  
Reviews



**5860**  
Completed  
Construction  
Inspections

### MAINTENANCE INSPECTIONS

**2381** + **1575** = **3832**  
Completed by Fire Prevention Officers    Completed by Firefighters    Total Initial Inspections

+ An Additional **813** Re-inspections



# Message from the Fire Marshal



Travis Ripley  
Fire Marshal

The Bellevue Fire Prevention team continues to identify that residential fires represent the number one type of fire occurring in our area. As we continue to educate about the importance of smoke alarms and escape plans, the most simple, cost-free prevention technique is taking a moment to close bedroom doors. A closed door can provide the life saving time necessary to escape a deadly fire. A closed-off room can reduce temperatures by 800 degrees and keep carbon monoxide levels 9,000 parts per million (PPM) lower than if the door were left open.

I especially emphasize the importance of this technique to parents of young children. Many times, parents believe leaving their child’s door ajar could help them remain alert or perhaps will allow them to escape more quickly. Unfortunately this practice can be extremely dangerous. Children may be delayed in responding to alarm signals and in a modern home just five seconds can make all the difference. However with a closed door, a safe environment is prolonged, providing the opportunity for improved escape and rescue efforts.

These simple steps could save your life and the lives of the ones you love. Please watch a video demonstration of how this basic habit can make a difference at [youtube.com/watch?v=bSP03BE74WA](https://www.youtube.com/watch?v=bSP03BE74WA). And remember to close before you doze!

Travis Ripley,  
Fire Marshal, Bellevue Fire Department



Watch the video:  
[youtube.com/watch?v=bSP03BE74WA](https://www.youtube.com/watch?v=bSP03BE74WA)

## IN THE EVENT OF A FIRE

In a room with the door  
**closed**  
temperatures are  
**reduced**  
**800**  
degrees Fahrenheit

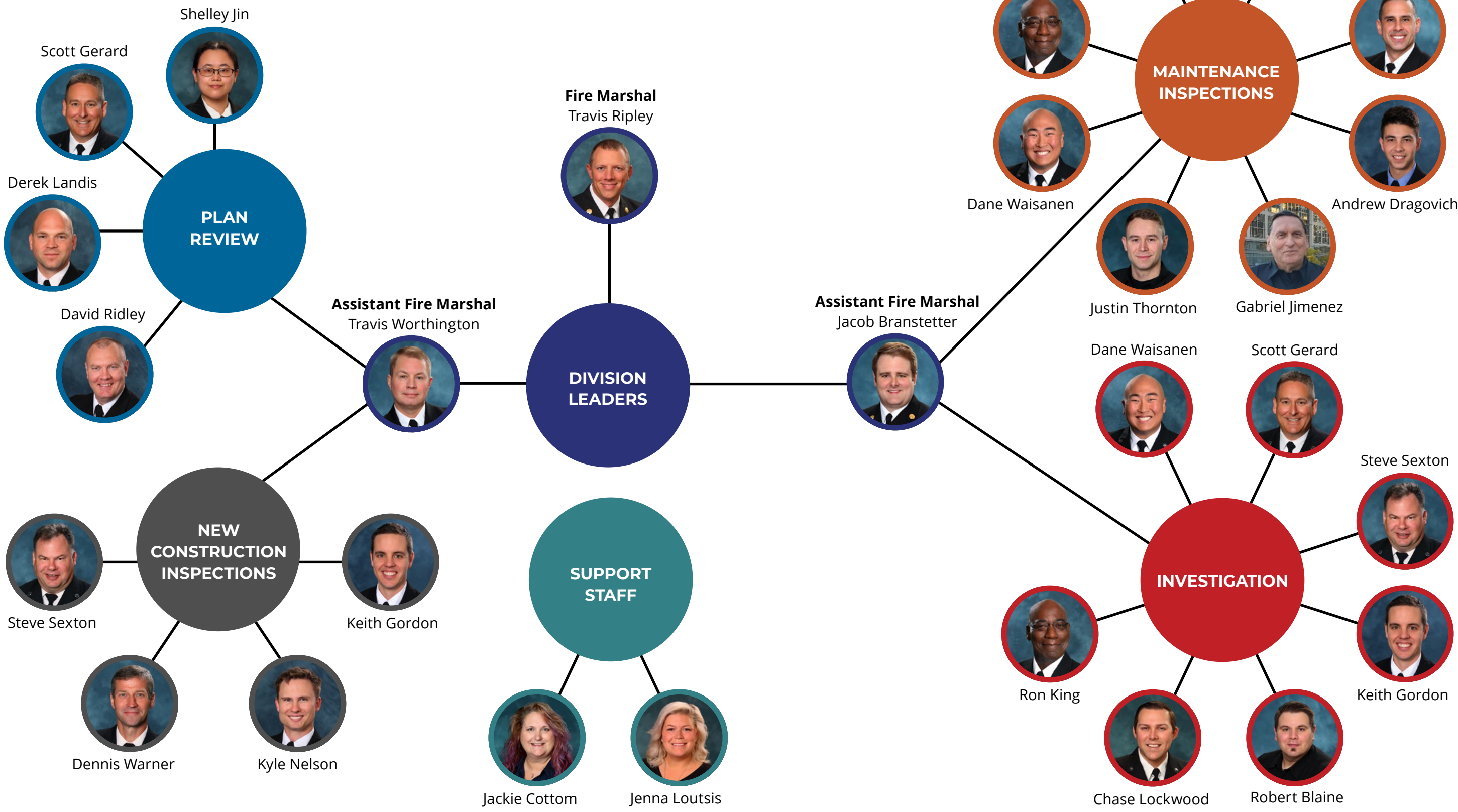
In a room with the door  
**open**  
Carbon Monoxide levels  
**increase**  
**9,000**  
Parts Per Million





# Fire Prevention

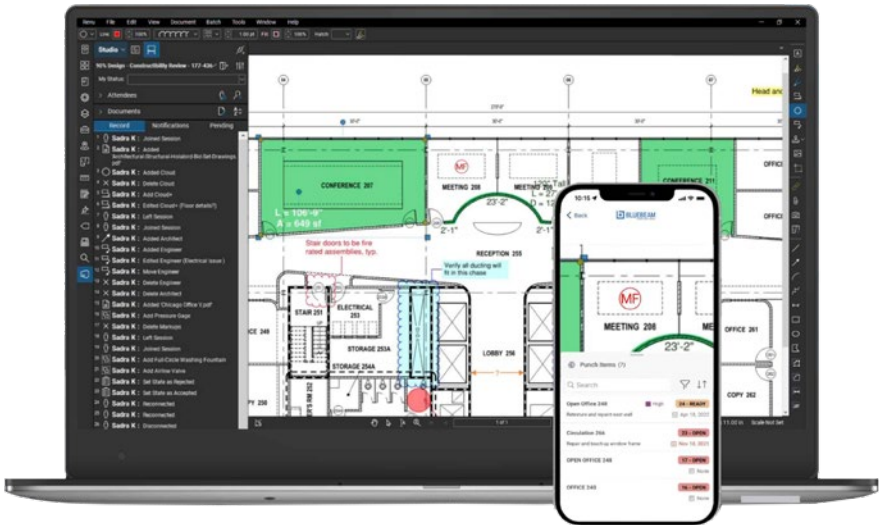
## Organizational Chart



# Plan Review

## Responsibilities

Fire Plan Examiners evaluate construction documents and fire protection system designs to ensure that the minimum fire codes and standards are consistently applied. Ensuring that projects comply with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, and to provide a reasonable level of safety to firefighters and emergency responders during emergency operations. Permit applications and the progress of submittals are conducted online at [MyBuildingPermit.com](https://mybuildingpermit.com).



Fire Prevention staff completed **4,309** hours of plan review in 2022.

This includes initial review and subsequent revision submittals.

## The Review Team



Scott Gerard



Derek Landis



David Ridley



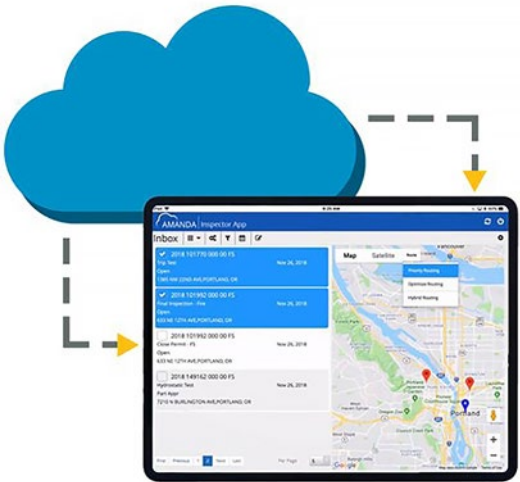
Shelley Jin

## Data Capture & Analytics in PowerBi

As the City of Bellevue continues to experience exponential growth, the Fire Prevention division consistently works to identify ways to leverage technology. Capturing and analyzing data to inform many different decisions has allowed the division to better direct resources and forecast growth.

## AMANDA 7 Software

In 2022 Bellevue Fire Prevention and the Development Services Department upgraded their plan review management software to AMANDA 7. This upgrade increased collaboration between Development divisions and has improved integrations between our Plan Reviewers and New Construction Inspectors.





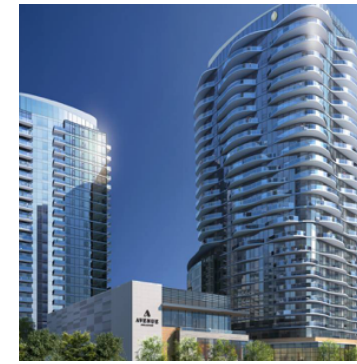
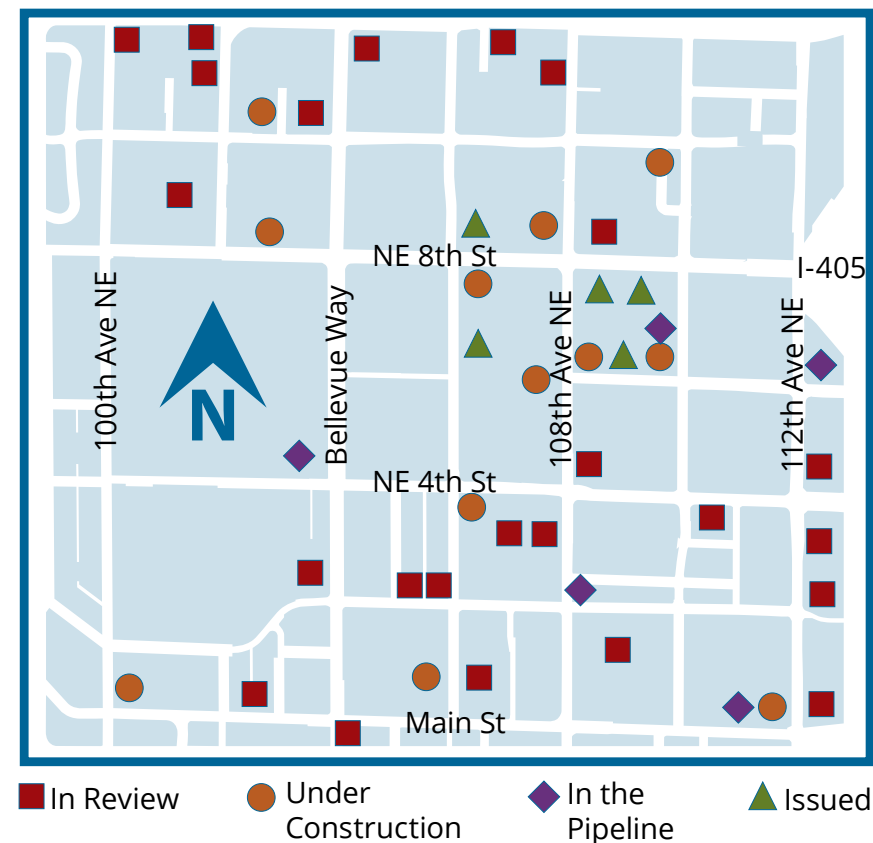
# Development Activity



## The Future Skyline of Bellevue

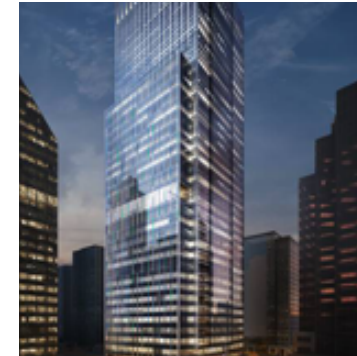
Aggregating projects constructed since 2018, those under construction, and the mega-projects ahead, Downtown Bellevue has seen the construction and is expecting the construction of 118 midrises, high-rises, and skyscrapers. All together downtown is counting over 13,100 new residential over 16 million square feet of commercial space, likely over 2,000 hotel rooms, and over 43,300 parking spaces constructed since 2018, under construction, and in permitting.

Downtown Major Projects Map



### 10300 NE 8TH ST

- 2 mixed-use residential towers
- 330 residential (condominium) units
- 251 hotel units
- 76,000 SF ground level & upper level active uses
- 826 parking spaces



### 555 108TH AVE NE

- Mixed-use office tower
- 42 stories & 2-story pavilion
- 695,610 SF office
- 24,675 SF active uses
- 967 parking spaces



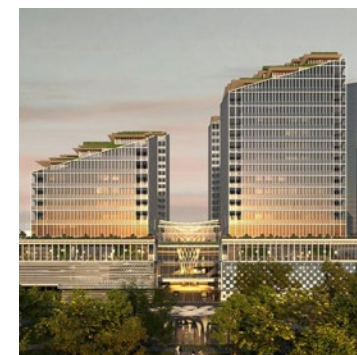
### CLOUDVUE

When completed, its three 600 foot towers, totaling over 4.2 million square feet, will soar over the city, reaching higher than any other existing or planned development. Cloudvue will offer over 40,000 square feet of retail, restaurants and other planned active-use spaces.



### 400 112TH AVE NE

- Mixed use office
- 2 towers
- 27 stories each
- 1,174,000 SF office
- 16,100 SF active use
- 1,190 parking spaces



### THE BELLEVUE

This four tower expansion at Bellevue Square will include a hotel, retail, residential units, a central glass atrium and six levels of underground parking. The project would add another 1.8 million square feet to Kemper's sprawling Bellevue collection.



# New Construction Inspections

## Responsibilities

Fire Prevention staff inspect new construction projects to ensure buildings and fire/life safety systems comply with the appropriate codes and standards. Current development activity is unprecedented in its length, driven by a combination of the economy, the expansion of the Sound Transit Eastlink Light Rail system, and technology companies (Amazon, Microsoft, Facebook etc.) relocating to Bellevue. The challenges on the horizon are keeping pace with the construction demand and complexity, training new staff and aligning resources with the demands. Additional information on construction permits can be obtained at [MyBuildingPermit.com](https://www.bellevuefire.org/MyBuildingPermit.com).

In 2022 we added  
**3,061,235** square feet  
of new major project construction.

An estimated valuation of  
**\$1.15 Billion**  
is anticipated for those  
projects in construction.

## New Construction Inspectors



Steve Sexton



Dennis Warner



Keith Gordon

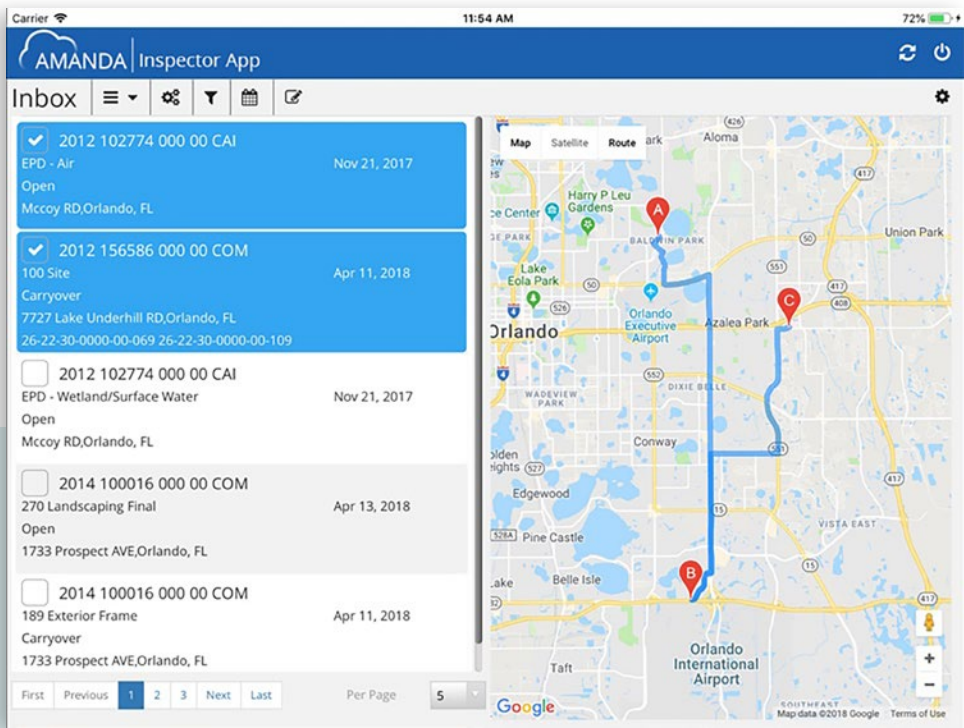
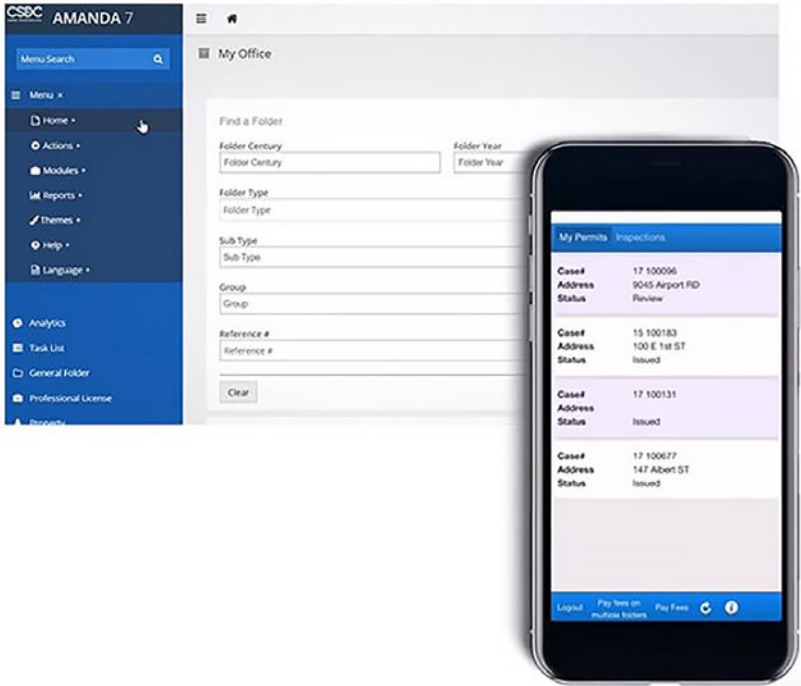


Kyle Nelson



## AMANDA 7 Inspector App

In 2022 Bellevue Fire Prevention and the Development Services Department upgraded their inspector software to AMANDA 7. This upgrade increased accessibility to digital inspection tools for team members in the field performing inspections and collaborating with members of the building community.





# Maintenance Inspections

## Responsibilities

In keeping with its mission statement, Fire Prevention staff inspect existing buildings to ensure fire/life safety systems are being maintained in accordance with all applicable codes and standards. Except for one-and two-family dwellings, every building in the community is inspected at least bi-annually. Multi-family buildings and restaurants lacking sprinkler systems are inspected annually, with all other buildings inspected on alternating years. This work serves the community by ensuring that the residents, visitors, customers, business owners and employees in community can be confident that they are safer from fire while living, working and playing in these cities.

Maintenance Inspectors completed  
**100%**  
of Initial Inspections.

## Maintenance Inspectors



Dane Waisanen



Ron King



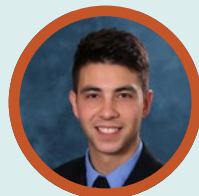
Chase Lockwood



Robert Blaine



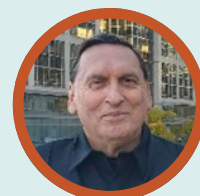
Patrick Hamilton



Andrew Dragovich



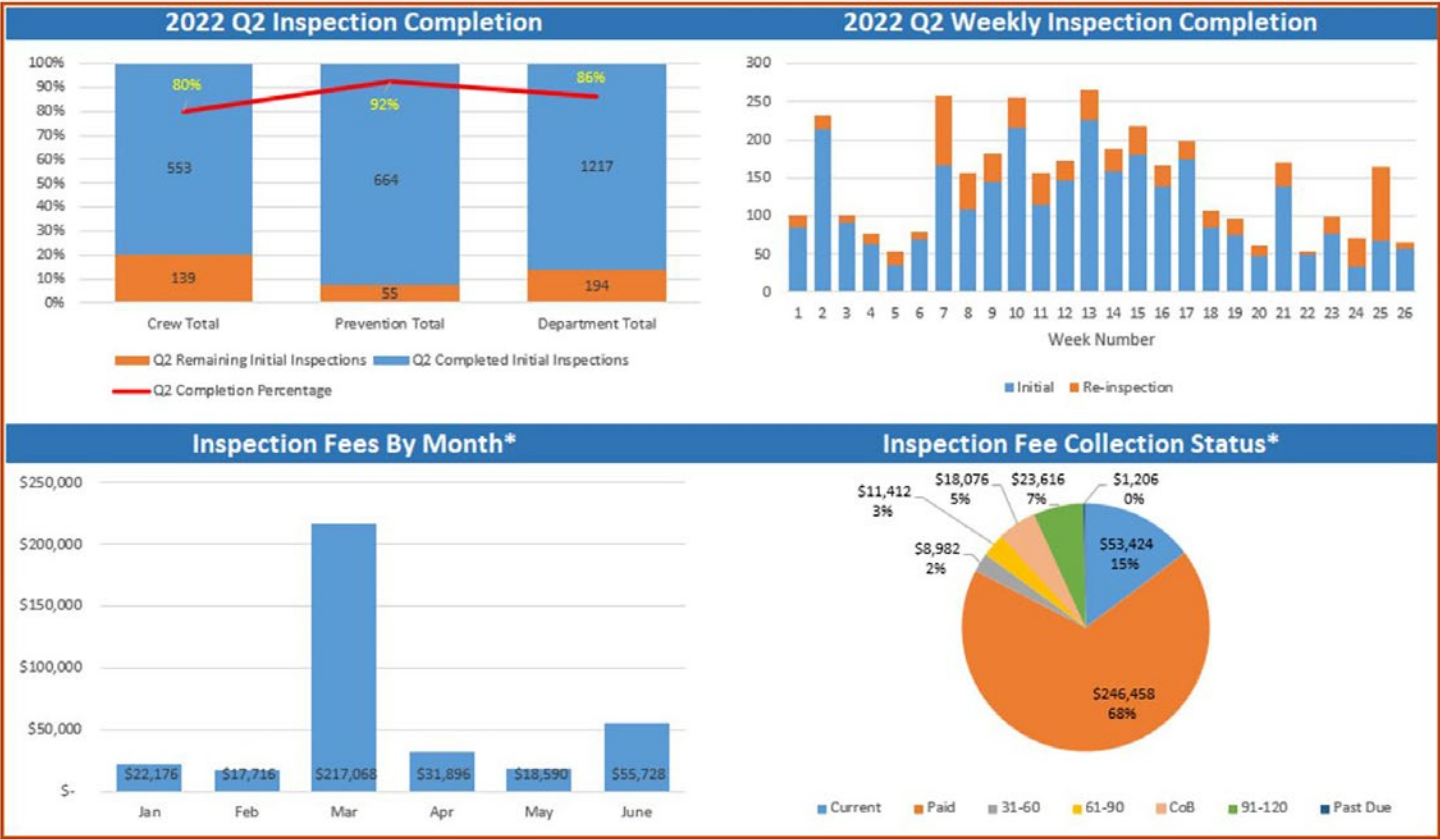
Justin Thornton



Gabriel Jimenez

In 2022  
**4645**  
Total Inspections  
Completed  
(Initial and Reinspections)

The Maintenance Team  
inspected  
**62,528,905**  
square feet  
and billed  
**\$751,031**  
For inspection fees to support the  
Fire Prevention Division



# Origin and Cause Investigation

A fire occurred when a built in gas grill, which had not been installed in accordance with the Manufacturer's Directions, was used. The fire primarily affected the wood framing members which were in direct contact with the grill and were not appropriately separated by non-combustible materials. Luckily, the fire was extinguished prior to extending into the rest of the residence, and there were no severe injuries.

**PREVENTION TIP:** Ensure that any appliance, especially heat-producing or cooking appliances, are installed in accordance with the Manufacturer's Directions.



A fire occurred in a home under construction when a large heat producing appliance with a damaged electrical cord was left unattended.

**PREVENTION TIP:** Never use appliances with damaged electrical cords. Do not attempt to repair damaged electrical cords, as their integrity cannot be relied upon.



A fire occurred on a combustible balcony where smoking occurred regularly. Cigarette butts were found on and in between wood structural members. No ashtrays or other receptacles to responsibly dispose of cigarettes were found. Luckily, the fire occurred during the day so residents were awake and aware, and the fire was promptly reported to the fire department and extinguished.

**PREVENTION TIP:** Always dispose of smoking materials in an appropriate receptacle. Never place smoking materials on or near combustible construction.



## TOP 5 FIRE CAUSES

-  **1** Cooking
-  **2** Heating
-  **3** Electrical
-  **4** Smoking
-  **5** Candles

  
**Total Fire Loss**  
**\$4,309,302**

## Investigation Team



Scott Gerard



Steve Sexton



Dane Waisanen



Keith Gordon



Ron King



Chase Lockwood



Robert Blaine

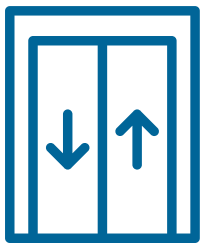


The Future of Fire Prevention

Innovative fire protection systems



FIREFIGHTER AIR  
REPLENISHMENT SYSTEMS



OCCUPANT  
EVACUATION  
ELEVATORS



PSERN  
(EMERGENCY RADIO  
NETWORK)

Bellevue’s unprecedented growth and development introduce new challenges to our Fire Prevention efforts. We proactively look to advances in Fire Protection Systems to meet these challenges head-on, working to prevent fire, detect incidents, or enhance evacuations as effectively as possible.

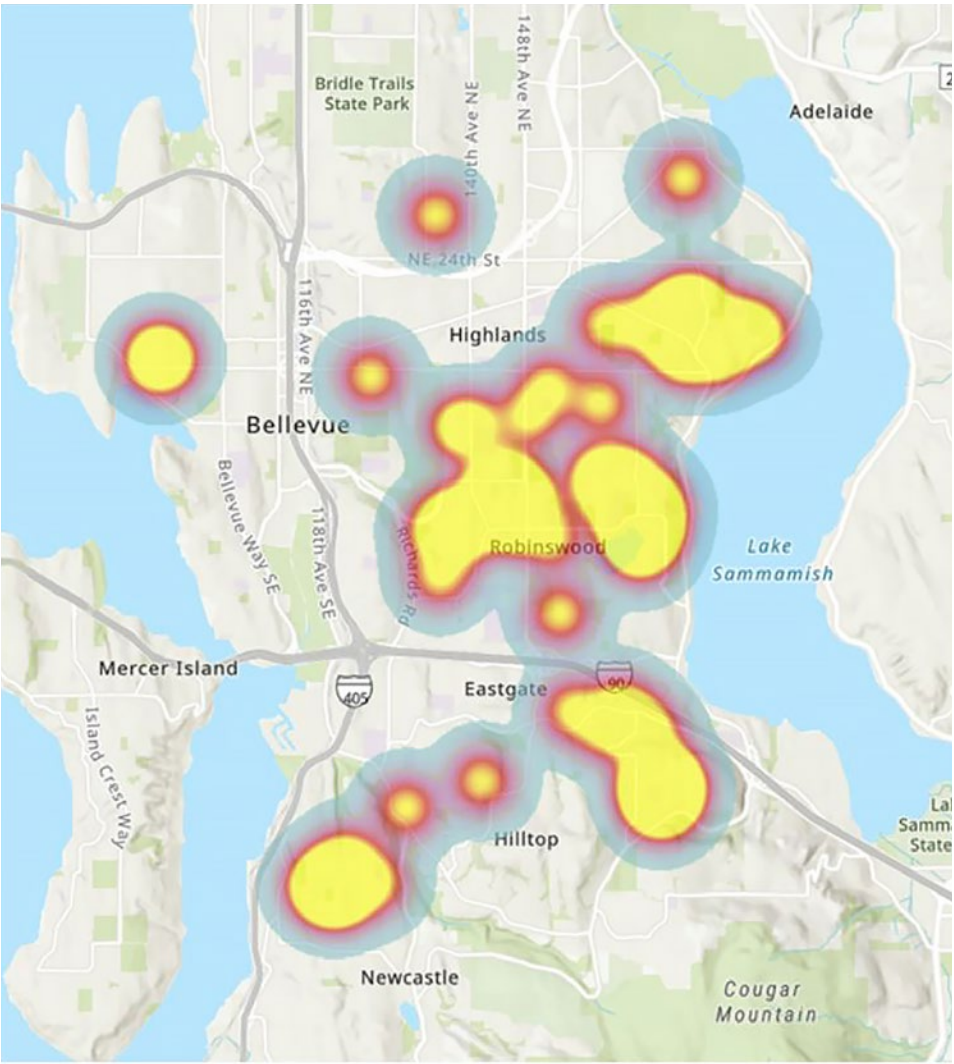
Data informed prevention efforts

In recent years the Fire Prevention division has been utilizing a paperless inspection software and through that tool has gathered all sorts of useful data. By looking at common deficiencies on inspections and by reviewing preventable incidents we can better align public education to address these common issues.

Focus on community risk reduction

Community Risk Reduction works to identify and prioritize local risks, followed by the integrated and strategic investment of resources to reduce their occurrence and impact. This process helps communities find out what their risks are and develop a plan to reduce the risks viewed as high priority. By centering our vision on overall Community Risk Reduction we better protect our citizens and our First Responders in an emergency event.

July 4th Event



Heat Map of Illegal  
Firework Activity  
Reporting  
July 4, 2022

Reporting Frequency



During previous 4th of July events, the Bellevue Fire Department and its Fire Prevention Officers partnered with the Bellevue Police Department to conduct enforcement patrols and issue citations. While participating in these patrols we observed that in most cases the use of fireworks, despite being banned in Bellevue, was primarily due to new residents being unaware of the ban. Beginning in 2022, Bellevue Fire adopted a new model often forcing fireworks rules. Rather than issuing citations, we decided to engage in focus educational efforts. Utilizing GIS mapping, data from past years and citizen reporting, we located individuals who were illegally using fireworks and provided direct education to them on the rules in Bellevue and King County as a whole. This approach was received more positively from the community. We do still have the ability to issue \$1,000 citations to violators and will do so when necessary, however, our primary compliance tool will continue to be though fire and life safety education.

# Education

## Document Accessibility

As our community continues to grow and develop it is vital that everyone who lives, works, or plays in our community be able to understand our Fire Code and best practices in order to protect themselves and their families from fire. To that end, beginning in 2021, Bellevue Fire Prevention began the process of updating and translating our educational materials into the seven most common languages other than English spoken and read in our neighborhoods. In 2022, Bellevue Fire Prevention received a grant from FM Global to continue this important communication effort, and will be translating an additional five documents into these languages. These documents are provided after inspections, upon request by a customer, or after an issue is identified. If you or someone you know could benefit from one of these documents, please contact us by phone or email.

## Top 8 Languages spoken in the City of Bellevue

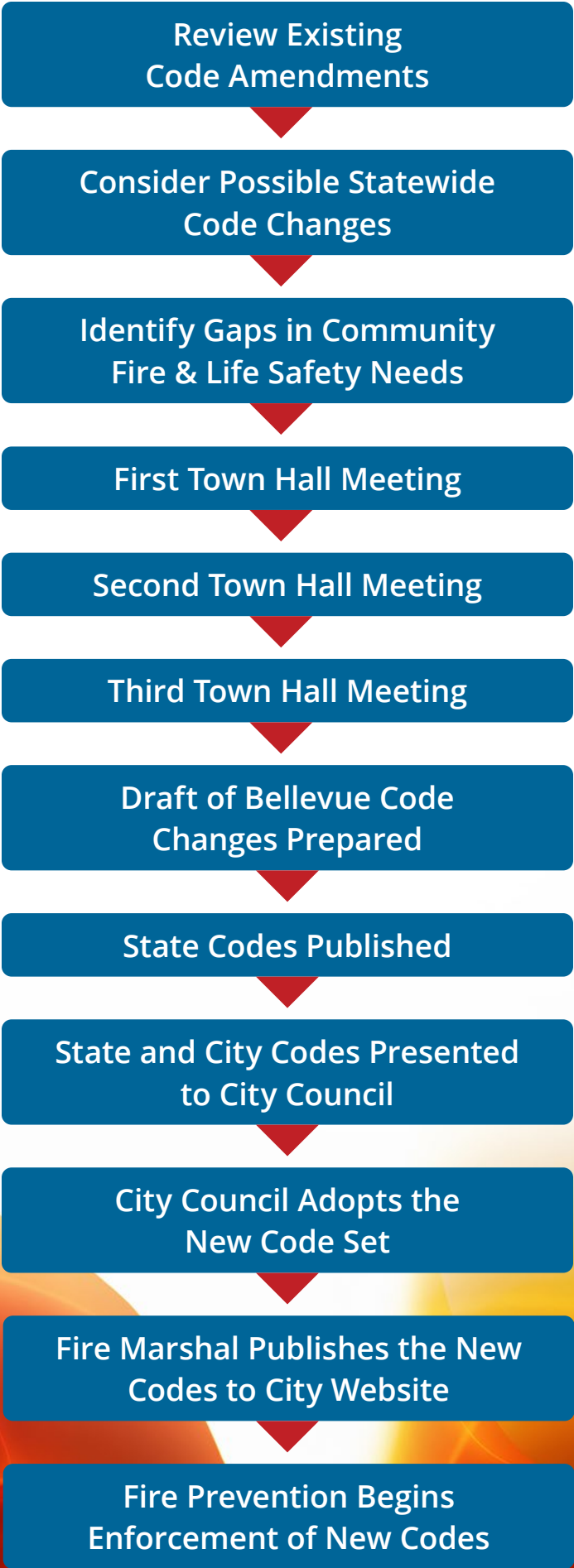
- English
- Mandarin (Traditional)
- Spanish
- Korean
- Russian
- Japanese
- Cantonese (Simplified)
- Vietnamese

## Pathway to New Fire Codes

Typically, every three years the state adopts the next cycle of building, fire, residential, mechanical, and existing building codes. Cities and counties alike go through a process of familiarizing themselves with the new codes and adopting or amending any changes specific to their jurisdiction.

As we do the same and prepare ourselves for an adoption date of July 1, 2023, the tasks include reviewing all existing amendments to judge their relevance and adapt them to any new code changes. In addition, we look for opportunities to both improve fire and life safety needs throughout the community and partner with builders and developers to strengthen and support industry needs.

We have completed three town hall meetings where stakeholders can weigh in on changes. We are also active in a zone wide code development group consisting of neighboring fire departments. The goal being to align in as many areas as possible. As we wait for final state amendment to post, we continue to draft what will eventually go to City Council for adoption early 2023.





# Education

## Revamping Special Events

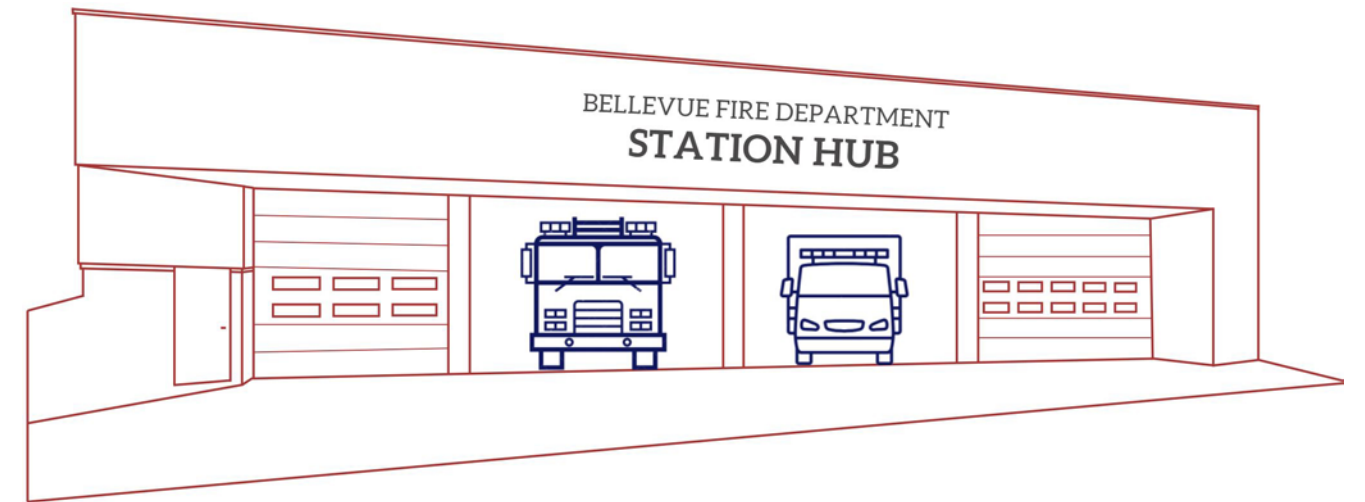


2022 Rock n' Roll Marathon

Throughout 2022 the Fire Prevention Division's Special Events Committee assigned a program manager to improve our special event processes in the Fire Department. The overall goal was to identify process gaps for external stakeholders, such as food vendors and event coordinators and increase collaboration with City of Bellevue departments and internal stakeholders. The Fire Prevention division's responsibility in Special Events is in evaluating event applications for compliance with Fire Code requirements. A Fire Prevention representative will then naturally integrate with the Fire Department Operations' SEC representative and the Office of Emergency Management, as well as the Police, Parks, and Transportation departments to ensure a safe and successful event. The Fire representative keeps a high level of awareness of when the Building Division and other groups within Development Services will require permits for public events. As part of our improvement efforts we connected with vendors and event coordinators to improve the permit process for events and to better educate members of the public on the importance of event preparedness.

## Preventable Alarm Tracking

By leveraging existing tools, Bellevue Fire Department has added automation to our process of reporting and addressing preventable fire alarms. This allows our Fire Prevention Team to quickly address situations which cause firefighters to unnecessarily be summoned to buildings, which improves response times by ensuring they are being called to fewer false alarms. Additionally, it prevents residents or employees from being evacuated unnecessarily.



## Prevention Tip:

Ensure that issues with Fire alarm systems are promptly repaired. Educate residents that smoke from cooking should be vented from a window, or through a vent fan, not into a shared hallway.







## Lithium Ion Batteries

Many of the items we use today use lithium-ion batteries due to the weight, size, and efficiency. These toys, tools, and appliances are commonplace amongst our homes. However, please be sure to use care and caution.

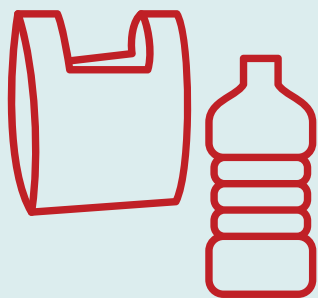
- Use in accordance with the manufacturer's instructions
- Store appropriately
- Charge with factory labeled cords
- Never let devices overheat where they are hot to touch



## BBQs

Most of us love to grill outside no matter the weather conditions. And though this may seem harmless note the following precautions.

- Don't turn grills on high. There's rarely a need and can cause damaging effects
- Stay with the grill while it's on or cooking
- Be sure to turn it off or extinguish once done. And don't forget to shut off propane



## Plastics

Be aware that many of the items we use or store in our homes today are made from plastics. This greatly reduces the time you have if a fire breaks out. The smoke and toxic gases released are extremely deadly. Please practice the following to stay as safe as possible.

- Have an escape plan for everyone
- Make sure you have smoke alarms on each floor, as well as inside and outside bedrooms
- Make sure you keep bedroom doors closed while sleeping



**A test lithium battery fire by the fire safety research institute, in which a battery with disabled safety features created a violent explosion.**







City of Bellevue Fire Department  
**Fire.BellevueWA.gov**  
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