



CITY OF LAKE FOREST PARK CITY COUNCIL REGULAR MEETING

Thursday, October 13, 2022 at 7:00 PM

Meeting Location: In Person and Virtual / Zoom

17425 Ballinger Way NE Lake Forest Park, WA 98155

INSTRUCTIONS FOR PARTICIPATING IN THIS MEETING VIRTUALLY:

Please note, this link works for both the Work Session (6:00 p.m.) and Regular Meeting (7:00 p.m.).

Join Zoom Webinar: <https://us06web.zoom.us/j/89896180737>

Call into Webinar: 253-215-8782 | Webinar ID: 898 9618 0737

The City Council is providing opportunities for public comment by submitting a written comment or by joining the meeting webinar (via computer or phone) or by attending in person to provide oral public comment.

HOW TO PARTICIPATE WITH ORAL COMMENTS:

Sign up here <https://app.waitwhile.com/welcome/comment-sign-up> between 9:00 a.m. and 5:00 p.m. on the day of the meeting to provide Oral Comments during the meeting.

If you are in person at the meeting, there is a sign in sheet located near the entrance to the Council Chambers. Simply fill the form out and the Mayor will call your name at the appropriate time. Oral comments are limited to 3:00 minutes per speaker.

If you are attending the meeting via Zoom, in order to address the Council during the Public Comment section of the agenda, please use the “raise hand” feature at the bottom of the screen. Oral comments are limited to 3:00 minutes per speaker. Individuals wishing to speak to agenda items will be called to speak first in the order they have signed up. The City Clerk will call your name and allow you to speak. Please state your name and whether you are a resident of Lake Forest Park. The meeting is being recorded.

HOW TO SUBMIT WRITTEN COMMENTS:

<https://www.cityofflp.com/615/Hybrid-City-Council-Meetings> (use CTRL+CLICK to open this link)

Written comments for public hearings will be submitted to Council if received by 5:00 p.m. on the date of the meeting; otherwise, they will be provided to the City Council the next day. Because the City has implemented oral comments, written comments are no longer being read under Citizen Comments.

As allowed by law, the Council may add and take action on items not listed on the agenda. For up-to-date information on agendas, please visit the City’s website at www.cityofflp.com

Meetings are shown on the city’s website and on Comcast channel 21 for subscribers within the Lake Forest Park city limits.

AGENDA

1. CALL TO ORDER: 7:00 PM

2. PLEDGE OF ALLEGIANCE

3. ADOPTION OF AGENDA

4. PRESENTATIONS

A. Introduction of Human Resources Director Shannon Moore

5. PROCLAMATIONS

A. Breast Cancer Awareness Month

B. Domestic Violence Awareness Month

6. PUBLIC HEARINGS

A. Public Hearing on Ordinance 1250 - Adoption of 2018 International Building Code, other construction related codes, and the International Fire Code with amendments.

- Staff presentation

- Questions from Council

- Open the public hearing for comments (3 minutes per speaker)

- Staff address questions that may have been presented during public comments and from Council.

B. Ordinance 1250/Adoption of 2018 International Building Code, other construction related codes, and the International Fire Code with amendments.

C. Discussion regarding updates to the building permit fees

7. CITIZEN COMMENTS

*This portion of the agenda is set aside for the public to address the Council on agenda items or any other topic. The Council may direct staff to follow up on items brought up by the public. **Comments are limited to a three (3) minute time limit.***

8. CONSENT CALENDAR

The following items are considered to be routine and non-controversial by the Council and will be approved by one motion. There will be no separate discussion of these items unless a

Councilmember so requests, in which case the item will be removed from the Consent Calendar in its normal sequence on the agenda.

- A. September 22, 2022 City Council Special Work Session Meeting Minutes
- B. September 22, 2022 City Council Regular Meeting Minutes
- C. September 26, 2022 City Council Budget and Finance Committee Special Meeting Minutes
- D. City Expenditures for the Period Ending October 13, 2022

9. ORDINANCES AND RESOLUTIONS FOR COUNCIL DISCUSSION

- A. Resolution 1858 - Interlocal Agreement regarding the design of improvements for the 25th Avenue NE Ballinger Creek Habitat Restoration and Flood Reduction Project
- B. Ordinance 1251/amending section 10.06.010 of the Lake Forest Park Municipal Code regarding authorization for traffic safety cameras in school walk areas and in public park speed zones
- C. Ordinance 1252/adopting the National Association of City Transportation Officials' 2020 City Limits, Setting Safe Speed Limits on Urban Streets

10. ORDINANCES AND RESOLUTIONS FOR ACTION

- A. Resolution 1858/Authorizing the staff to contract for cloud storage services with Axon Enterprise Inc
- B. Ordinance 1249 – Amending Chapter 13.08 of the Lake Forest Park Municipal Code, Sewer Service and Use, regarding rates

11. COUNCIL DISCUSSION AND ACTION

12. OTHER BUSINESS

13. COUNCIL COMMITTEE REPORTS

- A. Councilmember Reports
- B. Mayor's Report
- C. City Administrator's Report

14. ADJOURN

FUTURE SCHEDULE

--Thursday, October 20, 2022 City Council Budget and Finance Committee Meeting 6 pm *hybrid meeting (Zoom and City Hall)*
--Monday, October 24, 2022 City Council Committee of the Whole Meeting 6 pm *hybrid meeting (Zoom and City Hall)*
--Thursday, October 27, 2022 City Council Regular Business meeting 7 pm *hybrid meeting (Zoom and City Hall)*

As allowed by law, the Council may add and take action on items not listed on the agenda

Any person requiring a disability accommodation should contact city hall at 206-368-5440 by 4:00 p.m. on the day of the meeting for more information.



PROCLAMATION

WHEREAS, while considerable progress has been made in the fight against breast cancer, it remains the most commonly diagnosed cancer and the second leading cause of death among women in the United States; and

WHEREAS, every two minutes a woman is diagnosed with breast cancer, and 30% of new women's cancer diagnoses will be for breast cancer; and

WHEREAS, 1 out of every 8 women in the United States will be diagnosed with breast cancer during her lifetime; and

WHEREAS, in 2022, an estimated 287,850 new cases of invasive breast cancer are expected to be diagnosed in women in the U.S. and 51,400 new cases of non-invasive (in situ) breast cancer; and

WHEREAS, men can also get breast cancer, and an estimated 2,710 men will be diagnosed with it in 2022; and

WHEREAS, there are more than 3.8 million breast cancer survivors in the United States, including women still being treated and those who have completed treatment; and

WHEREAS, as we display pink ribbons, wear pink clothing, and our police department wears pink patches and badges to raise awareness, we also support those in our community that are courageously fighting breast cancer and honor the lives lost to the disease; and

WHEREAS, this October, we recognize breast cancer survivors, those battling the disease, their families and friends who are a tireless source of love and encouragement, and applaud the efforts of our medical professionals and researchers working to find a cure for this deadly disease; and

WHEREAS, Breast Cancer Awareness Month is an opportunity to unite all citizens in our community to prevent breast cancer deaths through increased education, early detection, prevention, and regular screening.

NOW, THEREFORE, the Mayor and Council of the City of Lake Forest Park do hereby proclaim the month of October 2022 as

~ BREAST CANCER AWARENESS MONTH ~

in the City of Lake Forest Park and I commend this observance to all citizens and encourage all women and men to learn more about this disease.

Signed this 13th day of October, 2022

Jeff Johnson, Mayor



PROCLAMATION

WHEREAS, October is recognized as National Domestic Violence Awareness Month that first began in 1981 by the National Coalition Against Domestic Violence as a Day of Unity to connect battered women's advocates across the country; and

WHEREAS, domestic violence is a pattern of physical, emotional, verbal, and/or sexual abuse, which includes, but is not limited to, threats, intimidation, isolation, and/or financial control; and

WHEREAS, domestic violence is an intentional pattern of behavior that is used by one person to harm and take power and control over another person in the context of a date, family, roommate, or caretaker relationship; and

WHEREAS, domestic violence is an epidemic affecting individuals in every community, regardless of age, economic status, sexual orientation, gender, race, religion, or nationality; and

WHEREAS, 1-in-4 women and 1-in-9 men in the United States are victims of domestic violence and a woman is killed by a spouse, ex-spouse, or dating partner every 74 hours in America; and

WHEREAS, 1-in-15 children is exposed to domestic violence each year and 90% of these children are eyewitness to this violence; and

WHEREAS, the city of Lake Forest Park remains committed to a professional response to incidents of domestic violence in our region.

NOW, THEREFORE, the Mayor and City Council of the City of Lake Forest Park do hereby proclaim the month of October 2022 as

DOMESTIC VIOLENCE AWARENESS MONTH

in the city of Lake Forest Park and call upon all community members to speak out against domestic violence and support local efforts to assist victims of these crimes in finding the help and healing they need.

Signed this 13th day of October, 2022.

Jeff Johnson, Mayor



CITY OF LAKE FOREST PARK

CITY COUNCIL

AGENDA COVER SHEET

Meeting Date	October 13, 2022, Regular Meeting
Originating Department	Building Department
Contact Person	Calvin Killman
Title	Ordinance 1250 - Adoption of 2018 International Building Code, other construction related codes, and the International Fire Code with amendments.

Legislative History

- | | |
|-----------------------|------------------------------------|
| • First Presentation | September 8, 2022 Work Session |
| • Second Presentation | September 22, 2022 Regular Meeting |
| • Third Presentation | October 13, 2022 Regular Meeting |

Attachments:

1. List of Codes being adopted
2. Ordinance 1250
3. Exhibit A – Amendments to the 2018 Fire Code

Executive Summary

The subject of this ordinance is the adoption of updated International Building Codes for Lake Forest Park. The 2018 version was adopted by the State of Washington and went into effect in February 2021. The codes are proposed for adoption with the state amendments and Exhibit A to the ordinance includes the City’s local amendments to the International Fire Code. These codes include the most recent approved materials, practices, and safety features. It is useful to permit holders and builders to have the latest codes available and, if they work in multiple cities, to be able to use the same codes.

Background

Codes and Sources: The State of Washington primarily uses the international family of Building Codes (Building, Residential, Mechanical, Fire, Plumbing, (National) Fuel Gas, (NFPA), Liquefied Petroleum Gas, Fuel Gas, (Uniform) Housing, (Uniform) Abatement of Dangerous Buildings, Energy Conservation, (National) Electrical, Existing Building. There are a series of state amendments adopted every three years to comport with state law. Every three years, the International Code Council of Building Officials (ICBO), National Fire Protection Association, and International Association of Plumbing and Mechanical Officials reviews and updates the family of codes and submit them for adoption. The briefing and action before City Council are to review and consider adopting the 2018 updates.

LFP Municipal Code Title 15, Building and Construction:

Chapter 15.04, General Provisions: Amended to add the most recent versions of the international codes and requiring the City to keep copies of them on file for review and inspection.

Chapter 15.10, Fire Code: Amended to update the local amendments to the International Fire Code.

Fiscal & Policy Implications

The main impact is the cost of a new set of code books every three years. The estimated cost is \$1,800 and is included in the budget.

Staff Recommendation

Approve Ordinance 1250 adopting the proposed 2018 International Building Code updates and amendments to same.

These are the codes being adopted by reference (which are updated versions of the same codes that were adopted by reference in 2018):

- The 2018 Edition of the International Building Code (“IBC”), as adopted and amended by the State Building Code Council in Chapter 51-50 WAC.
- The 2018 Edition of the International Residential Code (“IRC”), as adopted by the State Building Code Council in Chapter 51-51 WAC, as published by the International Code Council.
- The 2018 Edition of the International Mechanical Code (“IMC”), as adopted by the State Building Code Council in Chapter 51-52 WAC.
- The 2018 Edition of the International Fire Code (“IFC”), as adopted by the State Building Code Council in Chapter 51-54A WAC, along with Appendix B thereto (Fire Flow).
- The 2018 Edition of the Uniform Plumbing Code (“UPC”), as adopted by the State Building Code Council in Chapter 51-56 WAC, excluding Chapter 1, “Administration.”
- The 2018 Edition of the National Fuel Gas Code (NFPA 54), as adopted by the State Building Code Council in Chapter 51-52 WAC.
- The 2018 Edition of the International Fuel Gas Code, as adopted by the State Building Code Council in Chapter 51-52 WAC.
- The 2018 Edition of the International Existing Building Code, together with amendments and/or additions thereto, as adopted by the State Building Code Council in Chapter 51-50 WAC.
- The 2018 Edition of the National Electrical Code.
- The 2018 Edition of the International Energy Conservation Code, Commercial and Residential, as adopted by the State Building Code Council in Chapters 51-11C and 51-11R WAC.

ORDINANCE 1250

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LAKE FOREST PARK, WASHINGTON, ADOPTING THE 2018 EDITIONS OF THE INTERNATIONAL BUILDING CODE, INTERNATIONAL RESIDENTIAL CODE, INTERNATIONAL MECHANICAL CODE, NATIONAL FUEL GAS CODE (NFPA 54) FOR LP GAS, INTERNATIONAL FUEL GAS CODE, INTERNATIONAL FIRE CODE AND APPENDIX B THERETO, UNIFORM PLUMBING CODE, INTERNATIONAL ENERGY CONSERVATION CODES FOR COMMERCIAL AND RESIDENTIAL, INTERNATIONAL EXISTING BUILDING CODE, AND THE NATIONAL ELECTRICAL CODE (NFPA 70); ADOPTING APPENDICES THERETO; AMENDING CHAPTERS 15.04, 15.06 AND 15.10 OF THE LAKE FOREST PARK MUNICIPAL CODE; AND PROVIDING FOR SEVERABILITY AND AN EFFECTIVE DATE

WHEREAS, RCW 19.27.031 provides that there shall be in effect in all counties and cities the state building code, which shall consist of the International Building, Fire, Residential, and Mechanical Codes, along with a number of different, enumerated codes which are adopted by reference; and

WHEREAS, RCW 19.27.040 provides that the governing body of each county or city is authorized to amend the state building code as it applies within the jurisdiction of the county or city, so long as the minimum performance standards of the codes and the objectives enumerated in RCW 19.27.020 are not diminished by any such amendments; and

WHEREAS, RCW 19.27.050 provides that the state building code required by chapter 19.27 RCW shall be enforced by the counties and cities; and

WHEREAS, the State Building Code is amended from time to time by the State Building Code Council pursuant to RCW 19.27.035; and

WHEREAS, the State Building Code Council recently adopted the 2018 editions of the International Building, Fire, Residential and Mechanical Codes along with updates to other enumerated codes that comprise the State Building Code; effective February 1, 2021; and

WHEREAS, the City of Lake Forest Park City Council desires to adopt the 2018 editions of the applicable International codes and other amendments to the State Building Code, along with local amendments;

NOW, THEREFORE, The City Council of The City of Lake Forest Park, Washington, Do Ordain as Follows:

Section 1. LFPMC Section 15.04.015 Amended. Section 15.04.015 of the Lake Forest Park Municipal Code is amended to read as follows:

15.04.015 Building Code Adopted.

A. The city of Lake Forest Park, pursuant to state law (chapters [19.27](#) and [19.27A](#) RCW) adopts as its building code the Washington State Building Code, as modified by chapters [15.06](#) and 15.10 LFPMC, as follows:

1. The ~~2015-2018~~ Edition of the International Building Code ("IBC"), as adopted and amended by the State Building Code Council in Chapter [51-50](#) WAC.
2. The ~~2015-2018~~ Edition of the International Residential Code ("IRC"), as adopted by the State Building Code Council in Chapter [51-51](#) WAC, as published by the International Code Council.
3. The ~~2015-2018~~ Edition of the International Mechanical Code ("IMC"), as adopted by the State Building Code Council in Chapter [51-52](#) WAC.
4. The ~~2015-2018~~ Edition of the International Fire Code ("IFC"), as adopted by the State Building Code Council in Chapter [51-54A](#) WAC, along with Appendix B thereto (Fire Flow).
5. The ~~2015-2018~~ Edition of the Uniform Plumbing Code ("UPC"), as adopted by the State Building Code Council in Chapter [51-56](#) WAC, excluding Chapter 1, "Administration."
6. The ~~2015-2018~~ Edition of the National Fuel Gas Code (NFPA 54), as adopted by the State Building Code Council in Chapter [51-52](#) WAC.
7. The ~~2015-2018~~ Edition of the International Fuel Gas Code, as adopted by the State Building Code Council in Chapter [51-52](#) WAC.
8. The ~~2015-2018~~ Edition of the International Existing Building Code, together with amendments and/or additions thereto, as adopted by the State Building Code Council in Chapter [51-50](#) WAC.
9. The ~~2015-2020~~ Edition of the National Electrical Code as adopted by the Department of Labor and Industries in Chapter 296-46B WAC and Chapter 19.28 RCW.

10. The ~~2015-2018~~ Edition of the International Energy Conservation Code, Commercial and Residential, as adopted by the State Building Code Council in Chapters ~~51-11C~~ and ~~51-11R~~ WAC.

11. All current and future amendments, supplements, modifications, exclusions, exemptions and additions to the codes identified in subsections (A)(1) through (8) and (11) and (12) of this section adopted by the Washington State Building Code Council and published in WAC Title ~~51~~, including, but not by way of limitation, Chapters ~~51-11~~, ~~51-50~~, ~~51-51~~, ~~51-52~~, ~~51-54A~~, and ~~51-56~~ WAC.

12. All appendices to any code referenced above and adopted by the Washington State Building Code Council as published in WAC Title ~~51~~ are hereby adopted, unless specifically excluded above.

B. The city shall at all times keep on file with the city clerk, for reference by the general public, a copy of the foregoing codes, as they may be amended from time to time. The copies of codes on file may be placed by the city clerk in the custody of the office of the building inspector in order to make them more readily available to inspection and use by the general public.

Section 2. LFPMC Chapter 15.10 Repealed and Reenacted. Chapter 15.10 of the Lake Forest Park Municipal Code, Fire Code, is hereby repealed in its entirety and reenacted to read as shown in Exhibit A, attached hereto and incorporated herein by this reference.

Section 3. Severability. If any one or more section, subsection, or sentence of this ordinance is held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portion of this ordinance and the same shall remain in full force and effect.

Section 4. Corrections by Clerk or Code Reviser. Upon approval of the City Attorney, the City Clerk and the code reviser are authorized to make necessary corrections to this ordinance, including but not limited to the correction of clerical errors; references to other local, state or federal laws, codes, rules, or regulations; or ordinance numbering and section/subsection numbering.

Section 5. Effective Date. This ordinance shall take effect six (6) months after passage and publication.

APPROVED BY A MAJORITY OF the Lake Forest Park City Council this ____ day of October, 2022.

APPROVED:

Jeff Johnson, Mayor

ATTEST/AUTHENTICATED:

Matt McLean, City Clerk

APPROVED AS TO FORM:

Kim Adams Pratt, City Attorney

Introduced:
Adopted:
Posted:
Published:
Effective:

EXHBIT A

Chapter 15.10

FIRE CODE

Sections:

- 15.10.005 International Fire Code adopted.**
- 15.10.010 Title.**
- 15.10.015 IFC Section 102.7, Referenced codes and standards, amended.**
- 15.10.020 IFC Section 105.6, Operational permits, amended.**
- 15.10.025 IFC Section 105.7, Construction permits, amended.**
- 15.10.030 IFC Section 108, Board of appeals.**
- 15.10.035 IFC Section 108.6, Overcrowding, amended.**
- 15.10.040 IFC Section 109.4, Violation penalties, amended.**
- 15.10.045 IFC Section 202, Definition of fire code official.**
- 15.10.050 IFC Section 308.3, Open flame in Group A occupancies, amended.**
- 15.10.055 IFC Section 319, Mobile food preparation vehicles, amended.**
- 15.10.060 IFC Section 503, Fire apparatus access roads.**
- 15.10.065 IFC Section 506.1, Key boxes, amended.**
- 15.10.070 IFC Section 507, Fire protection water supplies, amended.**
- 15.10.075 IFC Section 510, Emergency responder radio coverage, amended.**
- 15.10.080 IFC Section 901.7, Systems out of service, amended.**
- 15.10.085 IFC Section 903, Automatic sprinkler systems, amended.**
- 15.10.090 IFC Section 903, Automatic sprinkler systems, amended.**
- 15.10.095 IFC Section 903.3.1.1, Exempt locations.**
- 15.10.100 IFC Section 903.3.1.2, NFPA 13R sprinkler systems.**
- 15.10.105 IFC Section 903.4.3, Floor control valves, amended.**
- 15.10.110 IFC Section 903.5, Testing and maintenance.**
- 15.10.115 IFC Section 907.2, Fire alarm and detection systems, amended.**
- 15.10.120 IFC Section 5003.9, General safety precautions, amended.**
- 15.10.125 IFC 5604, Explosives storage.**
- 15.10.130 IFC 5704 and 5706, Aboveground storage tanks.**
- 15.10.135 ICF 5707, On-demand fueling operations.**
- 15.10.140 IFC 5806, Flammable cryogenic fluids.**
- 15.10.145 IFC 6104, Liquefied petroleum gas.**
- 15.10.150 IFC Appendix B, Fire Flow Requirements for Buildings, amended.**

15.10.005 International Fire Code adopted.

The International Fire Code, 2018 Edition, adopted in LFPMC 15.04.015, is hereby amended pursuant to RCW 19.27.040 by the adoption of the local amendments set forth in LFPMC 15.10.015 through 15.10.150. (Ord. 1163 § 3, 2018; Ord. 1064 § 9, 2013)

15.10.010 Title.

Section 101.1 is amended to read as follows:

101.1 Title. These regulations shall be known as the Fire Code of the City of Lake Forest Park, hereinafter referred to as “this code.”

15.10.015 IFC Section 102.7, Referenced codes and standards, amended.

Section 102.7 is amended to read as follows:

102.7 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 80, and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2. When allowed by the fire code official, editions of standards not herein referenced may also be utilized provided the entire standard is utilized.

102.7.1 Conflict. Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

102.7.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

15.10.020 IFC Section 105.6 Required operational permits, amended.

Section 105.6.30 is revised to read as follows:

105.6.30 Mobile food preparation vehicles. A permit is required for mobile food preparation vehicles equipped with appliances that produce smoke or grease-laden vapors or that utilize flammable gases such as LP-gas or natural gas. The fire code official is authorized to develop policies that clarify the permit requirements and participate in a regional permitting program.

15.10.025 IFC Section 105.7, Required construction permits, amended.

Section 105.7 is amended by adding the following sections:

105.7.21 Mechanical refrigeration. A construction permit is required to install, modify or expand any mechanical refrigeration system containing more than 220 pounds of a Group A1 refrigerant or more than 30 pounds of any other group refrigerant.

15.10.030 IFC Section 108.6 Overcrowding, amended.

Section 108.6 Overcrowding is amended to read as follows:

108.6 Overcrowding. Overcrowding or admittance of any person beyond the approved capacity of a building or a portion thereof shall not be allowed. The fire code official, upon finding any overcrowding conditions or obstructions in aisles, passageways or other means of egress, or upon finding any condition which constitutes a life safety hazard, shall be authorized to direct actions to be taken to reduce the overcrowding or to cause the event to be stopped until such condition or obstruction is corrected.

15.10.035 IFC Section 109, Board of appeals.

IFC Section 109, Board of appeals, is deleted and replaced with the following:

Appeals of orders, decisions or determinations made by the fire code official shall be made to the hearing examiner pursuant to section 16.26.035, ministerial administrative decisions. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder has been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better solution is proposed. The hearing examiner shall have not authority relative to interpretation of the administrative provisions of this code nor shall the hearing examiner be empowered to waive requirements of either this code or the technical codes which are the codes, appendices and referenced code standards adopted by the city.

15.10.040 IFC Section 110.4, Violation penalties, amended.

Section 110.4 is deleted and replaced with the following:

110.4. Violation penalties. Any person who violates the provisions of this code or fails to comply with any of the requirements thereof or lawful directive of the fire code official, shall

be subject to code enforcement actions and penalties as prescribed by LFPMC 1.25 Code Enforcement.

15.10.045 IFC Section 202, definition of fire code official.

The definition of “fire code official” set forth in Section 202 is hereby amended to read as follows:

FIRE CODE OFFICIAL. The Building Official, or his or her duly authorized representative. The Building Official may delegate specified duties of the Fire Code Official to a duly authorized representative of the Northshore Fire District pursuant to that certain Inter-local Agreement Between the Northshore Fire District and the City of Lake Forest Park Relating to Administration and Enforcement of the Uniform Fire Code that is Attachment A to City of Lake Forest Park Resolution No. 790.

15.10.050 IFC Section 308.3, Open flame in Group A occupancies, amended.

Section 308.3 of the IFC is amended by adding the following exception:

4. Where approved by the fire code official.

15.10.055 IFC Section 319 Mobile Food Preparation Vehicles, amended.

Section 319.11 Location, is hereby added to read as follows:

319.11 Location. Mobile food facilities shall not be located within ten feet (10') of buildings, tents, canopies or membrane structures or within ten feet (10') of any other mobile food facility.

Exceptions:

1. When mobile food facilities are positioned on public streets, the distance from buildings may be reduced to five feet (5'). This exception is designated for events lasting a maximum of no more than three (3) consecutive calendar days in a row.
2. When located on private property, the distance from buildings may be reduced to five feet (5') from a fire wall constructed of non-combustible materials and having no openings such as windows or doors within 10 feet of the vehicle.

15.10.060 IFC Section 503, Fire apparatus access roads.

Fire apparatus access roads shall be provided and maintained in accordance with the latest version of the King County Road Standards except as modified below:

503.1.2 Additional access. The fire code official is further authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with sections 503.2.1 through 503.2.7.

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed access width of not less than 20 feet, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches.

Exceptions:

1. Driveways serving one single-family dwelling that are longer than 50 feet, as measured from the road to the house, must have a width of not less than 12 feet.
2. A joint use driveway serving only 2 single family homes must have a width of not less than 18 feet and may be located in an easement or tract of the same width.

503.2.2 Authority. The fire code official shall have the authority to require an increase in the minimum access widths where they are inadequate for fire or rescue operations.

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus (minimum 75,000 pounds with a 75-psi point load) and shall be surfaced so as to provide all-weather driving capabilities. Concrete or asphalt shall be used unless specifically approved by the fire code official.

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be 20 feet inside and 40 feet outside.

503.2.5 Dead ends. Dead-end fire apparatus access roads serving seven or more lots or in excess of 150 feet in length, as measured from the centerline of the connecting roadway, shall provide a cul-de-sac bulb with a minimum paved diameter of 80 feet.

503.2.6 Bridges and elevated surfaces. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the live loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges where required by the fire code official. Where elevated surfaces are designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained where required by the fire code official.

503.2.7 Grade. The grade of the fire apparatus access road shall be no more than 15 percent. If onsite grades exceed 15 percent, for roads serving detached Group R-3 occupancies, a design of the proposed road must be submitted during project review showing the extent and degree of overage. Onsite access roads may be permitted to exceed 15 percent if all of the dwellings accessed by the road are equipped with approved fire sprinkler systems.

503.3 Marking. Where required by the fire code official, approved signs or other approved notices shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs or notices shall be consistent with criteria described in the Northshore Fire Department Access Standard and maintained a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including parking of vehicles. The minimum widths and clearances shall be maintained at all times.

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be approved by the fire code official. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200 and must be equipped with Click2Enter or other authorized equipment that allows for operation of the gate by Fire and Police personnel from their vehicle.

15.10.065 IFC Section 506.1, Key boxes, amended.

Section 506.1 is amended by adding the following:

All occupancies equipped with an automatic sprinkler system, fire alarm system, or hazardous occupancies, or when required by the fire code official, shall have an emergency access key box mounted in an approved location.

Exception: One- and two-family dwellings.

15.10.070 IFC Section 507, Fire protection water supplies, amended.

Section 507.5.1 is amended to read as follows:

507.5.1 Where required. Where a facility or building hereafter constructed or moved into or within the jurisdiction is more than 150 feet from a hydrant on a fire apparatus access road, onsite fire hydrants and mains shall be provided where required by the fire code official. At least one hydrant shall be located within 400 feet of all portions of the exterior wall of the first story of the facility or building as measured by an approved route around the exterior of the building. All fire hydrants required by this section, whether existing or new shall be equipped with a 4-inch Storz fitting on the steamer port. A 4-inch Storz fitting shall also be installed on any hydrant required for protection of existing structures where the valuation of the improvement or alteration exceeds 50% of the assessed valuation or where the square footage is increased by 25% or 1,000 square feet, whichever is less.

Exceptions:

1. For one- and two-family dwellings and Group U occupancies, the maximum distance to the structure shall be 300 feet.
2. Distances may be modified by the fire code official for facilities or buildings equipped with approved automatic sprinkler systems.

15.10.075 IFC Section 510 Emergency responder radio coverage, amended.

Section 510 of the International Fire Code is hereby amended to read as follows:

510.1 Emergency responder radio coverage in new buildings. Approved radio coverage for emergency responders shall be provided within buildings meeting any of the following conditions:

1. High rise buildings;
2. The total building area is 50,000 square feet or more;
3. The total basement area is 10,000 square feet or more; or
4. There are floors used for human occupancy more than 30 feet below the finished floor of the lowest level of exit discharge.
5. Buildings or structures where the Fire or Police Chief determines that in-building radio coverage is critical because of its unique design, location, use or occupancy.

The radio coverage system shall be installed in accordance with Sections 510.4 through 510.5.5 of this code and with the provisions of NFPA 1221 (2019). This section shall not require improvement of the existing public safety communication systems.

Point of Information

When determining if the minimum signal strength referenced 510.4.1.1 exists at a subject building, the signal strength shall be measured at any point on the exterior of the building up to the highest point on the roof.

Exceptions:

1. Buildings and areas of buildings that have minimum radio coverage signal strength levels of the King County Regional 800 MHz Radio System within the building in accordance with Section 510.4.1 without the use of a radio coverage system.
2. In facilities where emergency responder radio coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of that facility, the *fire code official* shall have the authority to accept an automatically activated emergency responder radio coverage system.
3. One- and two-family dwellings and townhouses.

4. Subject to the approval of the fire code official, buildings other than high-rise buildings, colleges, universities and buildings primarily occupied by Group E or I occupancies that have completed a Mobile Emergency Responder Radio Coverage application and submitted payment as outlined in the application.

510.2 Emergency responder radio coverage in existing buildings.

Existing buildings shall be provided with approved radio coverage for emergency responders as required in Chapter 11.

510.3 Permit required.

A construction permit for the installation of or modification to emergency responder radio coverage systems and related equipment is required as specified in Section 105.7.6. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

Point of Information

Prior coordination and approval from the Public Safety Radio System Operator is required before installation of an Emergency Responder Radio System. Until 2022, such approval is required from EPSCA, King County, Seattle or ValleyCom depending on the location of the installation. In 2022 PSERN will be the single operator of a county wide system. In order to be forward compatible, designers and contractors should be aware of PSERN's requirements for Distributed Antenna Systems which can be found via <https://psern.org/requirements/>

510.4 Technical requirements.

Systems, components and equipment required to provide the emergency responder radio coverage system shall comply with Sections 510.4.1 through 510.4.2.8.

510.4.1 Emergency responder communication enhancement system signal strength. The building shall be considered to have acceptable emergency responder communications enhancement system coverage when signal strength measurements in 95 percent of all areas on each floor of the building meet the signal strength requirements in Sections 510.4.1.1 through 510.4.1.3.

Exception: Critical areas, such as the fire command center(s), the fire pump room(s), interior exit stairways, exit passageways, elevator lobbies, standpipe cabinets, sprinkler sectional valve locations, and other areas required by the fire code official, shall be provided with 99 percent floor area radio coverage.

510.4.1.1 Minimum signal strength into the building. The minimum inbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the fire code official. The inbound signal level shall be a minimum of -95dBm in 95% of the coverage area and 99% in critical areas and sufficient to provide not less than a Delivered Audio Quality (DAQ) of 3.0 or an equivalent Signal-to-Interference-Plus-Noise Ratio (SINR) applicable to the technology for either analog or digital signals.

510.4.1.2 Minimum signal strength out of the building. The minimum outbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the fire code official. The outbound signal level shall be sufficient to provide not less than a DAQ of 3.0 or an equivalent SINR applicable to the technology for either analog or digital signals. A minimum signal strength of -95 dBm shall be received by the King County Regional 800 MHz Radio System when transmitted from within the building.

510.4.1.3 System performance. Signal strength shall be sufficient to meet the requirements of the applications being utilized by public safety for emergency operations through the coverage area as specified by the radio system manager in Section 510.4.2.2.

510.4.2 System design.

The emergency responder radio coverage system shall be designed in accordance with Sections 510.4.2.1 through 510.4.2.8 and NFPA 1221 (2019).

510.4.2.1 Amplification systems and components. Buildings and structures that cannot support the required level of radio coverage shall be equipped with systems and components to enhance the public safety radio signals and achieve the required level of radio coverage specified in Sections 510.4.1 through 510.4.1.3. Public safety communications enhancement systems utilizing radio-frequency-emitting devices and cabling shall be allowed by the Public Safety Radio System Operator. Prior to installation, all RF-emitting devices shall have the certification of the radio licensing authority and be suitable for public safety use.

510.4.2.2 Technical criteria. The Public Safety Radio System Operator shall provide the various frequencies required, the location of radio sites, the effective radiated power of radio sites, the maximum propagation delay in microseconds, the applications being used and other supporting technical information necessary for system design upon request by the building owner or owner's representative.

510.4.2.3 Power supply sources. Emergency responder radio coverage systems shall be provided with dedicated standby batteries or provided with 2-hour standby batteries and connected to the facility generator power system in accordance with Section 1203. The standby power supply shall be capable of operating the emergency responder radio coverage system at 100-percent system capacity for a duration of not less than 12 hours.

510.4.2.4 Signal booster requirements. If used, signal boosters shall meet the following requirements:

1. All signal booster components shall be contained in a National Electrical Manufacturer's Association (NEMA) 4, IP66-type waterproof cabinet or equivalent.

Exception: Listed battery systems that are contained in integrated battery cabinets.

2. Battery systems used for the emergency power source shall be contained in a NEMA 3R or higher-rated cabinet, IP65-type waterproof cabinet or equivalent.
3. Equipment shall have FCC or other radio licensing authority certification and be suitable for public safety use prior to installation.
4. Where a donor antenna exists, isolation shall be maintained between the donor antenna and all inside antennas to not less than 20dB greater than the system gain under all operating conditions.
5. Bi-Directional Amplifiers (BDAs) used in emergency responder radio coverage systems shall be fitted with anti-oscillation circuitry and per-channel AGC
6. The installation of amplification systems or systems that operate on or provide the means to cause interference on any emergency responder radio coverage networks shall be coordinated and approved by the Public Safety Radio System Operator.
7. Unless otherwise approved by the Public Safety Radio System Operator, only channelized signal boosters shall be permitted.

Exception: Broadband BDA's may be utilized when specifically authorized in writing by the Public Safety Radio System Operator.

Point of Information

BDA's must also comply with PSERN's (www.psern.org/requirements) detailed requirements, which include channelized, minimum of 28 channels, supporting analog, P25 Phase I (FDMA), and P25 Phase II (TDMA).

510.4.2.5 System monitoring. The emergency responder radio enhancement system shall include automatic supervisory and trouble signals that are monitored by a supervisory service and are annunciated by the fire alarm system in accordance with NFPA 72. The following conditions shall be separately annunciated by the fire alarm system, or, if the status of each of the following conditions is individually displayed on a dedicated panel on the radio enhancement system, a single automatic supervisory signal may be annunciated on the fire alarm system indicating deficiencies of the radio enhancement system:

1. Loss of normal AC power supply.
2. System battery charger(s) failure.
3. Malfunction of the donor antenna(s).
4. Failure of active RF-emitting device(s).
5. Low-battery capacity at 70-percent reduction of operating capacity.
6. Active system component malfunction.
7. Malfunction of the communications link between the fire alarm system and the emergency responder radio enhancement system.

510.4.2.6 Additional frequencies and change of frequencies.

The emergency responder radio coverage system shall be capable of modification or expansion in the event frequency changes are required by the FCC or other radio licensing authority, or additional frequencies are made available by the FCC or other radio licensing authority.

510.4.2.7 Design documents.

The fire code official shall have the authority to require “as-built” design documents and specifications for emergency responder communications coverage systems. The documents shall be in a format acceptable to the fire code official.

510.4.2.8 Radio communication antenna density.

Systems shall be engineered to minimize the near-far effect. Radio enhancement system designs shall include sufficient antenna density to address reduced gain conditions.

Exceptions:

1. Class A narrow band signal booster devices with independent AGC/ALC circuits per channel.
2. Systems where all portable devices within the same band use active power control

510.5 Installation requirements. The installation of the public safety radio coverage system shall be in accordance with NFPA 1221 and Sections 510.5.1 through 510.5.7.

510.5.1 Approval prior to installation. Amplification systems capable of operating on frequencies licensed to any public safety agency by the FCC or other radio licensing authority shall not be installed without prior coordination and approval of the Public Safety Radio System Operator.

510.5.2 Minimum qualifications of personnel. The minimum qualifications of the system designer and lead installation personnel shall include both of the following:

1. A valid FCC-issued general radio telephone operators license.
2. Certification of in-building system training issued by an approved organization or approved school, or a certificate issued by the manufacturer of the equipment being installed.

510.5.3 Acceptance test procedure. Where an emergency responder radio coverage system is required, and upon completion of installation, the building owner shall have the radio system tested to verify that two-way coverage on each floor of the building is in accordance with Section 510.4.1.

The test procedure shall be conducted as follows:

1. Each floor of the building shall be divided into a grid of 20 approximately equal test areas, with a maximum test area size of 6,400 square feet. Where the floor area exceeds 128,000 square feet, the floor shall be divided into as many approximately equal test areas as needed, such that no test area exceeds the maximum square footage allowed for a test area.
2. Coverage testing of signal strength shall be conducted using a calibrated spectrum analyzer for each of the test grids. A diagram of this testing shall be created for each floor where coverage is provided, indicating the testing grid used for the test in Section 510.5.3(1), and including signal strengths and frequencies for each test area. Indicate all critical areas.
3. Functional talk-back testing shall be conducted using two calibrated portable radios of the latest brand and model used by the agency's radio communications system or other equipment approved by the fire code official. Testing shall use Digital Audible Quality (DAQ) metrics, where a passing result is a DAQ of 3 or higher. Communications between handsets shall be tested and recorded in the grid square diagram required by section 510.5.3(2): each grid square on each floor; between each critical area and a radio outside the building; between each critical area and the fire command center or fire alarm control panel; between each landing in each stairwell and the fire command center or fire alarm control panel.
4. Failure of more than 5% of the test areas on any floor shall result in failure of the test.

Exception: Critical areas shall be provided with 99 percent floor area coverage.

5. In the event that two of the test areas fail the test, in order to be more statistically accurate, the floor shall be permitted to be divided into 40 equal test areas. Failure of not more than two nonadjacent test areas shall not result in failure of the test. If the system fails the 40-area test, the system shall be altered to meet the 95-percent coverage requirement.
6. A test location approximately in the center of each test area shall be selected for the test, with the radio enabled to verify two-way communications to and from the outside of the building through the public agency's radio communications system. Once the test location has been selected, that location shall represent the entire test area. Failure in the selected test location shall be considered to be a failure of that test area. Additional test locations shall not be permitted.
7. The gain values of all amplifiers shall be measured, and the test measurement results shall be kept on file with the building owner so that the measurements can be verified during annual tests. In the event that the measurement results become lost, the building owner shall be required to rerun the acceptance test to reestablish the gain values.
8. As part of the installation, a spectrum analyzer or other suitable test equipment shall be utilized to ensure spurious oscillations are not being generated by the subject signal booster. This test shall be conducted at the time of installation and at subsequent annual inspections.
9. Systems incorporating Class B signal booster devices or Class B broadband fiber remote devices shall be tested using two portable radios simultaneously conducting subjective voice quality checks. One portable radio shall be positioned not greater than 10 feet (3048 mm) from the indoor antenna. The second portable radio shall be positioned at a distance that represents the farthest distance from any indoor antenna. With both portable radios simultaneously keyed up on different frequencies within the same band, subjective audio testing shall be conducted and comply with DAQ levels as specified in Sections 510.4.1.1 and 510.4.1.2.

10. Documentation maintained on premises. At the conclusion of the testing, and prior to issuance of the building Certificate of Occupancy, the building owner or owner's representative shall place a copy of the following records in the DAS enclosure or the building engineer's office. The records shall be available to the fire code official and maintained by the building owner for the life of the system:
 - a. A certification letter stating that the emergency responder radio coverage system has been installed and tested in accordance with this code, and that the system is complete and fully functional.
 - b. The grid square diagram created as part of testing in Sections 510.5.3(2) and 510.5.3(3).
 - c. Data sheets and/or manufacturer specifications for the emergency responder radio coverage system equipment; back up battery; and charging system (if utilized).
 - d. A diagram showing device locations and wiring schematic,
 - e. A copy of the electrical permit.
11. Acceptance test reporting to fire code official. At the conclusion of the testing, and prior to issuance of the building Certificate of Occupancy, the building owner or owner's representative shall submit to the fire code official a report of the acceptance test by way of the department's third-party vendor thecomplianceengine.com.

510.5.4 FCC compliance.

The emergency responder radio coverage system installation and components shall comply with all applicable federal regulations including, but not limited to, FCC 47 CFR Part 90.219.

510.5.5 Mounting of the donor antenna (s). To maintain proper alignment with the system designed donor site, donor antennas shall be permanently affixed on the highest possible position on the building or where approved by the fire code official. A clearly visible sign shall be placed near the antenna stating, "movement or repositioning of this antenna is prohibited without approval from the fire code official." The antenna installation shall be in accordance with the applicable requirements in the International Building Code for weather protection of the building envelope.

510.5.6 Wiring. The backbone, antenna distribution, radiating, or any fiber-optic cables shall be rated as plenum cables. The backbone cables shall be connected to the antenna distribution, radiating, or copper cables using hybrid coupler devices of a value determined by the overall design. Backbone cables shall be routed through an enclosure that matches the building's required fire-resistance rating for shafts or interior exit stairways. The connection between the backbone cable and the antenna cables shall be made within an enclosure that matches the building's fire-resistance rating for shafts or interior exit stairways, and passage of the antenna distribution cable in and out of the enclosure shall be protected as a penetration per the International Building Code.

510.5.7 Identification Signs. Emergency responder radio coverage systems shall be identified by an approved sign located on or near the Fire Alarm Control Panel or other approved location stating "This building is equipped with an Emergency Responder Radio Coverage System. Control Equipment located in room_____".

A sign stating "Emergency Responder Radio Coverage System Equipment" shall be placed on or adjacent to the door of the room containing the main system components.

510.6 Maintenance.

The emergency responder radio coverage system shall be maintained operational at all times in accordance with Sections 510.6.1 through 510.6.47.

510.6.1 Testing and proof of compliance. The owner of the building or owner's authorized agent shall have the emergency responder radio coverage system inspected and tested annually or where structural changes occur

including additions or remodels that could materially change the original field performance tests. Testing shall consist of the following items (1) through (7):

1. In-building coverage test as required by the *fire code official* as described in Section 510.5.3 “Acceptance test procedure” or 510.6.1.1 “Alternative in-building coverage test”.

Exception: Group R Occupancy annual testing is not required within dwelling units.

2. Signal boosters shall be tested to verify that the gain/output level is the same as it was upon initial installation and acceptance or set to optimize the performance of the system.
3. Backup batteries and power supplies shall be tested under load of a period of 1 hours to verify that they will properly operate during an actual power outage. If within the 1-hour test period the battery exhibits symptoms of failure, the test shall be extended for additional 1-hour periods until the integrity of the battery can be determined.
4. If a fire alarm system is present in the building, a test shall be conducted to verify that the fire alarm system is properly supervising the emergency responder communication system as required in Section 510.4.2.5. The test is performed by simulating alarms to the fire alarm control panel. The certifications in Section 510.5.2 are sufficient for the personnel performing this testing.
5. Other active components shall be checked to verify operation within the manufacturer’s specifications.
6. At the conclusion of the testing, a report, which shall verify compliance with Section 510.6.1, shall be submitted to the *fire code official* by way of the department’s third-party vendor thecomplianceengine.com
7. At the conclusion of testing, a record of the inspection and maintenance along with an updated grid diagram of each floor showing tested strengths in each grid square and each critical area shall be added to the documentation maintained on the premises in accordance with Section 510.5.3.

510.6.1.1 Alternative In-building coverage test. When the comprehensive test documentation required by Section 510.5.3 is available, or the most recent full five-year test results are available if the system is older than six years, the in-building coverage test required by the fire code official in Section 510.6.1(1), may be conducted as follows:

1. Functional talk-back testing shall be conducted using two calibrated portable radios of the latest brand and model used by the agency’s radio communications system or other equipment approved by the fire code official. Testing shall use Digital Audible Quality (DAQ) metrics, where a passing result is a DAQ of 3 or higher. Communications between handsets in the following locations shall be tested: between the fire command center or fire alarm control panel and a location outside the building; between the fire alarm control panel and each landing in each stairwell.
2. Coverage testing of signal strength shall be conducted using a calibrated spectrum analyzer for:
 - (a) Three grid areas per floor. The three grid areas to be tested on each floor are the three grid areas with poorest performance in the acceptance test or the most recent annual test, whichever is more recent; and,
 - (b) Each of the critical areas identified in acceptance test documentation required by Section 510.5.3, or as modified by the fire code official; and,
 - (c) One grid square per serving antenna.
3. The test area boundaries shall not deviate from the areas established at the time of the acceptance test, or as modified by the fire code official. The building shall be considered to have acceptable emergency responder radio coverage when the required signal strength requirements in 510.4.1.1 and 510.4.1.2 are located in 95 percent of all areas on each floor of the building and 99 percent in Critical Areas, and any

non-functional serving antenna are repaired to function within normal ranges. If the documentation of the acceptance test or most recent previous annual test results are not available or acceptable to the fire code official, the radio coverage verification testing described in 510.5.3 shall be conducted.

Point of Information

The alternative in-building coverage test provides an alternative testing protocol for the in-building coverage test in subsection (1) of section 510.6.1. There is no change or alternative to annual testing requirements enumerated in subsections (2) – (7) of Section 510.6.1, which must be performed at the time of each annual test.

510.6.2 Additional frequencies.

The building owner shall modify or expand the emergency responder radio coverage system at his or her expense in the event frequency changes are required by the FCC or other radio licensing authority, or additional frequencies are made available by the FCC public safety radio system operator or FCC license holder. Prior approval of a public safety radio coverage system on previous frequencies does not exempt this section.

510.6.3 Nonpublic safety system.

Where other nonpublic safety amplification systems installed in buildings reduce the performance or cause interference with the emergency responder communications coverage system, the nonpublic safety amplification system shall be corrected or removed.

510.6.4 Field testing.

Agency personnel shall have the right to enter onto the property at any reasonable time to conduct field testing to verify the required level of radio coverage or to disable a system that due to malfunction or poor maintenance has the potential to impact the emergency responder radio system in the region.

15.10.080 IFC Section 901.7, Systems out of service, amended.

Section 901.7 shall be amended to read as follows:

Where a fire protection system is out of service, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shutdown until the fire protection system has been returned to service. Where utilized, fire watches shall be provided with at least one means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

15.10.085 IFC Section 903, Automatic sprinkler systems, amended.

Section 903.2, Where required, is amended as follows:

The exception has been deleted

15.10.090 IFC Section 903, Automatic sprinkler systems, amended.

Section 903.2 is amended and supplemented with the addition of a new section 903.2.13 to read:

903.2.13 Additional fire sprinkler requirements.

NEW BUILDINGS

1. An automatic sprinkler system shall be installed in all occupancies requiring 2,000 gallons per minute or more fire flow, or where the gross square footage exceeds 5,000 square feet. This applies to all buildings regardless of type or use as well as townhouses with an aggregate area 5,000 square feet or greater. Fire walls, as noted in Section 705 of the International Building Code, shall not be considered to separate a building to enable deletion of the required sprinkler system.

Exception: Single-family Detached Houses.

2. All newly constructed buildings regardless of gross square footage shall be provided with an automatic sprinkler system if adequate fire flow, hydrant spacing, or approved fire department access is not provided as required in IFC Section 503, Appendix B, and/or Title 15 of the Lake Forest Park Municipal Code.

3. An automatic sprinkler system shall be installed in newly constructed one- and two-family structures if there is not a hydrant capable of providing at least 1,500 gallons per minute of water with 20 psi residual pressure located within 300 feet of the structure, or without approved emergency vehicle access.

EXISTING BUILDINGS

1. The provisions of this section shall apply to existing buildings that are subject to alterations, repairs, modifications or similar improvements where the total cost of the work performed exceeds 50% of the King County Assessor's Office valuation of the structure. Where subsequent alterations, repairs, modifications or similar improvements occur within five years of the first permitted work, the original building valuation shall be used, and the total costs of improvements shall be accumulative.

2. The provisions of this section shall apply to existing buildings where the gross floor area of the building is increased. Additions to buildings that would result in a gross floor area greater than 5,000 square feet shall be retrofitted throughout the addition with an approved automatic sprinkler system.

Exception:

1. The floor area of an existing building may be increased by up to 25%, not to exceed 5,000 square foot floor area increase. This exception shall be allowed one time only and acknowledgement of its use shall be recorded to run with the property title prior to permit issuance.

15.10.095 IFC Section 903.3.1.1, Exempt locations.

Item 6 from Section 903.3.1.1.1 is amended to read:

6. Machine rooms, machinery spaces, control rooms and control spaces associated with traction elevators that comply with Section 8.15.5.3 of NFPA 13 (2016 edition).

15.10.100 IFC Section 903.3.1.2, NFPA 13R sprinkler systems.

Section 903.3.1.2 is amended to read:

Automatic sprinkler systems in Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet in height, as measured from the lowest point of fire department access, shall be permitted to be installed throughout in accordance with NFPA 13R.

The number of stories of Group R constructed in accordance with Sections 510.2 and 510.4 of the International Building Code shall be measured from the horizontal assembly creating separate buildings.

15.10.105 IFC Section 903.4.3, Floor control valves, amended.

Section 903.4.3 is amended to read:

Section 903.4.3 Floor control valves. In multi-level buildings approved, supervised indicating control valves shall be provided at the point of connection to the riser on each floor.

Exception: When approved by the fire code official.

15.10.110 IFC Section 903.5, Testing and maintenance.

Section 903.5 is amended to read:

903.5 Testing and maintenance. Sprinkler systems shall be tested and maintained in accordance with Section 901.

903.5.1 Fire sprinkler and standpipe main/express drains shall be positioned to drain to the sanitary sewer. Additionally, maintenance or testing discharges from fire pumps shall be treated in order to comply with the National Pollution Discharge Elimination System (NPDES) requirements.

15.10.115 IFC Section 907.2, Fire alarm and detection systems, amended.

Section 907.2 is amended to read:

907.2 Where required – new buildings and structures. All occupancies exceeding 3,000 square feet gross floor area shall be required to provide an approved, monitored automatic fire detection system.

Exception: Group U or R-3 occupancies.

An approved fire alarm system installed in accordance with this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.6, unless other requirements are provided by another section of this code. Where automatic sprinkler protection installed in accordance with Section 903.3.1.1 or 903.3.1.2 is provided and connected to the building fire alarm system, automatic heat detection required by this section shall not be required.

A minimum of one fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or water-flow devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

EXISTING BUILDINGS

The provisions of this section shall apply to existing buildings that are subject to alterations, repairs, modifications or similar improvements where the total cost of the work performed exceeds 50% of the King County Assessor's Office valuation of the structure. Where subsequent alterations, repairs, modifications or similar improvements occur within five years of the first permitted work, the original building valuation shall be used and the total costs of improvements shall be accumulative.

15.10.120 IFC Section 5003.9, General safety precautions, amended.

Section 5003.9 is amended to read:

5003.9 General safety precautions. General precautions for the safe storage, handling or care of hazardous materials shall be in accordance with Sections 5003.9.1 through 5003.9.11.

...

5003.9.11 Manufacturer's limitations. The storage and use of hazardous materials shall not exceed the manufacturer's limitations on shelf life and any other restrictions on use.

15.10.125 IFC 5604, explosives storage.

Section 5604.1 is amended by adding the following:

The storage of blasting agents, detonators, explosives, explosive materials and special industrial explosive devices is prohibited within the city limits.

Exception:

1. Approved storage areas in law enforcement facilities and as otherwise provided in the Municipal Code.
2. When approved by the fire code official.

15.10.130 IFC 5704 and 5706, aboveground storage tanks.

Section 5704.2.9.6.1 is amended to read as follows:

Throughout the City, the use of above ground storage tanks outside of buildings shall be limited to flammable or combustible liquids in outside above ground tanks of 2,000 gallons per tank with an aggregate capacity of 4,000 gallons per site, unless otherwise specifically approved by the fire code official. All above ground storage tanks containing flammable or combustible liquids with a capacity of 500 gallons or more shall be protected tanks designed in accordance with Section 5704.2.9.7 and UL2085, or other systems with prior approval of the fire code official. Above ground combustible liquid tanks, used for the storage of heating oil, for a single-family residence shall not exceed 300 gallons. Above ground flammable liquid tanks shall not be permitted in a residential zone or within 100 feet of a residential zone within the City, except that such tanks may be located at fire stations or municipal facilities. Temporary uses may be permitted during periods of construction with the approval of the fire code official. Permits for above ground tanks shall be approved by the fire code official prior to installation or placement.

Exception: Existing installations exceeding 2,000 gallon tank or aggregate capacity or 4,000 gallons per site shall be allowed to continue until tank replacement is necessary or tank decommissioning.

15.10.135 IFC 5707 On-Demand Mobile Fueling Operations

Section 5707 is amended to read as follows:

5701.1 General. On-demand mobile fueling operations that dispense Class I, II and III liquids into the fuel tanks of motor vehicles shall comply with Sections 5707.1 through 5707.6. 6.

Exception: Fueling from an *approved* portable container in cases of an emergency or for personal use.

5707.1.1 Approval required. Mobile fueling operations shall not be conducted without first obtaining a *permit* and approval from the *fire code official*. Mobile fueling operations shall occur only at *approved* locations. The *fire code official* is authorized to approve individual locations or geographic areas where mobile fueling is allowed.

5707.2 Mobile fueling vehicle. An on-demand mobile fueling vehicle shall be that which is utilized in on-demand fueling operations for the dispensing of Class I, II or III liquids into the fuel tanks of motor vehicles.

5707.2.1 Mobile fueling vehicle classifications. An on-demand mobile fueling vehicle shall be characterized as one of the following:

1. Tier 1 Mobile Fueling Vehicle-A tank_vehicle that complies with NFPA 385 and_that has chassis-mounted tanks where the aggregate capacity does not exceed 1600_gallons (6057 L).
2. Tier 2 Mobile Fueling Vehicle-A vehicle with one or more chassis-mounted tanks or chassis-mounted containers, not to exceed 110 gallons (415 L) capacity and having an aggregate capacity that does not exceed 800 gallons (3028 L) or the weight capacity of the vehicle in accordance with DOTn.
3. Tier 3 Mobile Fueling Vehicle-A vehicle that carries a maximum aggregate capacity_of 60 gallons (227 L) of motor fuel in metal safety cans *listed* in accordance with UL 30 or other *approved* metal containers, each not to exceed 5 gallons (19 L) in capacity.

5707.2.2 Mobile fueling vehicle requirements. Each mobile fueling vehicle shall comply with all local, state and federal requirements, as well as the following:

1. Mobile fueling vehicles with a chassis-mounted tank in excess of 110 gallons (415 L) shall also comply with the requirements of Section 5706.6 and NFPA 385.
2. The mobile fueling vehicle and its equipment shall be maintained in good repair.
3. Safety cans and approved metal containers shall be secured to the mobile fueling vehicle except when in use.
4. Fueling a motor vehicle from tanks or containers mounted in a trailer connected to a mobile fueling vehicle shall be prohibited.

5707.3 Required documents. Documents developed to comply with Sections 5707.3.1 through 5707.3.3 shall be updated as necessary by the *owner* of the mobile fueling operation and shall be maintained in compliance with Section 108.3.

5707.3.1 Safety and emergency response plan. Mobile fueling operators shall have an *approved* written safety and emergency response plan that establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code.

5707.3.2 Training records. Mobile fueling vehicles shall be operated only by designated personnel who are trained on proper fueling procedures and the safety and emergency response plan. Training records of operators shall be maintained.

5707.3.3 Site plan. Where required by the *fire code official*, a site plan shall be developed for each location or area at which mobile fueling occurs. The site plan shall be in sufficient detail to indicate the following:

1. All buildings, structures;
2. *Lot lines* or, property lines;
3. Electric car chargers;
4. Solar photovoltaic parking lot canopies;
5. Appurtenances on site and their use or function;
6. All uses adjacent to the *lot lines* of the site;
7. Fueling locations;
8. Locations of all storm drain openings and adjacent waterways or wetlands;
9. Information regarding slope, natural drainage, curbing, impounding;
10. How a spill will be kept on the site property;
11. Scale of the site plan.

5707.4 Mobile fueling areas. The mobile fueling vehicle and point of connection of the vehicle being fueled shall not occur on public streets, *public ways* or inside *buildings*. Fueling on the roof level of parking structures or other *buildings* is prohibited.

5707.4.1 Separation. The point of connection of the vehicle being fueled shall not take place within 25 feet (7620 mm) of buildings, lot lines, property lines or combustible storage. Mobile fueling vehicles shall not park within 10 feet (3048 mm) of buildings, lot lines, property lines, or combustible storage.

Exceptions:

1. The *fire code official* shall be authorized to decrease the separation distance for dispensing from metal safety cans or other *approved* metal containers in accordance with Section 5707.2.
2. The point of fueling shall not take place within 10 feet (3048 mm) of buildings, lot lines, property lines, or combustible storage when the mobile fueling vehicle has an approved vapor recovery system or is servicing vehicles with on board refueling vapor recovery.

Where dispensing operations occur within 15 feet (4572 mm) of a storm drain, an *approved* storm drain cover or an *approved* equivalent method that will prevent any fuel from reaching the drain shall be used.

5707.4.2 Sources of ignition. Smoking, open flames and other sources of ignition shall be prohibited within

25 feet (7620 mm) of fuel dispensing activities. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the vehicle or the point of fueling shall be prominently posted on the mobile fueling vehicle. The engines of vehicles being fueled shall be shut off during fueling.

5707.4.3 Electrical equipment. Mobile fueling shall not occur within 20 feet of electrical equipment located within 18 inches of the ground unless such electrical equipment is rated for Class 1, Division 2 hazardous locations in accordance with the National Electrical Code.

5707.5 Equipment. Mobile fueling equipment shall comply with Sections 5707.5.1 through 5707.5.5.

5707.5.1 Dispensing hoses and nozzles. Where equipped, the dispensing hose shall not exceed 50 feet (15 240 mm) in length. The dispensing nozzles and hoses shall be of an *approved* and *listed* type. Where metal-to-metal contact cannot be made between the nozzle and the fuel fill opening, then a means for bonding the mobile fueling vehicle to the motor vehicle shall be provided and employed during fueling operations.

5707.5.2 Break-away device. A listed break-away device shall be provided at the nozzle.

Exception: Mobile fueling vehicles equipped with an approved brake interlock tied to the nozzle holder that prohibits movement of the mobile fueling vehicle when the nozzle is removed from its holder or tied to the delivery of fuel that prevents activation of the pumping system.

5707.5.3 Shut off valve and fuel limit. Mobile fueling vehicles shall be equipped with a listed shutoff valve assembly and a fuel limit switch set to a maximum of 30 gallons (116 L)

5707.5.4 Fire extinguisher. An *approved* portable fire extinguisher complying with Section 906 with a minimum rating of 4A:80-B:C shall be provided on the mobile fueling vehicle with signage clearly indicating its location.

5707.5.5 Spill kit. Mobile fueling vehicles shall contain a minimum 5-gallon (19 L) spill kit of an *approved* type.

5707.6 Operations. Mobile fueling vehicles shall be constantly attended during fueling operations with brakes set and warning lights in operation. Mobile fueling vehicles shall not obstruct emergency vehicle access roads.

5707.6.1 Dispensing hose. Where equipped, mobile fueling vehicles shall be positioned in a manner to preclude traffic from driving over the dispensing hose. The dispensing hose shall be properly placed on an *approved* reel or in an *approved* compartment prior to moving the mobile fueling vehicle.

5707.6.2 Drip control. Operators shall place a drip pan or an absorbent pillow under the nozzle and each fuel fill opening prior to and during dispensing operations to catch drips.

5707.6.3 Safety cones. Safety cones or other visual barriers shall be employed as warning devices to highlight the vehicle fueling area.

5707.6.4 Vehicle lights. The mobile fueling vehicle flasher lights shall be in operation while dispensing operations are in progress.

5707.6.5 Nighttime deliveries. Nighttime deliveries shall only be made in areas deemed adequately lighted by the *fire code official*.

5707.6.6. Spill reporting. Spills shall be reported in accordance with Section 5003.3.1

15.10.140 IFC 5806, flammable cryogenic fluids.

Section 5806.2 is amended to read as follows:

The storage of flammable cryogenic fluids in stationary containers is prohibited within the city limits.

15.10.145 IFC 6104, liquefied petroleum gas.

Section 6104.2 is amended to read as follows:

Throughout the City, the aggregate capacity of any one installation of liquefied petroleum gas shall not exceed five hundred (500) gallons water capacity. This capacity limit may be increased up to, but not to exceed, two thousand (2,000) gallons water capacity if the installation is not within, or closer than 100 feet of a residential zone and must be approved by the fire code official. A permit is required to install a liquefied petroleum gas tank.

Exception: Existing installations exceeding five hundred (500) gallons water capacity, but not exceeding two thousand (2,000) gallons water capacity, shall be allowed to continue.

15.10.150 IFC Appendix B, Fire Flow Requirements for Buildings, amended.

Appendix B, Sections B104.1, B104.2, B105.1, and B105.2, and the footnotes of Table B105.1, are amended to read as follows:

B104.1 General. The fire flow calculation area shall be the total floor area of all floor levels within the exterior walls, and under the horizontal projections of the roof of a building, including basements and attached garages, except as modified in Section B104.3.

B104.2 Area separation. Portions of buildings which are separated by four-hour fire walls without openings, constructed in accordance with the International Building Code, are allowed to be considered as separate fire-flow calculation areas.

B105.1 One- and two-family dwellings. The minimum fire flow requirements for one- and two- family dwellings having a fire-flow calculation area where the gross floor area, including attached garages, does not exceed 3,600 square feet (344.5 m²) shall be 1,500 gallons per minute (3785.4 L/min). Fire flow and flow duration for dwellings having a gross square footage in excess of 3,600 square feet (344.5 m²) shall be not less than that specified in Table B105.1 and the ISO Guide for the Determination of Needed Fire Flow.

B105.2 Buildings other than one- and two-family dwellings. The minimum fire flow and flow duration for buildings other than one- and two-family dwellings shall be as determined by utilizing Table B105.1 and the ISO Guide for the Determination of Needed Fire Flow.

Exception: A reduction in required fire flow of up to 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the International Building Code. Where buildings are of Type I or II construction and are a light-hazard occupancy as defined by NFPA 13, the reduction may be up to 75 percent. The resulting fire flow shall not be less than 1,500 gallons per minute (5,678 l/min) for the prescribed duration as specified in Table B105.1.

BUILDING PERMIT FEE SCHEDULE			
BUILDING TYPE	Current (\$/sf)	Proposed (\$/sf)	Difference (\$/sf)
Average Home	\$116.70	\$150.87	\$34.17
Custom Home	n/a	\$185.00	n/a
Utility / Garage	\$44.28	\$60.43	\$16.15
COMPARATIVE CITIES	Average Home (\$/sf)	Custom Home (\$/sf)	Utility / Garage (\$/sf)
Mercer Island	\$189.94	\$237.59	
Bellevue	\$169.10		\$68.27
Shoreline	\$148.00		\$60.43
Snohomish County	\$150.87		\$60.43
Bothell	\$186.21		
Kirkland	\$148.33		
Seattle	\$153.00		
Average Home Cost	\$163.64	\$237.59	\$63.04

MECHANICAL PERMIT FEE SCHEDULE

	Current	Proposed	Difference
MECHANICAL PERMIT BASE FEE			
MECHANICAL PERMIT BASE FEE (includes 1 Inspection)	\$85.00	\$150.00	\$65.00
MECHANICAL FEATURES			
Furnace	\$25.00	\$30.00	\$5.00
A/C or Heat Pump	\$30.00	\$30.00	\$0.00
Gas Hot Water Heater Installation /vent / expansion tank	\$18.00	\$30.00	\$12.00
Gas Log Fire Place Insert (Equipment Submittal Required)	\$18.00	\$30.00	\$12.00
Gas Piping - up to 10 outlets	\$20.00	\$30.00	\$10.00
Gas Piping - each additional outlet	\$2.00	\$5.00	\$3.00
Gas range - piping hookup	\$18.00	\$30.00	\$12.00
Residential hood: > 400 CFM (make up air required, review required)	\$18.00	\$30.00	\$12.00
Commercial hood: Class I hood (review required)	\$30.00	\$30.00	\$0.00
Dryer exhaust duct	\$18.00	\$30.00	\$12.00
Vent/duct Installation, relocation, or replacement vent fan	\$18.00	\$30.00	\$12.00
New/removal/replacement of ducting	\$18.00	\$30.00	\$12.00
Installation, relocation of boiler or each absorption system	\$18.00	\$30.00	\$12.00
Installation, relocation of compressor or each absorption system (Specifications required)	\$18.00	\$30.00	\$12.00
Appliance or equipment regulated by IMC, but not classed in other	\$20.00	\$30.00	\$10.00
Plan Review (Commercial Projects – hourly)	\$85.00	\$125.00	\$40.00
Additional Inspections (hourly)	\$100.00	\$125.00	\$25.00

PLUMBING PERMIT FEE SCHEDULE

	Current	Proposed	Difference
PLUMBING PERMIT BASE FEE			
PLUMBING PERMIT BASE FEE (includes 1 Inspection)	\$85.00	\$150.00	\$65.00
PLUMBING FIXTURES			
Sinks	\$18.00	\$30.00	\$12.00
Toilets	\$18.00	\$30.00	\$12.00
Showers	\$18.00	\$30.00	\$12.00
Tubs	\$18.00	\$30.00	\$12.00
Washing machine	\$18.00	\$30.00	\$12.00
Hot Tub/Spa	\$20.00	\$30.00	\$10.00
Other plumbing fixtures on one trap	\$18.00	\$30.00	\$12.00
Electric Water Heater Installation /vent / expansion tank	\$18.00	\$30.00	\$12.00
Hot/Cold rough-in addition or alteration	\$30.00	\$30.00	\$0.00
Waste & vent rough-in addition or alteration	\$30.00	\$30.00	\$0.00
Water service line	\$30.00	\$30.00	\$0.00
Lawn sprinkler on any one meter (Backflow device required)	\$30.00	\$30.00	\$0.00
Each addition or alteration of drainage	\$30.00	\$30.00	\$0.00
Waste (sewage ejector pump)	\$60.00	\$30.00	-\$30.00
Grease trap	\$30.00	\$30.00	\$0.00
Backflow protective device	\$30.00	\$30.00	\$0.00
Heat Pump	\$30.00	\$30.00	\$0.00
Hydronic Heating (loop vent system)	\$30.00	\$30.00	\$0.00
Additional Inspections (hourly rate)	\$85.00	\$125.00	\$40.00
Commercial Projects (Plan review required - hourly rate)	\$100.00	\$125.00	\$25.00
Grease Interceptor (Plan review required - hourly rate)	\$120.00	\$125.00	\$5.00

CITY OF LAKE FOREST PARK
CITY COUNCIL SPECIAL WORK SESSION MEETING MINUTES
September 22, 2022

It is noted this meeting was held in person in the Council Chambers at City Hall and virtually via Zoom.

Councilmembers present: Tom French, Deputy Mayor; Tracy Furutani, Larry Goldman, Jon Lebo, Semra Riddle

Councilmembers absent: Phillippa Kassover and Lorri Bodi

Staff present virtually: Phillip Hill, City Administrator; Mike Harden, Police Chief; Lindsey Vaughn, Finance Director; Jeff Perrigo, Public Works Director; Matt McLean, City Clerk

Others present: 12 visitors

CALL TO ORDER

Deputy Mayor French called the September 22, 2022, City Council work session special meeting to order at 6:00 p.m.

ADOPTION OF AGENDA

Cmbr. Furutani moved to approve the agenda as presented. **Cmbr. Riddle seconded.**
The motion to approve the agenda as presented carried unanimously.

Mayor’s Proposed Revenue Projection Overview

Finance Director Vaughn presented the item and responded to Council questions.

ADJOURNMENT

There being no further business, Deputy Mayor French adjourned the meeting at 6:50 p.m.

Tom French, Deputy Mayor

Matt McLean, City Clerk

**CITY OF LAKE FOREST PARK
CITY COUNCIL REGULAR MEETING MINUTES
September 22, 2022**

It is noted this meeting was held in person in the City Council Chambers and remotely via Zoom.

Councilmembers present: Tom French, Deputy Mayor; Phillippa Kassover, Lorri Bodi, Tracy Furutani, Larry Goldman, Jon Lebo, Semra Riddle

Councilmembers absent: Phillippa Kassover and Lorri Bodi

Staff present virtually: Phillip Hill, City Administrator; Kim Adams Pratt, City Attorney; Mike Harden, Police Chief; Lindsey Vaughn, Finance Director; Jeff Perrigo, Public Works Director; Steve Bennett, Planning Director; Calvin Killman, Building Official; Andy Silvia, Senior Project Manager; Matt McLean, City Clerk

Others present: 29 visitors

CALL TO ORDER

Deputy Mayor French called the September 22, 2022 City Council regular meeting to order at 7:00 p.m.

FLAG SALUTE

Deputy Mayor French led the Pledge of Allegiance.

ADOPTION OF AGENDA

Cmbr. Furutani moved to approve the agenda as presented. **Cmbr. Riddle seconded.**

Cmbr. Furutani moved to amend the agenda to have a second citizens comment section added to the agenda after the proclamation and before the presentation for people to comment on the proposed budget. **Cmbr. Riddle seconded.**

The motion to adopt the agenda as amended carried unanimously.

PROCLAMATION – Recognizing Volunteer Rosie Shaffer for Service to Lake Forest Park and Surrounding Communities

Cmbr. Riddle read the proclamation recognizing Rosie Shaffer.

CITIZEN COMMENTS REGARDING THE PROPOSED 2023-2024 BUDGET

The following members of the audience shared comments with the Council:

- Alan Kiest regarding various items on the budget
- Jack Tonkin regarding using fund transfers to balance the budget

PRESENTATION - Community Mobile Crisis Response Agency

City Administrator Hill gave a presentation about forming a new Community Mobile Crisis Response Agency with the cities of Bothell, Kenmore, Kirkland, and Shoreline through a proposed Interagency Local Agreement and responded to questions.

PRESENTATION – Update from Sound Transit regarding the bus rapid transit project

Rick Capka, Bus Rapid Transit Deputy Program Executive, and Faith Roland, Director of Real Property, from Sound Transit, gave a short presentation regarding the bus rapid transit project along SR-522.

CITIZEN COMMENTS

The following members of the audience shared comments with the Council:

- Liz (Elizabeth) Krzyminski
- Dale Troy
- Kerry Holmesian
- Christina Maldonado
- Alexia Bailey
- Paula Goode
- David Newman
- Barb Sharky
- Jeff Snedden
- Vicki Scuri
- David Maas
- Bud Homsy
- Elliot Fisher

The comments include that people are not being treated equally for their property that is being acquired for the project, looking for a sound wall or sound mitigation along the project, tree canopy, and the updated data that includes people that are working from home more and not riding the bus.

1 CONSENT CALENDAR

2
3 **Cmbr. Riddle moved** to approve the consent calendar as presented. **Cmbr. Furutani**
4 **seconded. The motion to approve the consent calendar as presented carried**
5 **unanimously.**
6

- 7 1. September 8, 2022 City Council Work Session Meeting Minutes
- 8 2. September 8, 2022 City Council Regular Meeting Minutes
- 9 3. September 12, 2022 City Council Budget and Finance Committee Special Meeting
- 10 Minutes
- 11 4. September 15, 2022 City Council Budget and Finance Committee Meeting Minutes
- 12 5. Approval of City Expenditures for the Period Ending September 22, 2022, covering
- 13 Claims Fund Check Nos. 83998 through 84040 in the amount of \$342,230.70, Payroll
- 14 Fund ACH transactions in the amount of \$158,791.56., and direct deposit transactions in
- 15 the amount of \$163,341.74 are approved; additional ACH transactions Elavon, \$655.47;
- 16 Lexis Nexis, \$264.97; Washington State Excise Tas, \$8,034.00; total approved Claims
- 17 Fund transactions, \$673,318.44
- 18

19 **RESOLUTION 1858/Interlocal Agreement with City of Shoreline Regarding Design of**

20 **Improvements for the 25th Avenue NE Ballinger Creek Habitat and Flood Reduction Project**

21
22 Director Perrigo presented the item and responded to questions. It was noted the item would
23 be brought forward at a future meeting.
24

25 **ORDINANCE 1249/Amending Chapter 13.08 of the Lake Forest Park Municipal Code, Sewer**

26 **Service and Use, Regarding Rates**

27
28 Finance Director Vaughn presented the item and responded to questions. It was noted the item
29 would be brought forward for consideration at a future meeting.
30

31 **RESOLUTION 1250/Adoption of 2018 International Building Code and Other Construction**

32 **Related Codes**

33
34 Building Official Killman presented the item and responded to questions. It was noted the item
35 would be brought forward for consideration at a future meeting.
36

37 **RESOLUTION 1857/Authorizing Mayor to Sign an Agreement with AQUALIS for 2022**

38 **Stormwater System Cleaning**

39
40 Senior Project Manager Silvia presented the item and responded to questions. Due to the
41 impending storm season, Mr. Silvia asked for approval during this meeting.
42

Cmbr. Lebo moved to suspend the three-touch rule. **Cmbr. Furutani seconded. The motion to approve suspend the three-touch rule carried unanimously.**

Cmbr. Furutani moved to approve as presented Resolution 1857/Authorizing Mayor to Sign an Agreement with AQUALIS for 2022 Stormwater System Cleaning. **Cmbr. Riddle seconded. The motion to approve Resolution 1857 carried unanimously.**

OTHER BUSINESS

Cmbr. Furutani moved to excuse Cmbrs. Kassover and Bodi. **Cmbr. Goldman seconded. The motion to excuse Cmbrs. Kassover and Bodi carried, with dissent from Cmbr. Riddle.**

COUNCIL COMMITTEE REPORTS/COUNCIL/MAYOR/CITY ADMINISTRATOR REPORTS

Councilmembers reported on meetings they attended.

ADJOURNMENT

There being no further business, the meeting was adjourned at 10:30 p.m.

Tom French, Deputy Mayor

Matthew McLean, City Clerk

CITY OF LAKE FOREST PARK
CITY COUNCIL SPECIAL BUDGET AND FINANCE COMMITTEE MEETING
MINUTES
September 26, 2022

It is noted that this meeting was held in person in the Council Chambers at City Hall and virtually via Zoom.

Councilmembers present: Tom French, Deputy Mayor; Phillippa Kassover, Council Vice-Chair; Lorri Bodi, Tracy Furutani (via Zoom), Larry Goldman, Jon Lebo, Semra Riddle

Councilmembers absent: Phillippa Kassover and Lorri Bodi

Staff present virtually: Jeff Johnson, Mayor; Phillip Hill, City Administrator; Jeff Perrigo, Public Works Director; Mike Harden, Police Chief; Lindsey Vaughn, Finance Director; Matt McLean, City Clerk

Others present: 2 visitors

CALL TO ORDER

Deputy Mayor French called the September 26, 2022, City Council Special Budget and Finance Committee meeting to order at 6:00 p.m.

ADOPTION OF AGENDA

Cmbr. Riddle moved to approve the agenda as presented. **Cmbr. Lebo seconded. The motion to approve the agenda as presented carried unanimously.**

City Council Budget Deliberations

Deputy Mayor French initiated Council discussion of the proposed 2023-2024 Biennial Budget.

The Council asked for clarification on items in the budget, fund balances, and generating sufficient revenues for proposed projects. The staff provided feedback and responded to questions from the Council.

Citizen Comments

The following members of the audience shared comments with the Council:

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- 14
- Julian Andersen commented on the budget process and the Council ensuring the budget is balanced.

ADJOURNMENT

There being no further business, Deputy Mayor French adjourned the meeting at 7:38 p.m.

Tom French, Deputy Mayor

Matt McLean, City Clerk

City of Lake Forest Park
SORTED TRANSACTION CHECK REGISTER
10/13/2022

VOUCHER CERTIFICATION AND APPROVAL

We, the undersigned members of the Finance Committee of the City of Lake Forest Park, Washington, do hereby certify that the merchandise or services hereinafter specified have been received, and that CLAIM FUND Check Nos. 84041 through 84107 in the amount of \$560,982.59, PAYROLL FUND ACH transactions in the amount of \$329,689.70 and DIRECT DEPOSIT transactions in the amount of \$335,944.27 are approved for payment this 13th day of October, 2022.

Additional approved transactions are:

ACH transaction Invoice Cloud in the amount of \$2,031.20

ACH transaction US Bank in the amount of \$45,479.09

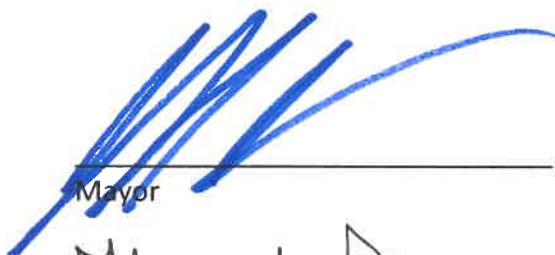
ACH transaction Washington State Excise Tax in the amount of \$5,786.68

ACH transaction Wex Bank in the amount of \$121.19

Total approved claim fund transactions: \$1,226,616.56



City Clerk



Mayor



Finance Committee

Accounts Payable

Voucher Approval Document

User: dmeagher
Printed: 10/07/2022 - 11:38AM
Batch: 00013.10.2022



Section 8, Item D.

CLAIM VOUCHER

CITY OF LAKE FOREST PARK
17425 BALLINGER WAY NE
LAKE FOREST PARK, WASHINGTON 98155

CERTIFICATION

I, the undersigned, do hereby certify under penalty of perjury, that the materials have been furnished, the services rendered or the labor performed as described herein, that any advance payment is due and payable pursuant to a contract or is available as an option for full or partial fulfillment of a contractual obligation, and that the claim is a just, due and unpaid obligation against the City of Lake Forest Park, and that I am authorized to authenticate and certify to said claim.

SIGNED - CITY ADMINISTRATOR OR DESIGNEE

Fund	Description	Amount
001	General Fund	167,753.26
101	Street Fund	15,135.29
107	ARPA Fiscal Recovery Fund	686.42
302	Transportation Capital Fund	110,509.56
401	Sewer Utility Fund	209,247.03
403	Surface Water Fund	12,361.76
404	Surface Water Capital Fund	17,679.43
407	PWTF Repayment Fund	105.87
501	Vehicle Equip Replacement Fund	15,967.59
631	Treasurer's Clearing Fund	6,130.45
632	Police Coalition Fund	13,345.00
Report Total:		568,921.66

Bank Reconciliation

Section 8, ItemD.

Checks by Date

User: dmeagher
 Printed: 10/07/2022 - 12:09PM
 Cleared and Not Cleared Checks



Check No	Check Date	Name	Comment	Module	Clear Date	Amount
0	10/13/2022	Invoice Cloud		AP		2,031.20
0	10/13/2022	State of Washington		AP		5,786.68
0	10/13/2022	Wex Bank - Chevron		AP		121.19
84041	10/13/2022	AARD Pest Control, Inc		AP		142.03
84042	10/13/2022	Agostino Construction, Inc.		AP		106,712.81
84043	10/13/2022	All Battery Sales & Service Inc.		AP		162.93
84044	10/13/2022	American Traffic Solutions Inc.		AP		66,500.00
84045	10/13/2022	Applied Ecology, LLC		AP		9,648.98
84046	10/13/2022	BHC Consultants LLC		AP		1,680.00
84047	10/13/2022	Brown Bear Car Wash		AP		9.00
84048	10/13/2022	Calportland Company		AP		40.00
84049	10/13/2022	Carstar Collision Specialties		AP		3,851.95
84050	10/13/2022	Weatherby Parent, LLC		AP		7,095.00
84051	10/13/2022	Century Link		AP		106.58
84052	10/13/2022	Nicole G Chae-Lee		AP		130.00
84053	10/13/2022	CivicPlus		AP		160.00
84054	10/13/2022	James Santerelli Enterprises		AP		75.00
84055	10/13/2022	Washington State Department of Licens		AP		144.00
84056	10/13/2022	Washington State Department of Transp		AP		3,084.53
84057	10/13/2022	Evermark, LLC		AP		38.36
84058	10/13/2022	Friends of Third Place Commons		AP		60.00
84059	10/13/2022	Jennifer Johnson Grant		AP		45.32
84060	10/13/2022	Gray & Osborne, Inc.		AP		17,679.43
84061	10/13/2022	Cassandra Howard		AP		121.00
84062	10/13/2022	Jim's U Fish		AP		3,240.00
84063	10/13/2022	Johnson Controls		AP		2,863.90
84064	10/13/2022	Kaiser Foundation Health Plan of Wash:		AP		125.00
84065	10/13/2022	King County Finance		AP		236.26
84066	10/13/2022	King County Finance		AP		969.78
84067	10/13/2022	King County Finance		AP		1,035.00
84068	10/13/2022	King County Finance		AP		3,721.00
84069	10/13/2022	King County Finance & Business		AP		202,154.81
84070	10/13/2022	King County Finance		AP		67.05
84071	10/13/2022	City of Kenmore		AP		9,997.50
84072	10/13/2022	Key Code Media, Inc.		AP		686.42
84073	10/13/2022	N. Cyrus Khatibi		AP		118.00
84074	10/13/2022	City of Kirkland		AP		511.34
84075	10/13/2022	City of Lake Forest Park		AP		3,868.66
84076	10/13/2022	Lake Forest Park Water Dist		AP		704.18
84077	10/13/2022	Metal Man Seattle		AP		71.40
84078	10/13/2022	Moon Security Service Inc.		AP		364.00
84079	10/13/2022	Northshore School District		AP		31.25
84080	10/13/2022	Northshore Utility District		AP		17,200.38
84081	10/13/2022	Office Depot, Inc.		AP		145.82
84082	10/13/2022	PACE Engineers, Inc.		AP		3,960.50
84083	10/13/2022	Pacific Office Automation		AP		682.59

Check No	Check Date	Name	Comment	Module	Clear Date	Section 8, ItemD.
84084	10/13/2022	Parametrix, Inc		AP		11,041.30
84085	10/13/2022	Pat's Trees & Landscape Inc.		AP		12,655.23
84086	10/13/2022	Progressive Animal Welfare Society		AP		440.00
84087	10/13/2022	Wayne Perryman		AP		6,250.00
84088	10/13/2022	Puget Sound Executive Services, Inc.		AP		1,264.00
84089	10/13/2022	Puget Sound Regional Council		AP		5,894.00
84090	10/13/2022	Red Carpet Building Maint. Inc.		AP		4,812.77
84091	10/13/2022	Stewart MacNichols Harmell, Inc., P.S.		AP		7,500.00
84092	10/13/2022	Snohomish Co Sheriff's Office		AP		20,061.11
84093	10/13/2022	Staples Advantage		AP		178.63
84094	10/13/2022	State Treasurer's Office		AP		5,423.70
84095	10/13/2022	Superior Printing, Inc.		AP		106.78
84096	10/13/2022	Jeffrey Creager		AP		138.86
84097	10/13/2022	Shannon Rasheed		AP		138.86
84098	10/13/2022	Joe Joebgren		AP		13.89
84099	10/13/2022	The FA Bartlett Tree Expert Company		AP		2,896.33
84100	10/13/2022	City of Vancouver		AP		325.00
84101	10/13/2022	Doreen Wai		AP		130.00
84102	10/13/2022	Wally's Towing, Inc.		AP		97.88
84103	10/13/2022	The Watershed Company		AP		8,763.34
84104	10/13/2022	Westlake Hardware WA-153		AP		367.79
84105	10/13/2022	Washington State Patrol		AP		110.50
84106	10/13/2022	Eduardo Zaldibar		AP		130.00
84107	10/13/2022	Zumar Industries Inc.		AP		2,000.86
Total Check Count:						70
Total Check Amount:						568,921.66

Bank Reconciliation

Section 8, Item D.

Checks by Date

User: dmeagher
 Printed: 10/07/2022 - 2:35PM
 Cleared and Not Cleared Checks



Check No	Check Date	Name	Comment	Module	Clear Date	Amount
92205433	9/19/2022	PRI Management Group		AP		259.00
92203791	10/13/2022	Stellar Event Rentals		AP		523.25
92203792	10/13/2022	Roth Bioscience, LLC		AP		289.00
92203793	10/13/2022	Sticker Mule		AP		508.66
92205431	10/13/2022	Westlake Hardware WA-153		AP		11.00
92205432	10/13/2022	PACT, Inc		AP		140.85
92210101	10/13/2022	Washington Finance Officers Associatic		AP		12.00
92210102	10/13/2022	Washington Finance Officers Associatic		AP		6.00
92218781	10/13/2022	Amazon		AP		87.74
92218782	10/13/2022	Amazon		AP		878.60
92227511	10/13/2022	Wasabi Technologies, Inc		AP		10.39
92227512	10/13/2022	Adobe Inc.		AP		256.42
92227513	10/13/2022	CDW Government, Inc.		AP		1,608.34
92227514	10/13/2022	Amazon		AP		363.30
92227515	10/13/2022	Amazon		AP		145.34
92227881	10/13/2022	North City Water District		AP		49.14
92227882	10/13/2022	North City Water District		AP		91.66
92227883	10/13/2022	Puget Sound Energy		AP		11.01
92227884	10/13/2022	Puget Sound Energy		AP		58.00
92227885	10/13/2022	Seattle City Light		AP		13.07
92227886	10/13/2022	Seattle City Light		AP		13.05
92227887	10/13/2022	Seattle City Light		AP		223.04
92227888	10/13/2022	Seattle City Light		AP		2,757.26
92227889	10/13/2022	Summit Law Group PLLC		AP		320.00
92229902	10/13/2022	FBI National Academy FBINAA		AP		199.27
92289531	10/13/2022	Amazon		AP		66.05
92289532	10/13/2022	Westlake Hardware WA-153		AP		59.43
92289533	10/13/2022	International Institute of Municipal Cler		AP		175.00
92289534	10/13/2022	Office Chair @ Work		AP		549.00
92295771	10/13/2022	Amazon		AP		29.71
92295772	10/13/2022	Amazon		AP		297.26
92295773	10/13/2022	Amazon		AP		58.29
92296351	10/13/2022	ICMA Membership Renewal		AP		149.00
922278810	10/13/2022	Northwest Cascade, Inc.		AP		174.05
922278811	10/13/2022	Pacific Topsoils, Inc.		AP		402.90
922278812	10/13/2022	Integra Telecom, Inc.		AP		413.77
922278813	10/13/2022	Sound Security Inc. (Sonitrol)		AP		1,740.37
922278814	10/13/2022	Seattle City Light		AP		26.10
922278815	10/13/2022	Northwest Cascade, Inc.		AP		190.55
922278816	10/13/2022	Good To Go		AP		2.00
922278817	10/13/2022	Pacific Topsoils, Inc.		AP		844.90
922278818	10/13/2022	Seattle City Light		AP		274.43
922278819	10/13/2022	Seattle City Light		AP		23,629.09
922278820	10/13/2022	Northwest Cascade, Inc.		AP		190.55
922278821	10/13/2022	The Seattle Times		AP		791.65
922278822	10/13/2022	Smarsh		AP		1,486.92

Check No	Check Date	Name	Comment	Module	Clear Date	Section 8, ItemD.
922278823	10/13/2022	Verizon Wireless		AP		2,690.29
922278824	10/13/2022	Northwest Cascade, Inc.		AP		504.11
922278825	10/13/2022	Northwest Cascade, Inc.		AP		174.05
922278826	10/13/2022	Northwest Cascade, Inc.		AP		418.01
922278827	10/13/2022	Good To Go		AP		3.90
922278828	10/13/2022	Puget Sound Energy		AP		60.29
922278829	10/13/2022	Seattle City Light		AP		13.50
922278830	10/13/2022	Seattle City Light		AP		13.52
922278831	10/13/2022	Puget Sound Energy		AP		11.01
922278832	10/13/2022	Northwest Cascade, Inc.		AP		1,204.00
						=====
Total Check Count:						56
						=====
						=====
Total Check Amount:						45,479.09
						=====



Accounts Payable

Checks by Date - Summary by Check Date

User: aheller
 Printed: 10/7/2022 2:46 AM

Check No	Vendor No	Vendor Name	Check Date	Check Amount
ACH	LEOFFTR	LEOFF TRUST	10/07/2022	1,642.02
ACH	NAVIA	Navia Benefit Solutions, Inc.	10/07/2022	5,100.64
ACH	NAVIAFSA	Navia - FSA	10/07/2022	228.41
ACH	TEAMDR	National D.R.I.V.E.	10/07/2022	4.45
ACH	TXSDU	Texas State Disbursement Unit (SDU)	10/07/2022	1,015.76
ACH	WASUPREG	Washington State Support Registry	10/07/2022	200.00
ACH	Z457	Vantagepoint Transfer Agents-304508 ICM.	10/07/2022	7,759.07
ACH	ZAWC	AWC	10/07/2022	41,456.40
ACH	ZEMPSEC	Employment Security Dept.	10/07/2022	515.08
ACH	ZGUILD	LFP Employee Guild	10/07/2022	687.50
ACH	ZICMA	Vantagepoint Transfer Agents-107084 ICM.	10/07/2022	32,561.62
ACH	ZL&I	Washington State Department of Labor & I	10/07/2022	5,980.93
ACH	ZLEOFF	Law Enforcement Retirement	10/07/2022	12,652.10
ACH	ZLFPIRS	Lake Forest Park/IRS	10/07/2022	36,814.81
ACH	ZPERS	Public Employees Retirement	10/07/2022	25,763.16
ACH	ZTEAM	Teamsters Local Union #117	10/07/2022	202.28
ACH	ZWATWT	Washington Teamsters Welfare Trust	10/07/2022	7,063.10
Total for 10/7/2022:				179,647.33
Report Total (17 checks):				179,647.33

Accounts Payable

Checks by Date - Summary by Check Date

User: aheller
 Printed: 9/22/2022 2:36 PM



Check No	Vendor No	Vendor Name	Check Date	Check Amount
ACH	LEOFFTR	LEOFF TRUST	09/23/2022	35,480.66
ACH	NAVIA	Navia Benefit Solutions, Inc.	09/23/2022	233.28
ACH	NAVIAFSA	Navia - FSA	09/23/2022	228.41
ACH	TEAMDR	National D.R.I.V.E.	09/23/2022	4.45
ACH	TXSDU	Texas State Disbursement Unit (SDU)	09/23/2022	1,015.76
ACH	WASUPREG	Washington State Support Registry	09/23/2022	200.00
ACH	Z457	Vantagepoint Transfer Agents-304508 ICM	09/23/2022	7,793.67
ACH	ZAFLAC	Aflac	09/23/2022	74.75
ACH	ZAWC	AWC	09/23/2022	1,379.08
ACH	ZEMPSEC	Employment Security Dept.	09/23/2022	469.29
ACH	ZGUILD	LFP Employee Guild	09/23/2022	687.50
ACH	ZICMA	Vantagepoint Transfer Agents-107084 ICM	09/23/2022	30,635.54
ACH	ZL&I	Washington State Department of Labor & I	09/23/2022	5,627.92
ACH	ZLEOFF	Law Enforcement Retirement	09/23/2022	12,789.40
ACH	ZLFPIRS	Lake Forest Park/IRS	09/23/2022	29,574.46
ACH	ZPERS	Public Employees Retirement	09/23/2022	23,311.02
ACH	ZTEAM	Teamsters Local Union #117	09/23/2022	202.28
ACH	ZWATWT	Washington Teamsters Welfare Trust	09/23/2022	334.90
Total for 9/23/2022:				150,042.37
Report Total (18 checks):				150,042.37

Bank Reconciliation

Checks by Date

User: dmeagher
Printed: 10/07/2022 - 12:04PM
Cleared and Not Cleared Checks



Section 8, Item D.

Check No	Check Date	Name	Comment	Module	Clear Date	Amount
0	9/23/2022		DD 00523.09.2022	PR		161,752.44
0	10/7/2022		DD 00507.10.2022	PR		174,191.83
Total Check Count:						2
Total Check Amount:						335,944.27



CITY OF LAKE FOREST PARK

CITY COUNCIL

AGENDA COVER SHEET

Meeting Date	09/22/2022
Originating Department	Public Works
Contact Person	Jeffrey Perrigo, Director of Public Works
Title	Resolution 1858 - Interlocal Agreement regarding the design of improvements for the 25 th Avenue NE Ballinger Creek Habitat Restoration and Flood Reduction Project

Legislative History

- First Presentation: September 22, 2022, City Council regular meeting
- Second Presentation: October 13, 2022, City Council regular meeting

Attachments:

1. Resolution Number 1858
2. Agreement between the City of Shoreline and the City of Lake Forest Park regarding the design of Improvements for the 25th Avenue NE Ballinger Creek Habitat Restoration and Flood Reduction project
3. Map – 195th and SR104

Executive Summary

The proposed Interlocal Agreement (“ILA”) establishes an agreement between the cities of Shoreline and Lake Forest Park to begin addressing long-standing flooding issues and improve the associated infrastructure required to mitigate such conditions and restore a degraded open channel.

The purpose of the ILA is to cover the cost and expense attributable to the review by the Washington State Department of Transportation (“WSDOT”) of 60% project plans for the design of improvements for the 25th Avenue NE Ballinger Creek Habitat Restoration and Flood Reduction project (the “Project”). The estimated cost of WSDOT’s review is \$15,000 and under the ILA, each city agrees to pay fifty percent of the review cost.

Background

The City of Shoreline has been the lead agency developing the Project. The purpose of the Project, in general, is to "daylight" and restore habitat along a piped stream, including an adjacent restored floodplain area within a City of Shoreline maintenance yard, install four (4) fish-passable and habitat-

friendly box culverts, and restore a degraded open channel running alongside and impacted by aging WSDOT infrastructure. These habitat improvements will also address long-standing and frequently recurring stream flooding issues near the intersection of SR104 and NE 195th Street. Shoreline’s consultant has completed the 60% Project plans.

The primary element within the City of Lake Forest Park included in the design under this ILA is the replacement of the culvert that runs under NE 195th Street parallel to SR104 (see attached map).

Fiscal & Policy Implications

The ILA is fully supported by the Surface Water Management Fund as part of the current adopted budget. The contract price is expected to be no more than \$10,000.00 and does not need additional budget allocations.

Alternatives

Options	Results
<ul style="list-style-type: none">Approve the Agreement	The City will approve the Interlocal Agreement with the City of Shoreline and agree to have WSDOT review and comment on the project details.
<ul style="list-style-type: none">No Action	The City will not partner with the City of Shoreline and future work and expenses on the culvert may need to be paid solely by the City of Lake Forest Park.

Staff Recommendation

Approve the Interlocal Agreement with the City of Shoreline to share the cost of having WSDOT review and comment on the design of improvements for the 25th Avenue NE Ballinger Creek Habitat Restoration and Flood Reduction project.

RESOLUTION NO. 1858

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LAKE FOREST PARK, WASHINGTON, AUTHORIZING THE MAYOR TO SIGN THE INTERLOCAL AGREEMENT WITH THE CITY OF SHORELINE FOR DESIGN IMPROVEMENTS FOR THE 25TH AVENUE NE BALLINGER CREEK HABITAT RESTORATION AND FLOOD REDUCTION PROJECT

WHEREAS, the City of Shoreline has been the lead agency developing the 25th Avenue NE Ballinger Creek Habitat Restoration and Flood Reduction project (the “Project”); and

WHEREAS, the Project improvements will take place in the cities of Lake Forest Park and Shoreline and will address long-standing and frequently recurring stream flooding issues in the area; and

WHEREAS, the Project benefits aging Washington State Department of Transportation (“WSDOT”) infrastructure and requires WSDOT’s review of the Project plans; and

WHEREAS, the cities of Lake Forest Park and Shoreline have negotiated an Interlocal Agreement to equally fund the WSDOT review costs.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Lake Forest Park, as follows:

Section 1. AUTHORIZATION. The Mayor is authorized to sign the Interlocal Agreement with the City of Shoreline for Design Improvements for the 25th Avenue NE Ballinger Creek Habitat Restoration and Flood Reduction Project, a copy of which is attached hereto as Exhibit A.

Section 2. CORRECTIONS. The City Clerk is authorized to make necessary corrections to this resolution including, but not limited to, the correction of scrivener’s/clerical errors, references, ordinance numbering, section/subsection numbers and any references thereto.

PASSED BY A MAJORITY VOTE of the members of the Lake Forest Park City Council this ____ day of _____, 2022

APPROVED:

Jeff Johnson
Mayor

ATTEST/AUTHENTICATED:

Matthew McLean
City Clerk

FILED WITH THE CITY CLERK:
PASSED BY THE CITY COUNCIL:
RESOLUTION NO.: 1858

AGREEMENT BETWEEN THE CITY OF SHORELINE AND THE CITY OF LAKE FOREST PARK REGARDING DESIGN OF IMPROVEMENTS FOR THE 25th AVENUE NE BALLINGER CREEK HABITAT RESTORATION AND FLOOD REDUCTION PROJECT

This Agreement between the City of Shoreline and the City of Lake Forest Park regarding Design of Improvements for the 25th Avenue NE Ballinger Creek Habitat Restoration and Flood Reduction Project, generally from Brugger’s Bog Park, a City of Shoreline park, to the culvert under State Route 104 (SR-104), hereinafter the “Agreement.” is made and entered into as of this ____ day of _____, 2022 (the “Effective Date”), by and between the City of Shoreline (“Shoreline”), a Washington municipal corporation and the City of Lake Forest Park (“LFP”), a Washington municipal corporation (collectively, the “Parties”).

Recitals

WHEREAS, Shoreline has been the lead agency developing the 25th Avenue NE Ballinger Creek Habitat Restoration and Flood Reduction project (the “Project”). The purpose of the Project, in general, is to "daylight" and restore habitat along a piped stream, including an adjacent restored floodplain area within a City of Shoreline maintenance yard, install four (4) fish-passable and habitat-friendly box culverts, and restore a degraded open channel running alongside and impacted by the aging Washington State Department of Transportation (WSDOT) infrastructure, and

WHEREAS, these improvements in habitat will also address long-standing and frequently recurring stream flooding issues in this area, and

WHEREAS, Shoreline has developed the Project’s design to approximately 60% completion, and

WHEREAS, roughly half of the Project area is within LFP’s jurisdictional boundaries, as well as WSDOT Rights-of Way for SR-104, and

WHEREAS, it is the understanding of the Parties that WSDOT is supportive of the Project, as it coordinates with improvements to, and benefits WSDOT’s existing facilities in proximity to the Project, such as WSDOT’s gabion wall that supports the SR-104 embankment, and

WHEREAS, WSDOT has agreed to review the 60% Project plans and collaborate on Project funding opportunities, and

WHEREAS, the Parties agree to equally fund the WSDOT review costs, and

WHEREAS, the Parties desire to memorialize terms and conditions relating to the WSDOT review of the Project, and

WHEREAS, the Parties also anticipate amendment(s) to this Agreement or future agreements regarding the Project,

NOW THEREFORE, in consideration of the mutual covenants and conditions contained herein, and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties agree as follows:

Agreement

1. PURPOSE

The purpose of this Agreement is to cover the cost and expenses attributable to the WSDOT review of Shoreline’s 60% Project Plans for the Project.

2. PROJECT PLANS

For the purpose of this Agreement, the 60% Project Plans means those plans prepared by Shoreline’s consultant, Louis Berger, under Shoreline Contract No. 8403, dated December 31, 2019, and identified as the NE 195th Street Ballinger Creek Culvert Replacement Plan Set and the 25th Avenue NE Ballinger Creek Flood Reduction Project Plan Set, both dated December 2019.

3. RESPONSIBILITIES OF PARTIES

- A. Shoreline will seek approval of a “JZ Account” with WSDOT for an estimated cost of \$15,000. This sum is intended to cover all WSDOT’s costs for reviewing and commenting on submitted engineering data and plans, completing agreements, meetings, and inspections.
- B. Each party agrees to be responsible for fifty percent (50%) of all WSDOT costs referenced in 3.A. These WSDOT costs include WSDOT invoices submitted to Shoreline prior to execution of this Agreement but included in the \$15,000 JZ account referenced in 3.A.
- C. WSDOT will invoice Shoreline for its costs on a periodic basis. Shoreline will then invoice LFP for its equal share of those costs.
- D. LFP shall submit its payment to Shoreline, in full, within thirty (30) calendar days of the date of receipt of Shoreline’s invoice so that Shoreline can either be reimbursed or compensate WSDOT in a timely manner.
- E. If LFP fails to make timely compensation, then Shoreline may charge interest on the outstanding balance to LFP in the amount of one percent (1%) per month.

4. TERM AND TERMINATION

- A. The term of this Agreement commences on the date executed by all the Parties and shall continue until December 31, 2023, unless extended or terminated by the Parties in accordance with this Agreement.
- B. This Agreement may be terminated by any Party if any other Party fails to comply with any material provisions of the Agreement, in whole or in part. Termination shall not relieve a Party of costs incurred to the date of termination.

5. NOTICES

All notices and invoices required under the terms of this Agreement shall be given in writing, addressed as follows:

Jeffrey Perrigo	John Featherstone
Public Works Director	Surface Water Utility Manager
City of Lake Forest Park	City of Shoreline
17425 Ballinger Way NE	17500 Midvale Ave N
Lake Forest Park, WA 98155	Shoreline, WA 98133
jperrigo@cityoflfp.gov	jfeatherstone@shorelinewa.gov

Notices may be hand-delivered; sent via U.S. mail, return receipt requested; by a nationally recognized courier service, or electronic mail (e-mail). All notices issued under this Agreement shall be deemed received on the next business day after being deposited in the U.S. mail in city of mailing, at the time of hand or courier delivery to the addressee party, or on the date received by the recipient’s computer.

6. SUCCESSORS OR ASSIGNS

Neither Party shall assign, transfer, or encumber any rights, duties or interests accruing from this Agreement without the written consent of the other.

7. ENTIRE AGREEMENT

This Agreement contains the entire agreement between the parties hereto and no other agreements, oral or otherwise, regarding the subject matter of this Agreement, shall be deemed to exist or bind any of the parties hereto. Either party may request changes in this Agreement. Proposed changes which are mutually agreed upon shall be incorporated by written amendment to this Agreement.

8. NO THIRD-PARTY BENEFICIARIES

This Agreement is entered into by and between the Parties hereto and is not intended to confer any rights or remedies upon any other persons or entities.

9. EXECUTION OF AGREEMENT – COUNTERPARTS

This Agreement may be executed counterparts, all of which shall be regarded for all purposes as an original.

10. RECORDS

Shoreline and LFP acknowledge that they are local agencies subject to Washington’s Public Records Act, chapter 42.56 RCW, and, as such, this Agreement and records arising from the performance of this Agreement are public records subject to disclosure unless an exemption applies. Shoreline and LFP will retain this Agreement and all records related to this Agreement consistent with the records retention schedule for contracts/agreements issued by the Washington Secretary of State pursuant to chapter 40.14 RCW.

11. JURISDICTION AND VENUE

This Agreement shall be interpreted pursuant to the laws of the State of Washington and any judicial action arising from this Agreement shall be in King County Superior Court. In any action or proceeding to enforce or interpret any provision of this Agreement, the prevailing part shall be entitled to recover its reasonable costs, expenses, and attorneys’ fees incurred in such action or proceeding.

12. SEVERABILITY

Any provision or part of the Agreement held to be void or unenforceable under any law or regulation shall be deemed stricken and all remaining provisions shall continue to be valid and binding upon Shoreline and LFP, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

13. NON-WAIVER OF RIGHTS AND REMEDIES

No term or provisions of this Agreement shall be deemed waived, and no breach excused, unless such waiver or consent shall be in writing and signed by the Party claimed to have waived or consented. Any consent by any Party to, or waiver of, a breach by the other Party, whether expressed or implied, shall not constitute consent to, waiver of, or excuse for any other different or subsequent breach.

IN WITNESS WHEREOF, each person executing this Agreement on behalf of a Party represents and warrants that he or she is fully authorized to execute this Agreement of behalf of

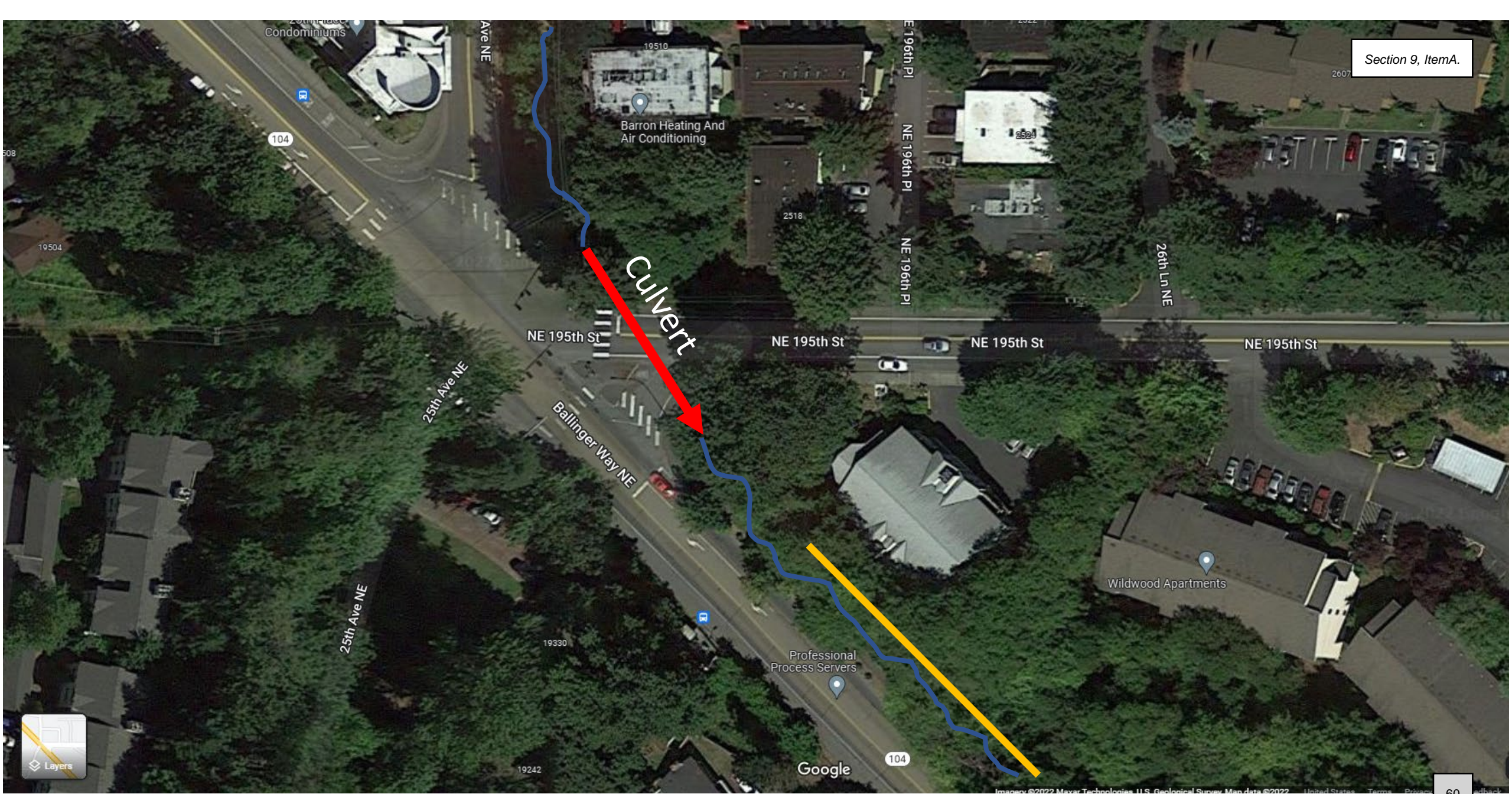
the Party for which he or she is signing on the date indicated next to their signatures

CITY OF LAKE FOREST PARK

CITY OF SHORELINE

By: _____
Jeff Johnson
Mayor

By: _____
Debbie Tarry
City Manager





CITY OF LAKE FOREST PARK

CITY COUNCIL

AGENDA COVER SHEET

Meeting Date10/13/2022

Originating DepartmentCity Council

Contact PersonDeputy Mayor French

Title

Ordinance 1251/amending section10.06.010 of the Lake Forest Park Municipal Code regarding authorization for traffic safety cameras in school walk areas and in public park speed zones

Legislative History

- First Presentation: June 21, 2022, City Council Committee of the Whole
- Second Presentation: August 22, 2022, City Council Committee of the Whole
- Third Presentation: October 13, 2022, City Council Regular meeting

Attachments:

1. Ordinance 1251

Executive Summary

The Lake Forest Park Municipal Code (“LFPMC”) currently authorizes the use of automated traffic cameras for stoplight violations at intersections of two arterials and school speed zones. Chapter 46.63 RCW has been recently amended to authorize the use of traffic cameras in school walk areas, public park speed zones, and hospital speed zones. The proposed Ordinance 1251 would authorize the use of traffic safety cameras to detect speed violations on any roadway identified in a school walk area and in public park speed zones.

Background

“Walk Area” is defined in RCW 28A.160.160 as that “area around a school with an adequate roadway configuration to provide students access to school with a walking distance of less than one mile. Mileage must be measured along the shortest roadway or maintained public walkway where hazardous conditions do not exist. The hazardous conditions must be documented by a process established in rule by the superintendent of public instruction and

must include roadway, environmental, and social conditions. Each elementary school shall identify walk routes within the walk area.”

Public park speed zones are defined in RCW 46.63.170(b)(ii)(A) as “the marked area within public park property and extending 300 feet from the border of public park property (I) consistent with active park use; and (II) where signs are posted to indicate the location is within a public park speed zone.

Fiscal & Policy Implications

The policy to allow two additional types of traffic safety cameras does not have a fiscal impact on the City at this time.

Alternatives

<i>Options</i>	<i>Results</i>
<ul style="list-style-type: none">• Approve the Agreement	Council will authorize the use of traffic cameras for school walk areas and public park speed zones.
<ul style="list-style-type: none">• No Action	Council will not authorize the use of traffic cameras for school walk areas and public park speed zones.

Staff Recommendation

Approve Ordinance 1251 amending LFPMC 10.06.010 to authorize the use of traffic safety cameras for school walk areas and public park speed zones.

ORDINANCE NO. 1251

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LAKE FOREST PARK, WASHINGTON AMENDING SECTION 10.06.010 OF THE LAKE FOREST PARK MUNICIPAL CODE, AUTOMATED TRAFFIC CAMERAS – DETECTION OF VIOLATIONS – RESTRICTIONS, PROVIDING FOR SEVERABILITY AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, in 2008 the City Council adopted chapter 10.06 in the Lake Forest Park Municipal Code (“LFPMC”), Automated Traffic Safety Cameras, as authorized by chapter 46.63 RCW; and

WHEREAS, in 2022, the Washington State Legislature adopted amendments to RCW 46.63.170 authorizing use of automated traffic safety cameras to detect speed violations on any roadway identified in a school walk area, public park speed zone, or hospital speed zones (together “New Traffic Safety Cameras”); and

WHEREAS, the above statutory amendment also requires that 50% of the noninterest money received by a city in excess of the cost to install, operate, and maintain New Traffic Safety Cameras shall be remitted to the state for deposit into a transportation safety account; and that the remaining 50% retained by a city must be used only for improvements to equitable access and mobility for persons with disabilities; and

WHEREAS, the City Council is interested in authorizing the installation of traffic safety cameras for school walk areas and public park speed zones in Lake Forest Park.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAKE FOREST PARK, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. AMENDMENT. LFPMC 10.06.010, Automated traffic cameras – Detection of violations- Restrictions shall be amended as follows:

LFPMC 10.06.010 Automated traffic safety cameras – Detection of violations – Restrictions.

A. City law enforcement officers and persons commissioned by the Lake Forest Park police chief are authorized to use automated traffic cameras and related automated systems to detect and record the image of: (1) stoplight violations at the intersection of two arterials; ~~and~~ (2) school speed zone violations; (3) speed zone violations on any roadway identified in a school walk area as defined by RCW 28A.160.160; and (4)

speed zone violations in public park speeds zone as defined in RCW 46.63.170(b)(ii).
Provided, however, pictures of the vehicle and the vehicle license plate may be taken only while an infraction is occurring, and the picture shall not reveal the face of the driver or of any passengers in the vehicle.

B. Before adding additional cameras or relocating any existing camera to a new location, an analysis of the locations where automatic traffic safety cameras are proposed must be presented to the City Council.

C.B. Each location where an automated safety camera is used shall be clearly marked by signs placed in locations that clearly indicate to a driver that the driver is entering a zone where traffic laws are enforced by an automated traffic safety camera.

D.C. “Automated traffic safety camera” means a device that uses a vehicle sensor installed to work in conjunction with an intersection traffic control system or a speed measuring device, and a camera synchronized to automatically record one or more sequenced photographs, microphotographs or electronic images of the rear of a motor vehicle whenever a vehicle fails to stop when facing a steady red traffic control signal or exceeds a speed limit to a school speed zone as detected by a speed measuring device.

Section 2. SEVERABILITY. Should any portion of this ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, such decision shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

Section 3. CORRECTIONS. The City Clerk is authorized to make necessary corrections to this ordinance including, but not limited to, the correction of scrivener’s/clerical errors, references, ordinance numbering, section/subsection numbers and any references thereto.

Section 4. EFFECTIVE DATE. This ordinance shall take effect five (5) days after passage and publication.

APPROVED BY A MAJORITY of the Lake Forest Park City Council this ____ day of October, 2022.

APPROVED:

Jeff Johnson
Mayor

ATTEST/AUTHENTICATED:

Matthew McLean
City Clerk

APPROVED AS TO FORM:

Kim Adams Pratt
City Attorney

Introduced: _____
Adopted: _____
Posted: _____
Published: _____
Effective: _____



CITY OF LAKE FOREST PARK

CITY COUNCIL

AGENDA COVER SHEET

Meeting Date	10/13/2022
Originating department	City Council
Contact Person	Deputy Mayor French
Title	Ordinance 1252/adopting the National Association of City Transportation Officials' 2020 <i>City Limits, Setting Safe Speed Limits on Urban Streets</i>

Legislative History

- First Presentation: June 21, 2022, City Council Committee of the Whole
- Second Presentation: August 22, 2022, City Council Committee of the Whole
- Third Presentation: October 13, 2022, City Council Regular meeting

Attachments:

1. Ordinance 1252
2. Exhibit A - 2020 *City Limits, Setting Safe Speed Limits on Urban Streets*

Executive Summary

The proposed Ordinance 1252 would adopt the National Association of City Transportation Officials' ("NACTO) 2020 *City Limits, Setting Safe Speed Limits on Urban Streets* ("*City Limits*"), a document intended to provide cities with guidance on how to strategically set speed limits on urban streets, using a Safe Systems approach, to reduce traffic fatalities and injuries. The proposed Ordinance also anticipates moving forward with a Safe Speed Study in accordance with methodology in *City Limits* to determine the speed limits that will best minimize the risk of persons being killed or seriously injured in Lake Forest Park.

Fiscal & Policy Implications

The policy adopting the NATCO document does not have a fiscal impact on the City at this time. In the future, when a safe speed study is performed by consultants, it will be paid through the transportation capital fund.

Alternatives

Options	Results
<ul style="list-style-type: none">Adopt Ordinance 1252	The City will move toward obtaining a Safe Speed Study done in accordance with City Limits.
<ul style="list-style-type: none">No Action	The City will not adopt City Limits.

Staff Recommendation

Approve Ordinance 1252 adopting NACTO’s 2020 City Limits, Setting Safe Speed Limits on Urban Streets, and directing that a contract for a Safe Speed Study be brought to City Council for review.

ORDINANCE NO. 1252**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LAKE FOREST PARK, WASHINGTON ADOPTING THE NATIONAL ASSOCIATION OF CITY TRANSPORTATION OFFICIALS DOCUMENT “CITY LIMITS” SUMMER 2020 EDITION, PROVIDING FOR SEVERABILITY AND PROVIDING AN EFFECTIVE DATE.**

WHEREAS, the City Council desires safe, sustainable, accessible and equitable transportation to support the citizens of Lake Forest Park; and finds that addressing speed is fundamental to making streets safer; and

WHEREAS, RCW 46.61.415 authorizes cities to establish and alter maximum limits on local streets; and

WHEREAS, the City Council is interested in adopting a model for setting speed limits that uses the current behavior of individuals to determine speed limits and does not use existing speeds on a street to determine what the speed limit should be; and

WHEREAS, the National Association of City Transportation Officials (“NACTO”) has published the 2020 *City Limits, Setting Safe Speed Limits on Urban Streets*, a document intended to provide cities with guidance on how to strategically set speed limits on urban streets, using a Safe Systems approach, to reduce traffic fatalities and injuries; and

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAKE FOREST PARK, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. ADOPTION. The City Council adopts the National Association of City Transportation Officials (“NACTO”) 2020 *City Limits, Setting Safe Speed Limits on Urban Streets*, as attached hereto as Exhibit A.

Section 2. SAFE SPEED STUDY. City staff will work to bring to City Council for review a contract for the performance of a Safe Speed Study in accord with the attached Exhibit A based on a default citywide speed limit and that analyzes conflict density and activities level, among other contextual factors, to determine the speed limits that will best minimize the risk of persons being killed or seriously injured in Lake Forest Park.

Section 3. SEVERABILITY. Should any portion of this ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any

reason, such decision shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

Section 4. CORRECTIONS. The City Clerk is authorized to make necessary corrections to this ordinance including, but not limited to, the correction of scrivener's/clerical errors, references, ordinance numbering, section/subsection numbers and any references thereto.

Section 5. EFFECTIVE DATE. This ordinance shall take effect five (5) days after passage and publication.

APPROVED BY A MAJORITY of the Lake Forest Park City Council this ____ day of October, 2022.

APPROVED:

Jeff Johnson
Mayor

ATTEST/AUTHENTICATED:

Matthew McLean
City Clerk

APPROVED AS TO FORM:

Kim Adams Pratt
City Attorney

Introduced: _____
Adopted: _____
Posted: _____
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CITY LIMITS

Setting Safe Speed Limits on Urban Streets



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ABOUT NACTO

NACTO's mission is to build cities as places for people, with safe, sustainable, accessible, and equitable transportation choices that support a strong economy and vibrant quality of life. We do this by:

- Communicating a bold vision for 21st century urban mobility and building strong leadership capacity among city transportation officials.
- Empowering a coalition of cities to lead the way on transportation policy at the local, state, and national levels.
- Raising the state of the practice for street design that prioritizes people walking, biking, and taking transit.

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Key Terms & Definitions

Absolute Speed Law: A legal environment in which drivers must never drive faster than the posted speed limit, regardless of what they deem safe for conditions.

Basic Speed Law: A legal environment in which drivers must never drive faster than is safe for present conditions, regardless of the posted speed limit.

Design Speed: The speed on which the geometry or physical elements of the roadway is based.

Operating Speed: The speed at which vehicles are traveling along a roadway.

Posted Speed Limit: The maximum lawful speed as displayed on a regulatory sign.

Statutory Speed Limit: The speed limit established under law, which applies in the absence of a posted speed limit.

Target Speed: The highest speed that designers intend drivers to go on a specific street or road.

Speed Limits Conversions

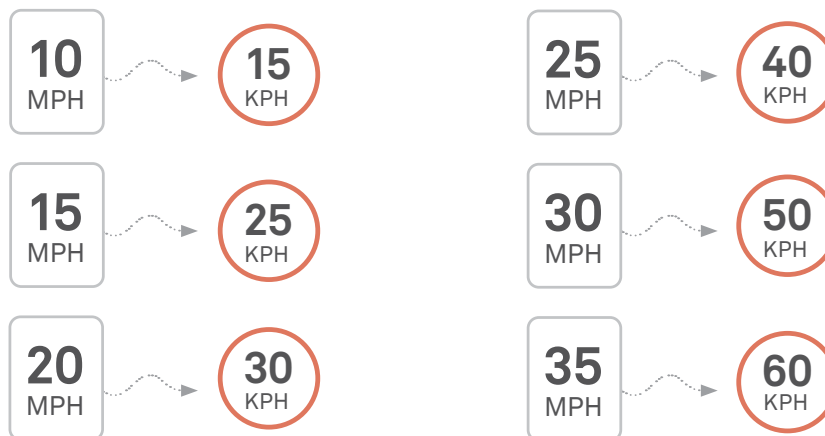


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Executive Summary

We cannot reduce traffic fatalities on US city streets without reducing speeds.

More than 35,000 people die in traffic crashes on US roads each year, and millions more are seriously and often permanently injured. The United States has the highest fatality rate in the industrialized world; double the rate in Canada and quadruple that in Europe. While traffic fatalities may seem like an intractable issue, city governments have the power to reduce the frequency and severity of traffic crashes by reducing motor vehicle speeds.

Addressing speed is fundamental to making streets safer. Vehicle speed increases both the likelihood of a crash, as well as the severity of the crash, as it diminishes drivers' ability to recognize and avoid potential conflicts. In addition, on streets with higher speeds and higher speed limits, traffic engineers have fewer design options to increase safety.

In cities, transportation agencies have long understood that motor vehicle speed plays a key role in fatal and serious crashes, and have sought to reduce speeds through design and regulation in order to save lives. But speed limit reductions have remained out of bounds for many city transportation agencies because authority over speed limits, even on city streets, is often held at the state level, and is commonly tethered to the practice of using the existing speeds on a street to determine what the speed limit should be. This flawed model uses the current behavior of individuals to determine the speed limit, instead of allowing engineers and planners to set the limit at the speed that will create the best, safest conditions for all road users. The result is higher speeds and speed limits over time.

Practitioners often find themselves with limited recourse to address these challenges because they lack an alternative method for

setting speed limits in urban areas. In many places, cities have turned to increased police enforcement to compensate for restrictive engineering and speed limit setting policies, a practice that is not proven to reduce serious injuries or fatalities, and often increases risk for Black, Indigenous, and people of color (BIPOC) on city streets.

This document, *City Limits*, is intended to provide city practitioners with guidance on how to strategically set speed limits on urban streets, using a Safe Systems approach, to reduce traffic fatalities and injuries. Recognizing that city authority to set speed limits varies by jurisdiction, *City Limits* offers three tools for setting speed limits on urban streets:

Setting **Default Speed Limits** on many streets at once.

Designating **Slow Zones** in sensitive areas.

Setting **Corridor Speed Limits** on high priority major streets using a Safe Speed Study.

City Limits maps a new path for US cities, codifying speed limit setting best practices that have been tested and documented in cities across North America. Cities can create better and safer outcomes for all by adopting these speed limit setting practices as part of their traffic fatality reduction or Vision Zero programs. By managing speeds, cities can save lives.

About This Document

In 2018, NACTO convened a working group of major US cities to develop new robust guidance for setting speed limits on urban streets that could provide an alternative to the highway-focused federal recommendations. Over the course of the following 18 months, transportation staff from 19 cities helped to write and review the guidance and provided technical expertise based on their experience developing speed management strategies and programs and implementing lower speed limits in their own cities.

The resulting guidance, *City Limits*, provides cities with clear technical and policy guidance on setting safe speed limits on city streets. All of NACTO's Member Agencies (81 members at the time of final review) have approved this guidance. The technical guidance and recommended maximum speed limits in this document are based on input from NACTO member agencies, academic studies about speeds that minimize conflict and risk, and best practices in cities across the world.

Unlike existing national guidance, *City Limits* focuses on urban streets, which pose the most challenging scenarios for determining speed limits and are where the majority of pedestrian and cyclist fatalities occur. In this document, urban streets refer to most of the categories of streets found in North American cities, including local, primarily residential streets, mixed use corridors, transit corridors, high density downtown streets, and urban arterials

with commercial, residential, or retail uses along one or both sides. This guidance is also applicable on streets like these in non-urban areas. This guidance is not applicable on limited access streets, even within cities, or on rural or very low density streets with limited multimodal use.

Finally, the speed limit setting guidance contained in *City Limits* is only one piece of a larger, essential discussion around how to make streets truly safe for everyone. Speeding vehicles pose a significant, specific, and deadly threat, but comprehensive safety on city streets and public spaces involves a more holistic consideration of risks—from accessibility to gender identity-based harassment to racial violence. In particular, speed enforcement as currently practiced poses additional, disproportionate health and safety risks especially to Black and Latinx people. Manual police enforcement is a less effective way to manage speeds down over time than street design and engineering changes, and can create dangerous physical and mental health impacts for Black, Indigenous, and people of color (BIPOC), as well as other marginalized road users. This resource touches on speed enforcement, but it is not the focus of this guidance. *City Limits* addresses speed limit setting policy which, paired with street design, is the best tool for reducing the health and safety risks posed by vehicular speeds.

Photo: City of New York



LUCIEN MERRYWEATHER, 9
 ALLISON LIAO, 3
 KIKO SHAO, 5
 RENEE THOMPSON, 16
 SAMUEL COHEN ECKSTEIN, 12
 LUIS BRAVO, 18
 TENZIN DRUDAK, 16
 OLVIN YHAR FIGUERO, 3
 PURAN THAPA, 7
 SARA KISHIK, 15
 AMAR DIARRASSOUBA, 6
 DENIM McLEAN, 2
 ZULEMI TORRES, 16
 MARVIN RAMIREZ, 18
 ARIEL RUSSO, 4

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 DENIM McLEAN, 2
 ZULEMI TORRES, 16
 MARVIN RAMIREZ, 18
 ARIEL RUSSO, 4
 KYRILLOS GENDY, 5
 JAIED GIGUERO, 2



1

The Need



Rethinking Safety

In 2018 alone, drivers killed 36,560 people on US roads and seriously injured millions more.^{1,2} These tragedies are the result of a failed approach to traffic safety that prioritizes speed and convenience over human lives.

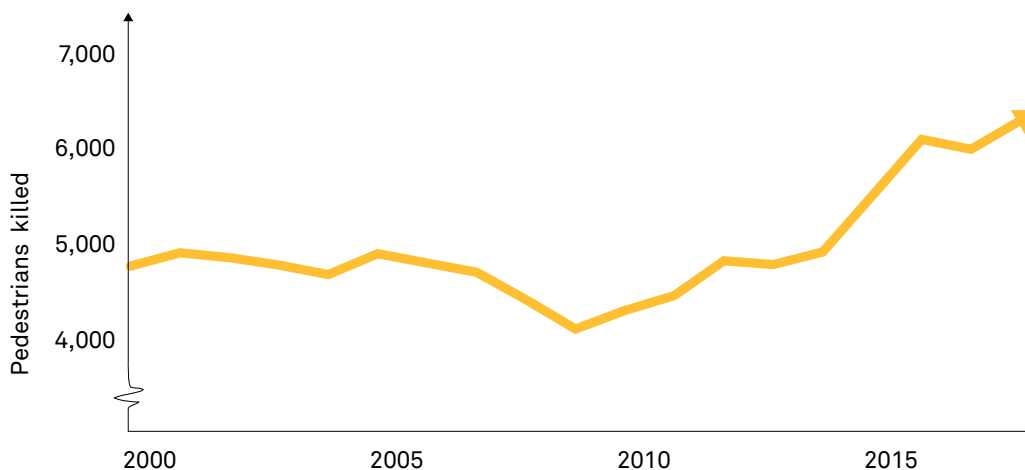
Experience from other industrialized countries shows that fewer traffic deaths and safer roads are possible. Rather than focusing on individual behavior, these countries focus on changing the policies and engineering decisions that create unsafe conditions. This technique, also known as a Safe Systems approach, is the guiding philosophy behind the safer streets in European Union and Scandinavian countries, which have, on average, a per capita traffic fatality rate that is half and a third, respectively, of that in the United States.³

Safety for all road users must be set as the foremost goal, and all decisions must be made based on how well they advance work toward zero deaths.

US streets are becoming especially dangerous for people walking and biking. Between 2009 and 2018, pedestrian deaths from traffic crashes in the US grew by 46%, reaching a nearly 3-decade high of 7,354 people killed by vehicles in 2018 alone.^{4,5} This rate means that people walking and biking are an increasingly large percentage of all fatalities on the road. For the past five years, pedestrians and cyclists have accounted for almost 20% of all road fatalities, despite making up only 11% of road users.^{6,7} And this number is on the rise. From 2008 to 2018, cyclist and pedestrian fatalities increased by 38% versus a 12% decline for vehicle occupants.⁸

Compounding these statistics, reliance on increased police enforcement to address dangerous driving in the name of “safety” has contributed to the disproportionate number of Black people stopped, injured, and killed by the police.⁹

PEDESTRIAN FATALITIES HAVE BEEN STEADILY RISING SINCE 2009



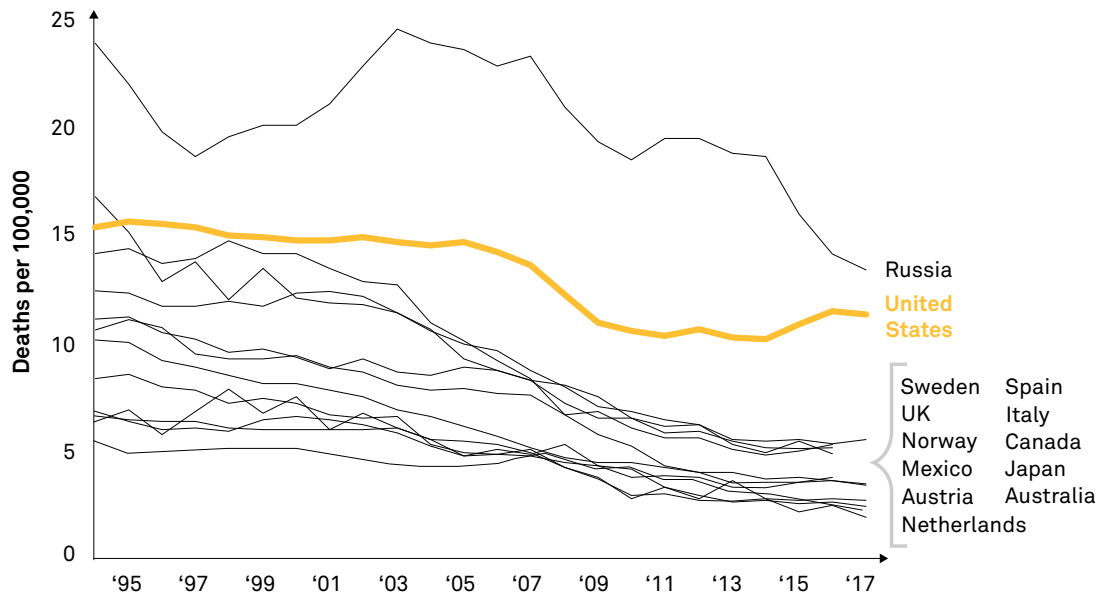
In cities, where the vast majority of pedestrians and cyclists are killed, transportation agencies have long understood that motor vehicle speed plays a key role in fatal and serious crashes, and have sought to reduce speeds and save lives. But speed limit reductions have remained out of bounds for many city transportation agencies because authority over speed limits, even on city streets, is often held at the state level, and is commonly tethered to the practice of using the existing speeds on a street to determine what the speed limit should be. This method results in higher speeds and speed limits over time.¹⁰

If the US approached speed limit setting using a Safe Systems approach, engineers would determine the speed that is safest for all people using the street and then build

infrastructure to support that speed. Instead of being forced upward over time, speeds, and fatalities, would go down as they have in the countries that use such approaches.

To reduce traffic deaths and severe injuries in the US, transportation policymakers must change their approach. Safety for all road users must be set as the foremost goal, and all decisions—about speed, infrastructure, allocation of parking and other curbside uses, enforcement, and maintenance—must be made based on how well they advance work toward zero deaths. By taking a holistic, Safe Systems approach to street design, cities can reduce speeds, build safer streets, and save lives.

TRAFFIC FATALITIES ARE DECLINING IN MOST OTHER INDUSTRIALIZED COUNTRIES, BUT RISING IN THE US¹¹





RACISM EXACERBATES THE DANGERS OF SPEEDING

Structural and individual racism exacerbate the dangers posed by speed. In their 2019 *Dangerous by Design* report, Smart Growth America finds that Black, Indigenous, and Latinx people are more likely than White people to be struck and killed by a driver.¹² Street conditions are often worse in low-income neighborhoods and those where people of color are the majority. Historically, in many cities, redlining justified underinvestment in public services for communities of color, while past and current highway siting decisions, suburban-focused traffic engineering practices, and disinvestment in urban cores, result in substandard, dangerous streets in predominantly low-income, immigrant, and BIPOC communities.¹³

Recent studies from Portland State University and the University of Nevada, have found racial bias in how quickly or frequently drivers yield to pedestrians in crosswalks.^{14,15} In particular, in higher-income neighborhoods, researchers found that drivers failed to yield

to a White pedestrian actively crossing in the crosswalk only about 3% of the time versus 21% of the time for a Black pedestrian.¹⁶

Finally, relying on traffic stops as a primary method for managing speeds can hinder larger efforts to improve overall community safety on streets and deepen the role of transportation in structural poverty, where enforcement targets low-income communities. According to the Department of Justice, about half of all interactions with police begin with a traffic stop or crash.¹⁷ But data shows that when enforcing traffic laws, police disproportionately stop Black people and other people of color, sometimes with fatal consequences.¹⁸ By focusing only on reducing traffic fatalities at the cost of increasing risk of fatalities due to police violence and undue stress, transportation planners, engineers, and practitioners erode their credibility with the communities they serve and undercut the momentum for safer streets as a whole.

Speed Kills

Speed is a central factor in traffic deaths. The National Highway Traffic Safety Administration reports that speed was a factor in a quarter of all fatal crashes in 2018.¹⁹ As speed limits and speeds increase, so do fatalities. Researchers from the Insurance Institute for Highway Safety (IIHS) found that a 5 mph increase in the maximum speed limit was associated with an 8% increase in the fatality rate on interstates and freeways, and a 3% increase in fatalities on other roads.²⁰

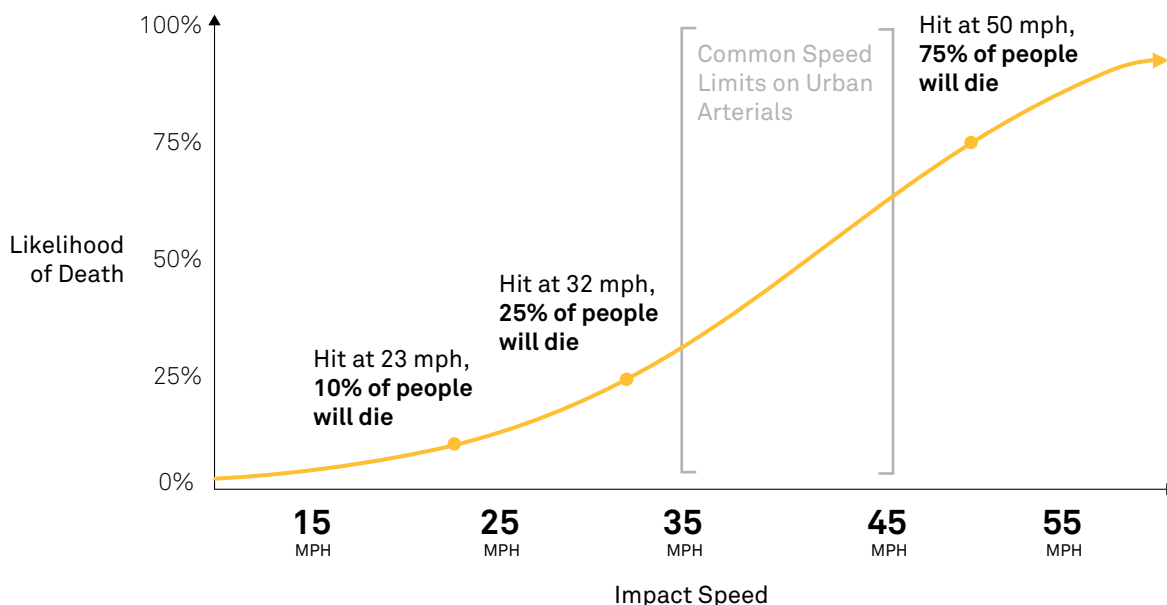
Vehicle speed at the time of impact is directly correlated to whether a person will live or die. A person hit by a car traveling at 35 miles per hour is five times more likely to die than a person hit by a car traveling at 20 miles per hour.²¹ The risk of death at every speed is higher for older pedestrians and pedestrians hit by trucks and other large vehicles.²²

High speed crashes are more likely to occur than crashes at lower speeds and, when they do occur, they're more likely to be deadly.

Higher speeds are more likely to result in crashes because the amount of time a driver has to hit the brakes or swerve decreases at higher speeds, while vehicle braking distances increase.^{23,24} A driver going 40 mph travels twice as far as a driver traveling at 20 mph before coming to a complete stop.^{25,26,27} Research also shows that drivers have less peripheral awareness at higher speeds and are less likely to see or predict potential conflicts such as people crossing the street or children playing.²⁸ Meanwhile, crashes are more likely to be fatal at higher speeds because these crashes are more forceful.

As a result, evidence shows that small reductions in speed result in large safety gains.²⁹ The *Highway Safety Manual* reports that a 1 mph reduction in operating speeds can result in a 17% decrease in fatal crashes.³⁰ A separate study found that a 10% reduction in the average speed resulted in 19% fewer injury crashes, 27% fewer severe crashes, and 34% fewer fatal crashes.³¹

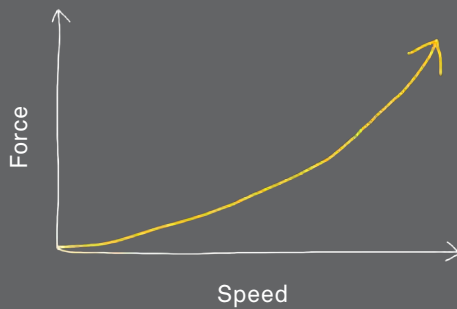
THE LIKELIHOOD OF FATALITY INCREASES EXPONENTIALLY WITH VEHICLE SPEED³²



How Speed Kills

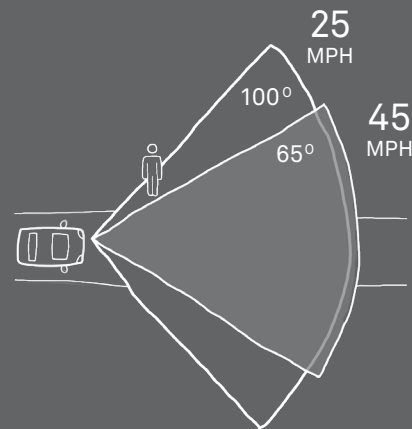
1

Crashes at higher speeds are more **forceful** and thus more likely to be fatal




2


Drivers traveling at higher speeds have a **narrower field of vision**

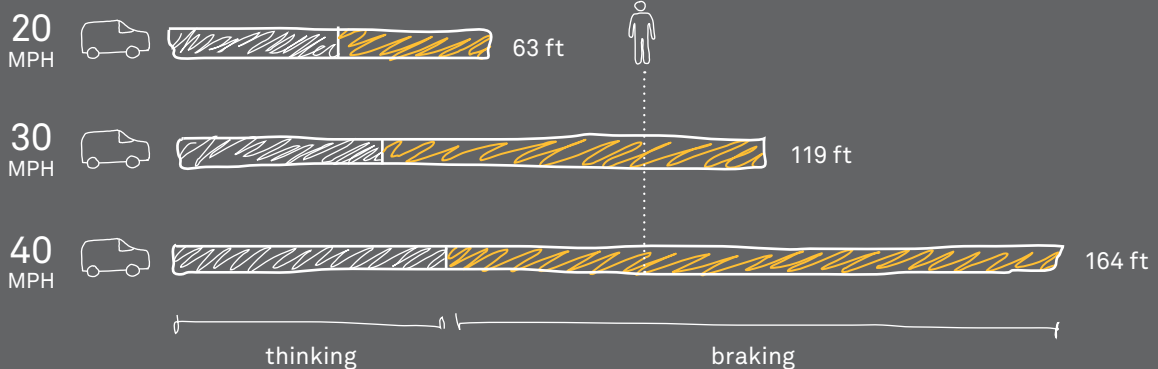


3

Drivers traveling at higher speeds **travel further** before they can react 

4

Vehicles traveling at higher speeds have **longer braking distances** 



High speed driving is particularly deadly where different types of road users share space and must interact frequently. In the US, fatal crashes are disproportionately clustered on a small group of high speed, auto-oriented streets, known as urban arterials. Between 2014 and 2018, urban arterials accounted for 29% of all fatal crashes in the US and half (49%) of all fatal crashes involving people biking or walking, despite making up only 6% of US roadways.³³

Urban arterials are typically signed for 35–45 miles per hour or higher, and are designed to support high speeds by featuring wide, highway-width lanes, sweeping turn radii, and few places to stop for people to cross. In many cities, urban arterials often lack basic protections for people outside of cars, such as sidewalks, even when bus stops are present or when the adjacent retail/commercial land uses encourage people to go there.

INCREASING VEHICLE SIZE COMPOUNDS THE DANGERS OF SPEED

In the US, the trend toward larger vehicles compounds the problems posed by excessive speeds. In 2017, 43% of pedestrian and cyclist fatalities involved an SUV, pickup truck or other light truck.³⁴ In 2015, the National Highway Traffic Safety Administration found that pedestrians are two to three times more likely to die when hit by an SUV or pickup than by a passenger car.³⁵

Larger vehicles are more lethal than smaller ones for two main reasons: they are heavier, which increases the force of the impact when combined with speed;

and they have a taller frame, which increases the likelihood that, if struck, a person (especially a child) will be pulled under the vehicle rather than pushed onto the hood.

The US trend toward larger, more dangerous vehicles is only growing. SUVs and pickup trucks outsold sedans more than three-to-one in 2019, and companies like Ford and Fiat Chrysler have announced that they will stop producing the vast majority of their sedans and compact cars.³⁶



Photo: Angie Schmitt, @schmangee on Twitter, Cleveland, OH



TWO TAKES ON SAFETY-FIRST SYSTEMS APPROACHES

Vision Zero saves lives

Shifting an entire system from unsafe to safe is not just an aspiration. Many US cities have adopted safety-first programs, to varying degrees of success. Vision Zero, Injury Minimization, and Safe Systems programs affirm safety as the top transportation priority and the most effective way to eliminate traffic fatalities. Establishing a safety-first program:

- Signals a commitment to zero traffic deaths on city streets
- Asserts a belief that such a goal is attainable
- Accepts the role of officials, engineers, and planners in making streets safer

Safety-first programs recognize that although human error is inevitable, fatalities and severe injuries are preventable through street design and management choices. Successful safety programs systematically change the way streets operate to keep users safe, even when individuals make mistakes.

Sweden has created one of the most successful Vision Zero programs to date. In 1997, when Sweden adopted its Vision Zero program, there were more than 7 traffic deaths per 100,000 people. Today, despite more than 20 years of growth in traffic volume, this number has dropped to 3 people per 100,000.³⁷

US Aviation makes an impact

By nearly every measure, commercial aviation is the safest transportation mode in the United States. There were 3 fatal crashes between 2010 and 2017, compared to 17 fatal crashes in 1960 alone.³⁸ These safety gains are the result of systemwide, interdisciplinary approaches to managing risk on the part of regulators and the commercial aviation industry.

In 1997, the White House Commission on Aviation Safety & Security and the National Civil Aviation Review Commission released reports calling for the Federal Aviation Administration (FAA) and airlines to work together to reduce fatal accidents.³⁹ In response, the FAA partnered with airlines to form the Commercial Aviation Safety Team (CAST), which uses incident data to discern safety priorities, deploys interdisciplinary teams to determine underlying crash causes, and applies interventions based on their findings.

In 2009, Continental Flight 3407 crashed, killing all 49 people on board and one person on the ground. Pilot error and fatigue were the listed causes. By 2013, the FAA dramatically increased both training and rest requirements for pilots.⁴⁰ Humans in the commercial aviation industry make mistakes. However, a systems approach to safety has resulted in substantive safety gains across the entire industry.

Designed to Fail

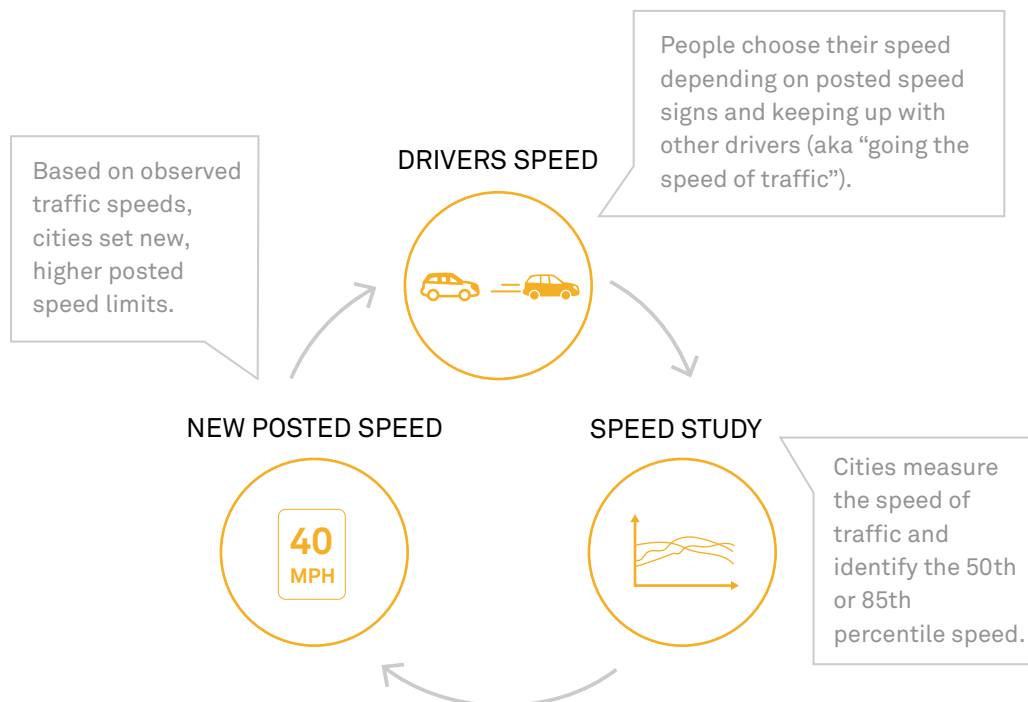
THE PROBLEM WITH PERCENTILE-BASED SPEED LIMITS

Current speed limit setting practice in the US uses a percentile-based method, typically set at the 85th percentile, to determine speeds. Traffic engineers record how fast vehicles are traveling on a road, determine the speed that 85 percent of drivers are traveling at or below, then set the new speed limit by rounding from that speed to the nearest 5 mph increment. Traffic engineers who use the 85th percentile method are instructed to raise the speed limit when more than 15% of drivers are driving faster than posted signs. This method forces engineers to adjust speed limits to match observed driver behavior instead of bringing driver behavior in line with safety goals and the law. When it comes to safety, this method is designed to fail.

Percentile-based speed limit setting methods fail at keeping people safe because they set a permanently moving target based on current human behavior, not safety.

Two issues are at play. First, percentile-based models are designed to respond to extremes. When enough people drive faster than the set percentile, the model rewards them by instructing traffic engineers to increase the posted speed.

Second, people decide how fast to drive based on both the street's design and cues such as the posted speed and other drivers' speeds. Researchers originally recommended using the 85th percentile approach to determine posted speeds, assuming that drivers always travel at reasonable speeds.⁴¹ But a growing body of research shows that drivers base their decisions at least partially on the posted speed limit.^{42,43} When they see higher posted limits, and see the resulting increased speed of their peers, they drive faster too, which results in an increased speed of the street overall.⁴⁴

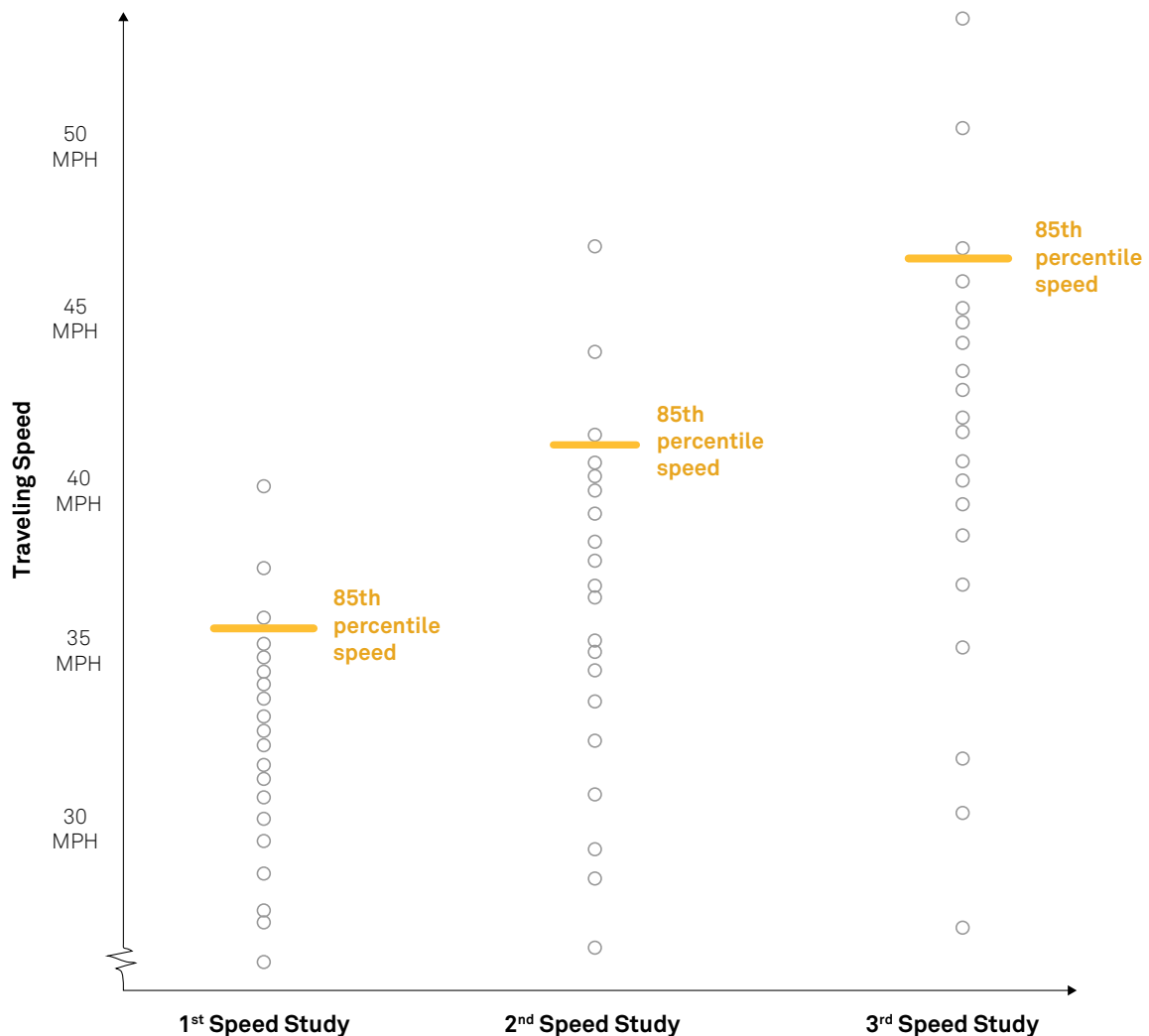


Posting higher speed limits does not increase compliance with the law. Even when higher speed limit signs are posted, some number of people will still choose to drive 5-15 mph faster than the posted limit. These “high-end” speeders travel even faster as speed limits rise and typically spread out over a

wider range of speeds. This can increase the likelihood of crashes because people are traveling at increasingly different speeds, and increases the likelihood that crashes will be fatal because they occur at higher speeds.

USING PERCENTILES TO DETERMINE SPEED LIMITS RESULTS IN INCREASED SPEEDS OVER TIME

○ = 5 vehicles (out of 100)
recorded in speed study



In cities and other urban contexts, percentile-based speed limit setting methods are particularly dangerous because they are based on outdated research that is inapplicable in urban settings.⁴⁵ The 1940s-era research supporting the 85th percentile relied on self-reported crash data and was conducted on two-lane rural highways, devoid of multimodal activity.⁴⁶ But these historic roads are a far cry from the vibrant streets and arterials that typify city streets today. In particular, rural roads and highways lack the type or volume of conflicts found in cities, such as people crossing the street, and people biking, walking, or rolling at a variety of speeds. They also lack driveways, loading, parking, and double-parking.

Los Angeles' experience with Zelzah Avenue provides a telling example of the dangers of percentile-based speed limit setting. In 2009, Los Angeles conducted a traffic speed study and raised the speed limit on Zelzah Avenue from 35 mph to 40 mph.⁴⁷ In 2018, the city again studied existing traffic speeds, and again raised the speed limit, this

time to 45 mph. While other additional factors may also have played a role in speeds inching up over time, absent any design or land use changes, the increase suggests that the 85th percentile operating speed can shift over time in accordance with the posted speed limit. Notably, this time period in LA corresponded to a 92 percent increase in pedestrian fatalities.⁴⁸

The most commonly cited alternative for the 85th percentile is USLIMITS2, an online tool developed by the Federal Highway Administration that incorporates other factors when determining speed limits. USLIMITS2 is a step forward in that it allows practitioners to also consider the street's most exposed users. However, it still relies on the 85th or, more commonly in urban areas, the 50th percentile operating speed, which is often still much higher than is safe. Relying on a percentile-based system focused on current driver behavior, rather than a defined safety target to set speed limits, significantly limits cities' ability to reduce traffic deaths.

Relying on a percentile-based system focused on current driver behavior, rather than a defined safety target to set speed limits, significantly limits cities' ability to reduce traffic deaths.

RURAL CONNECTICUT



Photo: State of Connecticut DOT

The research supporting the use of the 85th percentile method was conducted on rural, two-lane highways.

AUSTIN



Photo: Capital Metro

But streets in cities are full of people walking, biking, using transit, and driving all in close proximity. The 85th percentile method for setting speed limits has never accounted for these types of conditions.

Speed Limit Changes Have Big Impacts

Rethinking how urban speed limits are set improves safety for people in a number of ways. Even changing the posted speed limit sign creates safety benefits and allows cities to provide more and better safety treatments, and improve overall quality of life.

A growing body of research shows that speed limit changes alone can lead to measurable declines in speeds and crashes, even absent enforcement or engineering changes. For example, a 2017 Insurance Institute for Highway Safety study in Boston found that just reducing the citywide speed limit to 25 mph from 30 mph reduced speeding overall and dramatically decreased the instances of high-end speeding (vehicles traveling faster than 35 mph).⁴⁹

Similarly, in Canada, researchers at The Hospital for Sick Children found measurable safety gains after Toronto lowered speed limits from 40 kilometers per hour (~25 mph) to 30 kilometers per hour (~20 mph) on a number of local streets.⁵⁰

Recent efforts in Seattle underscore this pattern. There, the Department of Transportation saw significant speed and crash reductions when they lowered the speed limit to 25 mph and increased the density of speed limit signs on select streets.

Reducing the posted speed limit unlocks a variety of engineering and design tools that can further increase safety on a street and support other policy goals. Typically, the posted speed of a street dictates what infrastructure and safety elements can be included in the final street design. For example, if the posted speed is 30 mph, a wider curb radius will be required than if the posted speed is 25 mph. The wider curb radius increases exposure and risk for people walking and biking.⁵¹ All too often, essential pieces of safety infrastructure—raised crossings, bike lanes, corner bulb-outs—are ironically ineligible for inclusion in a street redesign because drivers are currently going too fast. In effect, the street is too dangerous to build safety infrastructure.

Reducing posted speeds creates opportunities for safer street designs that also support other policy goals. Similar to curb radii decisions, often infrastructure that supports transit and other sustainable modes like biking and walking, cannot be included in a design if the posted speed is too high. City policies around safety, economic sustainability, equity, carbon emissions reductions, and increased transit, bike, and walk mode share are interconnected. Rethinking speed limits unlocks the door for better design and safer streets, which increases opportunities for all.

All too often, essential pieces of safety infrastructure—raised crossings, bike lanes, corner bulb-outs—are ironically ineligible for inclusion in a street redesign because drivers are currently going too fast.

SPEED LIMIT REDUCTIONS ALONE CAN REDUCE SPEEDS AND CRASHES

CASE STUDY

TORONTO

In Toronto, Researchers at The Hospital for Sick Children found that on streets where speed limits were lowered from 40 kph to 30 kph, there was a 28% decrease in the number of collisions between pedestrians and motor vehicles and a 67% decline in the number of fatal and serious injuries on streets with speed limit reductions.

PEDESTRIAN-VEHICLE
COLLISIONS

-28%

FATAL & SERIOUS
INJURIES

-67%

CASE STUDY

SEATTLE

Seattle DOT replaced existing 30 mph signs spaced 1 mile apart with 25 mph signs placed ¼ mile apart on a 1.3 mile stretch of Greenwood Ave. North / Phinney Ave. North, and saw reductions in 85th and 50th percentile speeds, as well as all crashes and injury crashes. During this time, the city did not increase marketing or enforcement, nor did they make any engineering changes.

85TH PERCENTILE
SPEED

34 MPH

31 MPH

before

after

ALL CRASHES

30

21

before

after

Section 1 Endnotes

1. National Highway Traffic Safety Administration. Fatality Analysis and Reporting System. Retrieved from: <https://www.nhtsa.gov/es/research-data/fatality-analysis-reporting-system-fars>.
2. National Highway Traffic Safety Administration. Table 54: Persons Killed or Injured, by Person Type and Injury Severity, 2017. Retrieved from: <https://cdan.nhtsa.gov/SASStoredProcess/guest>.
3. World Health Organization. Global Health Observatory data repository: Road traffic deaths. Retrieved from <http://apps.who.int/gho/data/node.main.A997>.
4. National Highway Traffic Safety Administration (October 2019). 2018 Fatal Motor Vehicle Crashes: Overview. Retrieved from: <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812826>.
5. National Highway Traffic Safety Administration. Fatality Analysis and Reporting System. Retrieved from: <https://www.nhtsa.gov/es/research-data/fatalityanalysis-reporting-system-fars>.
6. Ibid.
7. National Household Travel Survey (2017). Number of Person Trips by Mode. Retrieved from: <https://nhts.ornl.gov/person-trips>.
8. National Highway Traffic Safety Administration. Fatality Analysis and Reporting System. Retrieved from: <https://www.nhtsa.gov/es/research-data/fatalityanalysis-reporting-system-fars>.
9. Stanford Open Policing Project. Retrieved from: <https://openpolicing.stanford.edu/>.
10. National Traffic Safety Board (25 July, 2017). Reducing Speeding-Related Crashes Involving Passenger Vehicles. Retrieved from: <https://www.nts.gov/safety/safety-studies/Documents/SS1701.pdf>.
11. Organisation for Economic Co-operation and Development. Road accidents. Retrieved from <https://data.oecd.org/transport/road-accidents.htm>.
12. Smart Growth America (2019). Dangerous by Design. Retrieved from: <https://smartgrowthamerica.org/app/uploads/2019/01/Dangerous-by-Design-2019-FINAL.pdf>.
13. Cusick, Daniel (21 Jan, 2020). "Past Racist 'Redlining' Practices Increased Climate Burden on Minority Neighborhoods". E&E News. Retrieved from: <https://www.scientificamerican.com/article/past-racist-redlining-practices-increased-climate-burden-on-minority-neighborhoods/>.
14. Goddard, Tara et al. (August 2015). Racial bias in driver yielding behavior at crosswalks. Transportation Research Part F: Traffic Psychology and Behaviour, 33, pp 1-6. Retrieved from: <https://www.sciencedirect.com/science/article/abs/pii/S1369847815000923>.
15. Coughenour, Courtney, et al. (January 2017). Examining racial bias as a potential factor in pedestrian crashes. Accident Analysis & Prevention, 98, pp. 96-100. Retrieved from: <https://www.sciencedirect.com/science/article/abs/pii/S000145751630361X?via%3Dihub#abst0010>.
16. Ibid.
17. US Department of Justice (October 2018). Contacts Between Police and the Public, 2015. Retrieved from: <https://www.bjs.gov/content/pub/pdf/cpp15.pdf>.
18. Stanford Open Policing Project. Retrieved from: <https://openpolicing.stanford.edu/findings/>.
19. National Safety Council. Motor Vehicle Safety Issues: Speeding. Retrieved from: <https://injuryfacts.nsc.org/motor-vehicle/motorvehicle-safety-issues/speeding/>.
20. Farmer, Charles (April 2019). The effects of higher speed limits on traffic fatalities in the United States, 1993–2017. Retrieved from: <https://www.iihs.org/api/datastoredocument/bibliography/2188>.
21. Tefft, B.C. (2011). Impact Speed and a Pedestrian's Risk of Severe Injury or Death. AAA Foundation for Traffic Safety. Retrieved from: <https://aaafoundation.org/impact-speed-pedestrians-risk-severe-injury-death/>.
22. Ibid.
23. Transportation Research Board (2012). NCHRP Report 600: Human Factors Guidelines for Road Systems. Retrieved from: http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_600second.pdf, pp. 5-12.
24. American Association of State Highway and Transportation Officials (2001). A Policy on Geometric Design of Highways and Streets. Retrieved from: https://www.bestmaterials.com/PDF_Files/geometric_design_highways_and_streets_aashto.pdf, pp. 56.
25. National Highway Traffic Safety Administration (August 2015). Safety Facts. Retrieved from: https://one.nhtsa.gov/nhtsa/Safety1nNum3ers/august2015/S1N_Aug15_Speeding_1.html.
26. University of Pennsylvania School of Engineering (April 2015). Vehicle Stopping Distance and Time. Retrieved from: https://nacto.org/wp-content/uploads/2015/04/vehicle_stopping_distance_and_time_upenn.pdf.
27. Layton, Robert, and Karen Dixon (April 2012). Stopping sight distance. Retrieved from: <https://cce.oregonstate.edu/sites/cce.oregonstate.edu/files/12-2-stopping-sight-distance.pdf>.
28. National Association of City Transportation Officials. (2013). *Urban Street Design Guide*. New York, NY: Island Press.

29. Poole, B., Johnson, S., and Thomas, L. (December 2017). An Overview of Automated Enforcement Systems and Their Potential for Improving Pedestrian and Bicyclist Safety. Pedestrian and Bicycle Information Center. Chapel Hill, NC. Retrieved from: http://www.pedbikeinfo.org/cms/downloads/WhitePaper_AutomatedSafetyEnforcement_PBIC.pdf.
30. American Association of State Highway and Transportation Officials (2010). *Highway Safety Manual*. Retrieved from: <http://www.highwaysafetymanual.org/>.
31. Nilsson, G. (2004). Traffic safety dimensions and the Power Model to describe the effect of speed on safety. *Traffic Engineering*. Retrieved from: <https://lup.lub.lu.se/search/ws/files/4394446/1693353.pdf>.
32. Tefft, B.C. (2011). Impact Speed and a Pedestrian's Risk of Severe Injury or Death. AAA Foundation for Traffic Safety. Retrieved from: <https://aaaafoundation.org/impact-speed-pedestrians-risk-severe-injury-death/>.
33. National Highway Traffic Safety Administration. Fatality Analysis and Reporting System. Retrieved from: <https://www.nhtsa.gov/es/research-data/fatality-analysis-reporting-system-fars>.
34. National Highway Traffic Safety Administration (2018). Traffic Safety Facts: Pedestrians. Retrieved from: <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812681>.
35. National Highway Traffic Safety Administration (2015). New Car Assessment Program (Docket No. NHTSA–2015–0119). Retrieved from: <https://www.federalregister.gov/documents/2015/12/16/2015-31323/new-car-assessment-program>.
36. Ulrich, Lawrence (12 September, 2019). S.U.V. vs. Sedan, and Detroit vs. the World, in a Fight for the Future. *The New York Times*. Retrieved from: <https://www.nytimes.com/2019/09/12/business/suv-sedan-detroit-fight.html>.
37. International Transport Forum (2019). Road Safety Annual Report 2019: Sweden. Retrieved from: <https://www.itf-oecd.org/sites/default/files/sweden-road-safety.pdf>.
38. US Department of Transportation, Bureau of Transportation Statistics (2014). Table 2-9: U.S. Air Carrier Safety Data [table]. Retrieved from: https://www.bts.gov/archive/publications/national-transportation-statistics/table_02_09.
39. National Civil Aviation Review Commission Archive
40. Josephs, L (13 Feb, 2019). The Last Fatal US Airline Crash Was a Decade Ago. Here's Why Our Skies are Safer. *CNBC*. Retrieved from: <https://www.cnn.com/2019/02/13/colgan-air-crash-10-years-ago-resaped-us-aviation-safety.html>.
41. Federal Highway Administration (2012). Methods and Practices for Setting Speed Limits: an Informational Report. Retrieved from: https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa12004.
42. Hu, W. and J. Cicchino (2019). Lowering the speed limit from 30 to 25 mph in Boston: effects on vehicle speeds. Insurance Institute for Highway Safety. Retrieved from: <https://www.iihs.org/topics/bibliography/ref/2168>.
43. Fridman, L., Ling, R., Rothman, L. et al. (2020). Effect of reducing the posted speed limit to 30 km per hour on pedestrian motor vehicle collisions in Toronto, Canada - a quasi experimental, pre-post study. *BMC Public Health* 20, 56. Retrieved from: <https://doi.org/10.1186/s12889-019-8139-5>.
44. National Traffic Safety Board (25 July, 2017). Reducing Speeding-Related Crashes Involving Passenger Vehicles. Retrieved from: <https://www.ntsb.gov/safety/safety-studies/Documents/SS1701.pdf>.
45. Taylor, Brian D. and Yu Hong Hwang (30 June, 2020). Eighty-Five Percent Solution: Historical Look at Crowdsourcing Speed Limits and the Question of Safety. *Transportation Research Record*. Retrieved from: <https://doi.org/10.1177/0361198120928995>.
46. Federal Highway Administration (2012). Methods and Practices for Setting Speed Limits: an Informational Report. Retrieved from: https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa12004.
47. California state law requires localities to evaluate 85th percentile speeds on a given street every seven years in order for the speed limit to be enforceable. According to the law, the city must identify the 85th percentile speed on the street and set speed limits to the nearest multiple of five.
48. California Highway Patrol. Statewide Integrated Traffic Records System. Retrieved from: <http://iswitr.chp.ca.gov/Reports/jsp/userLogin.jsp/>.
49. Hu, W. and J. Cicchino (2019). Lowering the speed limit from 30 to 25 mph in Boston: effects on vehicle speeds. Insurance Institute for Highway Safety. Retrieved from: <https://www.iihs.org/topics/bibliography/ref/2168>.
50. Fridman, L., Ling, R., Rothman, L. et al. (2020). Effect of reducing the posted speed limit to 30 km per hour on pedestrian motor vehicle collisions in Toronto, Canada - a quasi experimental, pre-post study. *BMC Public Health* 20, 56. Retrieved from: <https://doi.org/10.1186/s12889-019-8139-5>.
51. Seattle DOT (July 2020). Speed Limit Case Studies. Retrieved from: https://www.seattle.gov/Documents/Departments/SDOT/VisionZero/SpeedLimit_CaseStudies_Report.pdf.
52. Federal Highway Administration. Curb Radius Reduction. Retrieved from: <https://safety.fhwa.dot.gov/saferjourney1/library/countermeasures/09.htm>.

SAN FRANCISCO

Photo: SFMTA





2

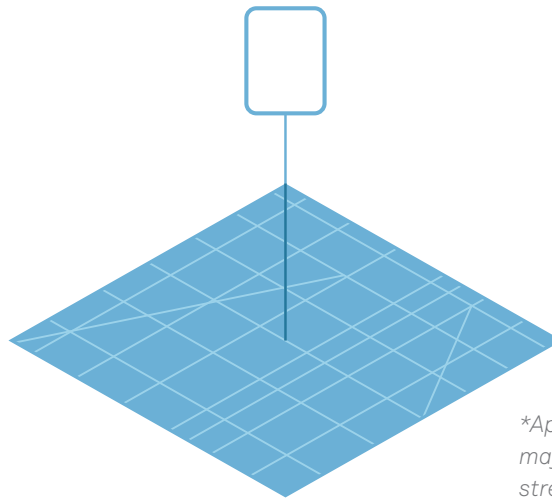
The Tools

Tools to Change Speed Limits

There are three primary tools for setting speed limits in urban areas.

Default Speed Limits*

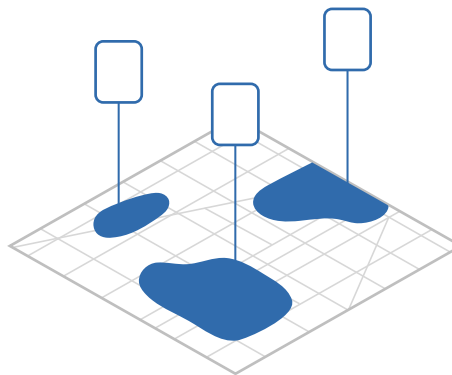
Set default speed limits on many streets at once.



**Applicable on all streets—major, minor, and shared streets / alleys*

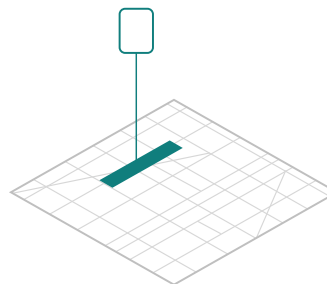
Slow Zones

Designate slow zones in sensitive areas.



Corridor Speed Limits*

Set corridor speed limits on high priority major streets using a Safe Speed Study (see page 58).



**Applicable on major streets only*

Authority to Change Speed Limits

The tool or combination of tools a city uses will depend on their authority to set speed limits. In some cases, state law already grants cities authority to set speed limits that comply with the guidance in *City Limits*. In others, state departments of transportation

or state legislation determines statewide speed limit setting requirements. In the absence of legislative or administrative requirements, city authority depends on engineering practice or law at the city level.

If the city has...

State-granted authority to lower speed limits through a locally-defined process or across many streets at once.

If possible, start by setting **citywide default speed limits** at 25 mph or below.

If desired or more politically feasible, set **default speed limits by category** of street (e.g., 25 mph on arterials, 20 mph on non-arterials).

Use a **Safe Speed Study** (see page 58) to lower speed limits below the citywide or category default on high-crash or otherwise high priority corridors. Consider using a Safe Speed Study to evaluate a batch of similar streets to lower speed limits on many streets of one type all at once (e.g., local streets).

Designate **slow zones**. Slow zones can be linear (along a street) or cover all streets within a specific neighborhood or business district.

If state or local legislation prevents any of the above, but conducting Safe Speed Studies and lowering default limits is desired, seek the authority to do so.

If the city has...

Limited authority to lower speed limits using a locally-defined process or across many streets at once.

Seek a written change in practice (leveraging *City Limits* may help).

Request that some streets be exempt from the 85th percentile requirement (e.g., **streets near schools or other sensitive areas like parks or neighborhood downtowns**).

Once the authority is established, see actions above.

Cities that have authority to set default speed limits have a number of options to improve safety on their streets. In some cities, setting the default limit citywide is the most effective approach. Citywide defaults provide a uniform, predictable limit that applies everywhere. They are relatively easy to implement and easy to explain to the public. Citywide limits can be combined with slow zones and with corridor limits on specific corridors to address conditions where a speed lower than the citywide default is necessary.

In cities where there is clear differentiation between major arterial streets and local or minor streets, cities may choose to set speeds by street type or category. Category-based limits allow cities to address significantly different street contexts but still create a predictable regulatory environment for drivers. Like citywide defaults, category-based defaults can be combined with slow zones and with corridor limits on specific streets.

In some states, cities do not have explicit authority to set their own default speed limits. These cities have different playbooks for aligning speed limits with their safety goals.

In states where the process for engineering studies is not codified in state law or practice, cities have asked for (or assumed) permission

to use a locally-defined process such as the Safe Speed Study method outlined on page 58, that is different from the 85th percentile method. In some cases, cities have used this same tactic to set default citywide or category-based speed limits by conducting “bulk studies” on a representative sample of similar streets in order to assess the appropriate speed for that category of street.

In the states where jurisdictions must set speed limits on most streets based on 85th percentile speeds, some cities have requested exemption from using the 85th percentile for specific streets (for example, streets identified in a high-injury network analysis). In these places, robust crash, fatality, and injury data collection is particularly important to make the case for exemptions.

In almost all states, cities have authority to create school slow zones. For example, in California, which codifies the use of the 85th percentile method to determine and enforce speed limits on streets across the state, the Vehicle Code allows all local jurisdictions to lower speeds in school zones that meet specific criteria. In 2019, Sacramento used this authority to reduce speed limits from 25 to 15 mph on 225 street segments across the city, even without the explicit authority to reduce default speeds citywide.

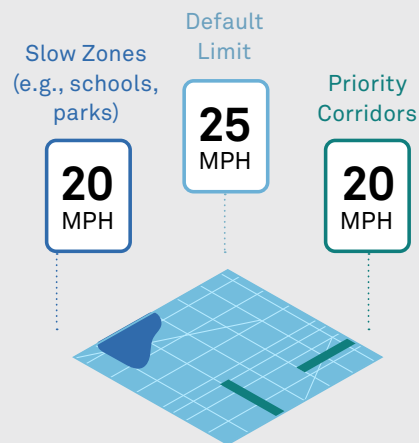


Combining Tools

Cities can combine these proactive speed management strategies to create safe conditions for their city.

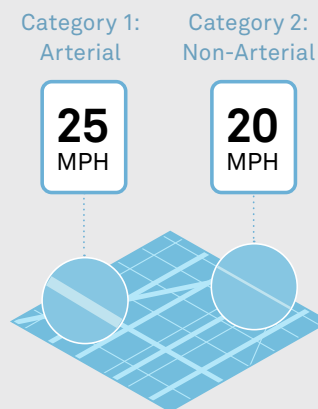
EXAMPLE COMBINATION: CITY A

City A has explicit authority to set default speeds and has chosen to set a citywide default limit of 25 mph on all streets. In addition, they have identified a few high-crash corridors and have set 20 mph corridor limits on those streets to reduce fatalities and injuries. They also have established 20 mph slow zones in key areas around schools or parks to provide additional protection for children.



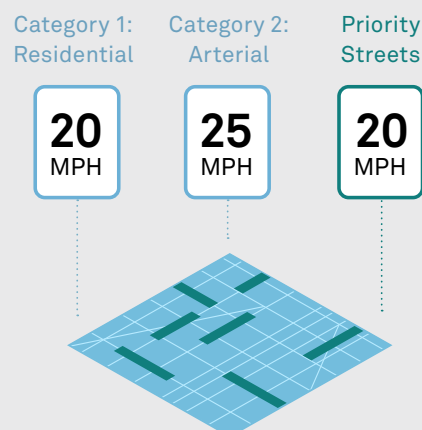
EXAMPLE COMBINATION: CITY B

City B has explicit authority to set default speed limits and has clear differentiation between major or arterial streets and minor or local streets. They have chosen to set category speed limits at 25 mph for arterials and 20 mph for non-arterials. Like City A, they may choose to also establish slow zones in key areas.



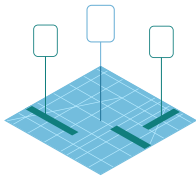
EXAMPLE COMBINATION: CITY C

City C does not have explicit authority to set default speeds. The state requires a speed study but does not lay out an explicit process. They have chosen to conduct a bulk engineering study and to use a locally-defined process for setting speeds by street category. At the same time, using authority to set speed limits on a case-by-case basis, they have conducted a Safe Speed Study to determine appropriate speed limits for a few priority corridors.



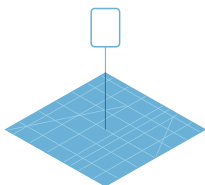
RECENT NOTABLE LEGISLATIVE CHANGES

Implementing the speed limit tools recommended in this guidance may require state-level legislative permission. A growing group of US states have passed legislation granting cities the flexibility to set safer speed limits. These supportive policies generally take one of two forms:



Authority to set context-sensitive speed limits using a locally-defined process.

Several states have passed laws that enable cities to create, adopt, and utilize an approach for setting urban speed limits that places safety as the top priority. Cities that leverage this authority do so in different ways, often by lowering default limits on some or all streets and also by updating local engineering guidance to redefine speed study procedures.



Authority to reduce default speed limits.

Some states have passed laws that explicitly allow cities to lower their default citywide speed limits (e.g., from 30 mph to 25 mph) or speed limits on a specific category of streets (e.g., “residential streets” at 20 mph).

OREGON

Oregon (Senate Bill 558) allows all cities in the state to establish a 20 mph speed limit on all non-arterial streets in residence districts under city jurisdiction. Rule 734-020-0015 allows the use of 50th percentile studies instead of 85th percentile studies on non-residential streets.



WASHINGTON STATE

Washington State has two pieces of enabling legislation that, together, allow cities to set safe speed limits:

RCW 46.61.415 allows local agencies to establish/alter maximum limits on local streets.

WAC 468-95-045 is a modification to the State MUTCD that provides local jurisdictions with considerations about what requirements they need to meet to revise the posted speed limit.

MINNESOTA

Minnesota Statute (Section 169.14, Subd. 5h - Speed limits on city streets) allows cities to establish speed limits on city streets based on the city's safety, engineering, and traffic analysis. Speed limits must be set in a consistent and understandable manner.

MASSACHUSETTS

Massachusetts (MGL c. 90 § 17C) allows "thickly settled" cities and towns to adopt a 25 mph default speed limit by ordinance for all streets unless otherwise posted. Cities and towns can also set 20 mph safety zones, which they can use their own criteria to create.

NEW YORK STATE

New York State Assembly Bill 10144/Senate Bill 7892 amended section 1642 of the Vehicle and Traffic Law to allow New York City to set a speed limit of 25 miles per hour, down from 30 mph, on streets that are not part of the State highway system. This was followed by NYC Local Law 54 of 2014, which enacted a citywide speed limit of 25 mph unless otherwise posted.

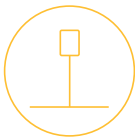
POLICY HURDLES

A city's ability to change speed limits is impacted by rules and practices around enforcement, signage, and design requirements.



Enforcement

A city's ability to enforce the posted speed limit depends on whether speed limits in the state are Absolute, Prima Facie, Basic Speed Law, or a combination of the three. When drivers are ticketed in a state with absolute speed limits, the ticket will typically stand on face value. In states with prima facie, or presumed, speed limits, drivers can contest tickets in court on the basis that their speed was safe for the conditions. In basic speed law states, drivers are required only to travel at a safe speed, regardless of the posted speed limit. A growing body of evidence shows that drivers respond to posted speed limits even without changes to enforcement; cities may want to make speed limit changes even when enforcement is difficult.



Signage

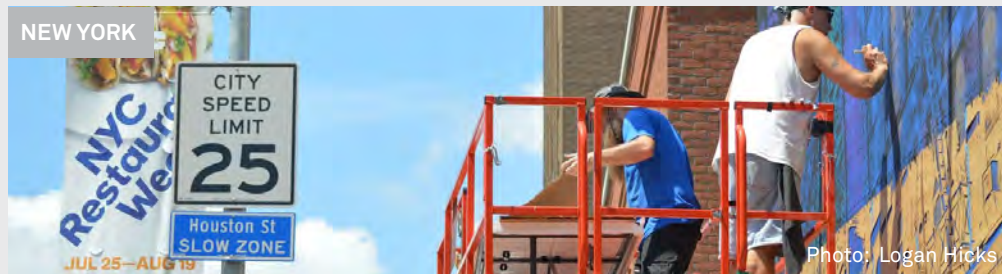
In some states, a city must install a sign on every block if the posted speed limit is anything other than the citywide default. This is feasible when the city lowers the limit on a small number of segments, but becomes prohibitively expensive at a large scale (e.g., across all residential streets).



Design

In some states, cities must implement physical design changes to streets in order to justify lower speed limits. Requiring engineering changes before cities can change the posted limit can make it difficult for cities to change speed limits on a large number of streets because of the cost. Other cities must reduce speed limits before they can make design changes, since the design speed is set in relation to the posted speed on a given street.

Case Studies in Lowering Speed Limits



Recognizing the importance of lowering speed limits to improve safety, a number of cities have successfully amended their speed limits in recent years. The four cities highlighted below present interesting lessons learned for other municipalities looking to lower speed limits on their streets.

SEATTLE

In 2016, Seattle lowered its default speed limit from 25 to 20 mph on neighborhood streets and from 30 to 25 mph on arterials. The City has also begun to reduce speed limits within urban villages, where lots of people walk, bike, drive and use transit.

Resources: [Seattle DOT Speed Limits Website](#), [Seattle DOT Blog](#)

NEW YORK CITY

In 2014, New York City lowered its default citywide speed limit from 30 to 25 mph, which complemented a Neighborhood Slow Zone program implemented in 2011.

Resources: [2014 NYC Vision Zero Action Plan](#), [Borough Pedestrian Safety Action Plans](#), [Families for Safe Streets](#)

CAMBRIDGE

In 2016, the City of Cambridge lowered its default citywide speed limit from 30 to 25 mph. In the years since, Cambridge has leveraged authority to further reduce speed limits to 20 mph in Safety Zones to reduce speed limits to 20 mph on nearly every street in the city.

Resources: [City of Cambridge Speed Limits Website](#)

PORTLAND

In 2018, Portland lowered the default speed limit on residential streets from 25 mph to 20 mph. This change complements 20 mph speed limits in business districts.

Resources: [Portland Bureau of Transportation Speed Limits Website](#), [50th Percentile Allowance on Non-Residential Roads](#)

CASE STUDY

SEATTLE



Photo: City of Seattle

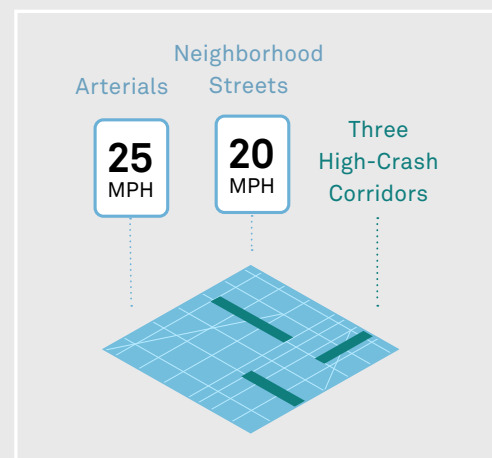
In October 2016, the Seattle City Council passed an ordinance to lower the **default speed limit** from 25 to 20 mph on 1,250 miles of neighborhood streets and the **default speed limit** from 30 to 25 mph on arterials. This change was the result of a months-long legislative process initiated by Seattle DOT leadership.

To build their case for lower speed limits, Seattle DOT (SDOT) staff compiled two documents. The first was a detailed history of the city's 1934 decision to reduce speed limits to 25 mph on arterials and 20 mph on residential streets, and their 1948 decision to raise the default maximum speed across the city from 25 to 30 mph. The second was a data-based justification for lower speed limits in 2016. In this document, SDOT made the case that the built environment, the city's Vision Zero commitment, and recent mode shift away from driving and toward walking, biking, and taking transit all signaled a need for lower, safer speed limits. SDOT also included speed and safety data from all of their recent Vision Zero pilot projects.

In November 2016, the new law went into effect. This campaign was a success in large part because of the data that SDOT used to

support their request. SDOT also included a variety of stakeholders during the process—the transportation director, a city council member, a lawyer from the law department, the city traffic engineer, and a public engagement specialist.

Since the law passed, SDOT has built on the momentum of reducing speed limits across the city to leverage existing state-level authority to reduce speed limits on **3 high crash corridors** using a context-sensitive engineering study. They are also leveraging both of these tools to reduce speed limits at a neighborhood scale in particular zones.



CASE STUDY

NEW YORK CITY



Photo: City of New York

New York City has worked for over a decade on comprehensively reducing speeds on streets across its five boroughs. In 2011, the City installed its first **Neighborhood Slow Zone**: a program that revamps small (about ¼ square mile) residential areas with low traffic volumes and minimal through traffic, with 20 mph on-street markings, signs, speed humps, and other traffic calming treatments. This program quickly expanded to over two dozen neighborhoods, increasingly demonstrating the large demand for safer streets across the city.

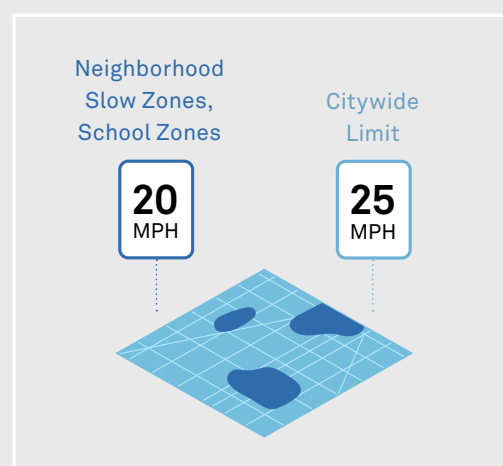
In 2013, family members of people killed in traffic crashes in New York joined with City Council members and local agencies to petition the State Legislature to reduce speed limits. At the time, the citywide speed limit was 30 mph, the lowest allowed by state law. The campaign hit political hurdles and the State took no action.

The next year, New York City rolled out its Vision Zero Action Plan, which called for City Hall to lead a campaign to reduce the **citywide speed limit** to 25 mph.

With the combined advocacy of a years-long campaign by local safe streets advocates, as well as sustained pressure from the Mayor's Office and city agencies, the state legislature

passed a new bill in June 2014 authorizing New York City to lower its citywide speed limit. The City promptly took action, and a new **citywide speed limit** of 25 mph went into effect in November of the same year.

In the same legislative session, the State Legislature also granted New York City permission to establish an automated speed enforcement program with a limited number of cameras located in school zones. The program was successful, with speeds lowered by an average of over 60 percent in camera locations. In 2019, the City obtained new authority to expand this program more than five-fold, from 140 to 750 active zones.



CASE STUDY

CAMBRIDGE



Photo: City of Cambridge

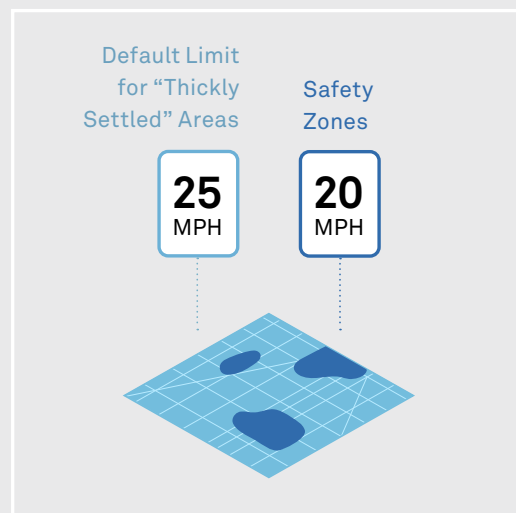
In 2016, the City of Cambridge lowered speed limits to 25 mph **citywide** and began implementing 20 mph **safety zones** in 2018. Cambridge—along with other cities and towns in Massachusetts—have the right to set speed limits for “thickly settled” areas under the state’s 2016 Municipal Modernization Act.

Prior to this reform, the default speed limit in thickly settled areas was 30 mph and required a speed study to change a speed limit. But when a new Governor was elected in 2015, his office asked all municipalities how the legislature could update state regulations to make cities more effective. Among the asks was a request for greater local authority in setting speed limits.

The law allows any city or town to adopt citywide default limits of 25 mph for areas that meet the definition of thickly settled (homes or businesses spaced 200’ or less apart) and safety zone limits of 20 mph with local government approval. The definition of safety zone is broad, taking into account the

presence of vulnerable users, schools, parks, and senior centers, among other factors. Implementation of a Safety Zone on streets under municipal control does not require State authorization.

In 2019, using this authority, the City of Cambridge embarked on an effort to reduce speed limits to 20 mph on most streets. At the time of publication, Cambridge has successfully reduced speed limits to 20 mph on the majority of streets in the city.



CASE STUDY

PORTLAND



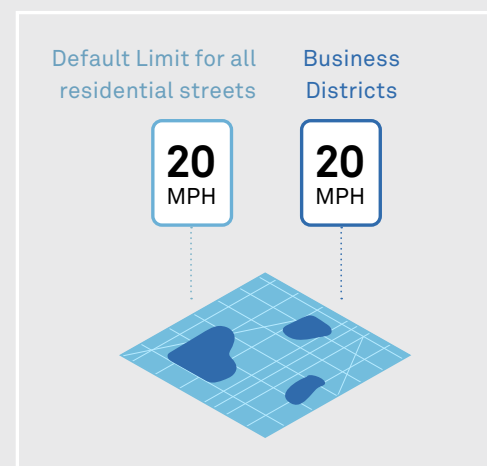
In 2018, Portland City Council approved an ordinance that lowered the speed limit on **all residential streets** to 20 mph, a change that resulted in reductions on 70 percent of the city's street network.

Oregon state law also allows the city to implement a 20 mph speed limit in **business districts** and to lower speed limits on specific non-residential streets pending approval from Oregon DOT in each case.

In Portland, there are 228 miles of non-residential arterials with speed limits between 35 and 45 mph where most road deaths occur. Effective May 1, 2020, the Oregon DOT began using a revised speed setting methodology for streets like these in urban areas that weighs 50th instead of 85th percentile speeds, and that better accounts for the presence of exposed road users, street design, and land use characteristics. This important change came after years of coordination between City of Portland staff and Oregon DOT staff to develop a revised methodology for determining speed limits on non-residential streets.

After a speed limit change is approved, but before installing new signs, City of Portland staff notify neighborhood residents about the speed limit changes, along with officials at the local transit agency, which notifies their operators.

Where possible, City of Portland staff work to coordinate speed limit reductions with street redesigns, such as road reorganizations. However, Portland frequently reduces speed limits on streets without any expected near-term changes in street design or enforcement.







3

The Right Speed Limits

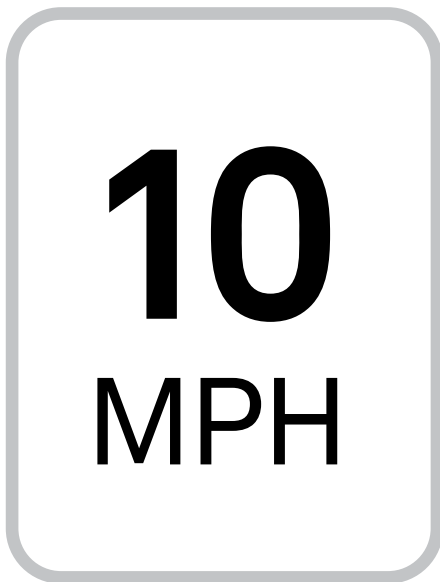
PORTLAND

Photo: City of Portland

Recommended Speed Limits

This document recommends maximum speed limits of 10–25 miles per hour for most city streets, increasing to 35 mph only in select, limited cases. The maximum recommended speed limit for any shared street or alley is 10 mph, and the maximum recommended speed limit for any minor street is 20 mph. The maximum recommended speed limits are based primarily on speeds that minimize risk to pedestrians and cyclists.⁵²

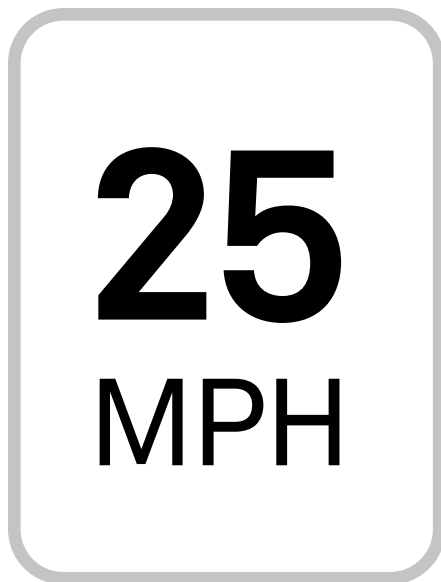
SHARED STREETS & ALLEYS



MINOR STREETS



MAJOR STREETS

**20**
MPH**25**
MPH

On major streets, where conditions vary widely, cities can conduct a Safe Speed Study to determine the safest maximum speed limit (see page 58). In urban areas, a Safe Speed Study will most often result in a recommended maximum speed limit of 20 or 25 mph for major streets.

30
MPH**35**
MPH

For streets that have well-protected places for people to walk and bike, and that are in low density areas with primarily manufacturing and residential uses, cities may find that a 30 or even 35 mph speed limit is appropriate. However, these higher speed limits should be used sparingly and only in cases where safe conditions can be met.



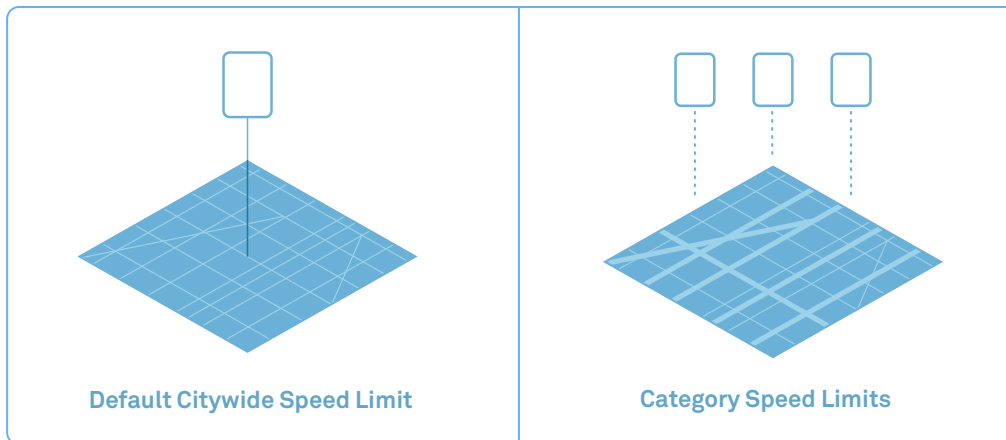
BOULDER

Photo: Kevin J. Krizek, Professor,
University of Colorado Boulder

Default Speed Limits

Applicable on all streets—major, minor, and shared streets / alleys

Default Speed Limits

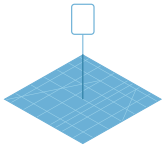


Cities have two options for setting default speed limits: **citywide** or **by street category** (e.g., major, minor, alley).

Citywide speed limits are generally easier to implement and may be easier for drivers to follow. However, in cities where there is clear differentiation between major arterial streets and local or minor streets, setting speed limits based on category of street can sometimes allow cities to lower speed limits

on a large number of streets below what would be allowable citywide (i.e., 20 mph on minor streets vs. 25 mph citywide).

If cities have the authority to set default speed limits, they should decide whether to implement citywide limits or category limits based on what makes the most sense given the local conditions.



Citywide Speed Limits

Default citywide speed limits, or “unless otherwise posted” speed limits, provide a jurisdiction-wide speed limit in effect at all times and on all streets, except where a different speed limit sign is in place. These are generally the easiest speed limits to implement, and are usually enacted through law.

Setting or lowering default citywide speed limits is an inexpensive, scalable way to quickly improve safety outcomes, and establish a basis for larger safety gains. Default citywide limits also provide consistent expectations and messages about speed across the jurisdiction, which is easy for drivers to follow.

**Recommended
default citywide
speed limit:**

**25
MPH**

The Boston Globe

Boston is set to lower its speed limit in Jan.

By Andy Rosen Globe Staff, November 30, 2016, 4:45 p.m.

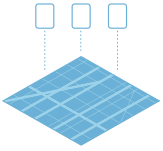


City of Atlanta reduces speed limit to 25 mph



Top: The City of Boston lowered the default citywide speed limit to 25 mph in January 2017.

Bottom: In April 2020, the City of Atlanta voted to lower the default citywide speed limit to 25 mph.



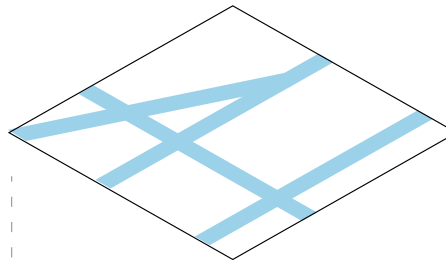
Category Speed Limits

Category speed limits apply speed limits to specific categories of streets based on broad classes, such as major streets, minor streets, and alleys, allowing cities to set a small number of speed limits that apply to nearly all streets. This simple categorization scheme allows cities to quickly adjust speed limits on most streets, and frees up resources to focus on high-crash corridors or

places where site-by-site analysis is necessary. Depending on the city, setting speed limits by category might be more politically feasible than setting a default citywide limit. If setting categories based on major and minor streets, practitioners should develop definitions for these streets that are easy to use based on existing local data.

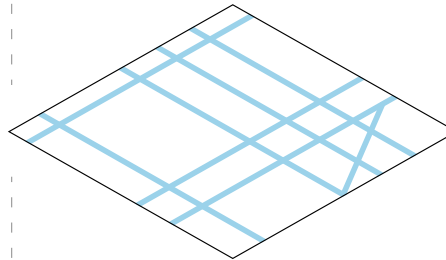
MAJOR
STREETS:

25
MPH



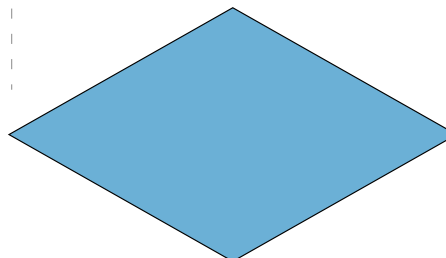
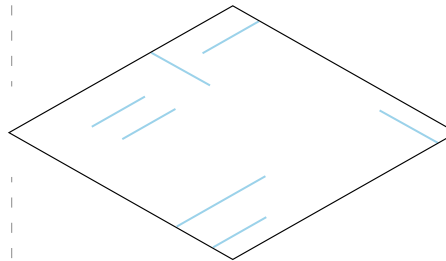
MINOR
STREETS:

20
MPH



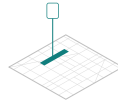
SHARED
STREETS
& ALLEYS:

10
MPH



MAJOR STREETS

A 25 mph speed limit on urban multi-lane streets has demonstrable safety benefits for all users.^{53, 54} Major streets feature a combination of high motor vehicle traffic volume, signalization of major intersections, and an inherently multimodal street environment.



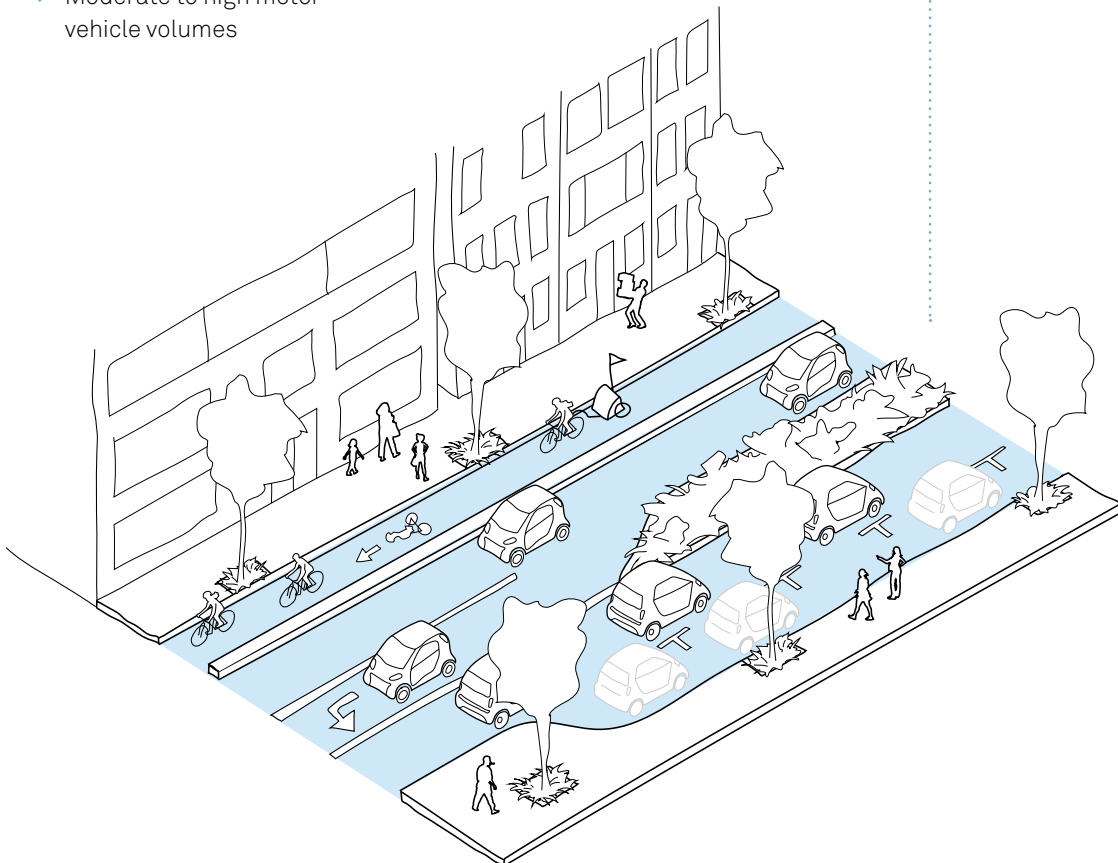
If unable to set a category speed limit for *all* major streets, cities should conduct a Safe Speed Study for high-priority major streets on an individual basis. See Safe Speed Study section on page 58.

Major streets are often characterized by:

- Signalized intersections
- Few, if any, all-way stop intersections
- At least two formal (marked) motor vehicle traffic lanes, and usually more
- Frequent transit stops
- Moderate to high motor vehicle volumes
- Multi-lane downtown one-way and downtown two-way streets, as well as many neighborhood main streets, multi-way boulevards, and transit boulevards as described in the NACTO *Urban Street Design Guide*

Recommended category speed limit for Major Streets:

**25
MPH**



MINOR STREETS

A 20 mph speed limit on minor streets supports safe movement and contextually appropriate design on the majority of city streets.⁵⁵ Since minor streets tend to have either very low volumes or operate at the speed of the most cautious driver, cities can apply a category speed limit to minor streets without detailed review of street characteristics.

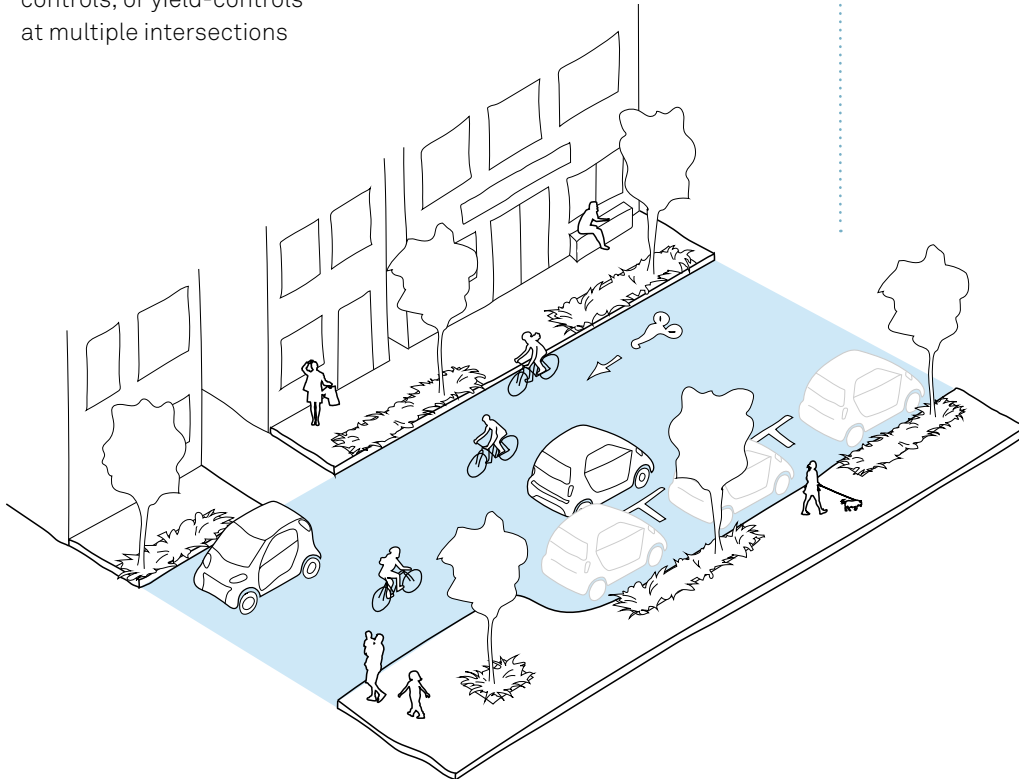
Minor streets include physically small streets where low speeds are often already present, as well as low-vehicle-volume streets with few or no transit stops.

**Recommended
category speed limit
for Minor Streets:**

Minor streets are often characterized by:

- A single moving vehicle lane (one- or two-way)
- Two moving vehicle lanes but fewer than 6,000 vehicles per day
- A “minor” or “local” definition in a citywide street typology or street plan
- Stop controls, all-way stop controls, or yield-controls at multiple intersections
- Yield streets, neighborhood streets, some residential boulevards, one-lane downtown one-way and two-lane downtown two-way streets as described in the NACTO *Urban Street Design Guide*
- Lateral, service, or access roadways along multiway boulevards

**20
MPH**



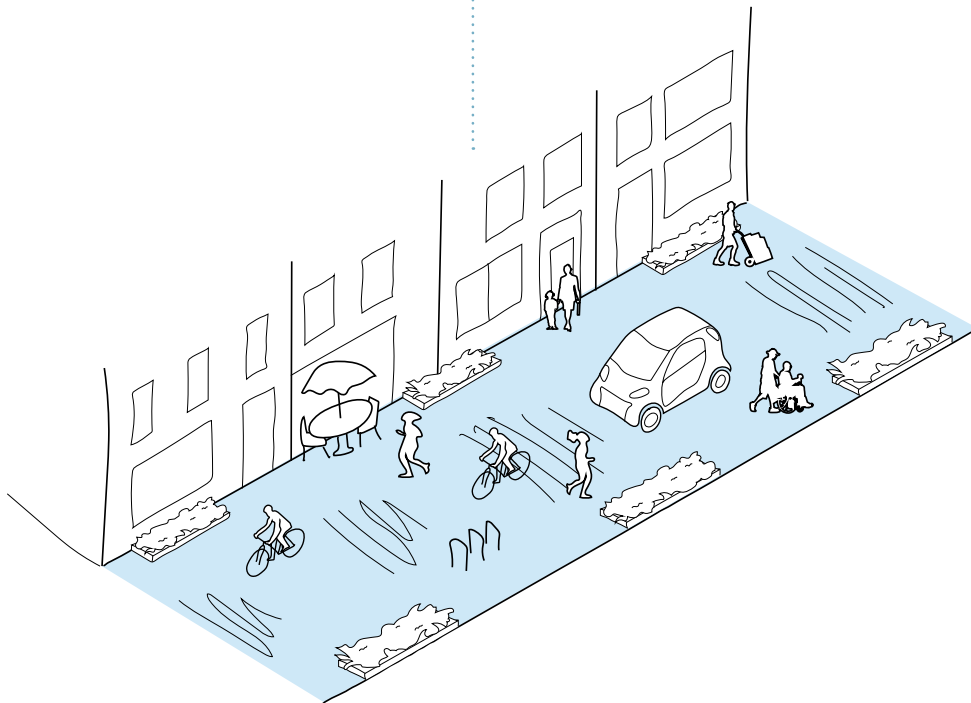
SHARED STREETS & ALLEYS

Shared street surfaces where people are expected to walk in front of motor vehicles or against oncoming motor vehicles call for the lowest category speed limits. Especially in places where large vehicles routinely enter shared street spaces, speed limits even lower than the recommended 10 mph may be advisable.

A 10 mph speed limit is also appropriate for dead ends, laneways, some service/parking/access roads along multiway boulevards, and other streets where walking, playing, or public space activities are expected in the roadway.

**Recommended
category speed
limit for Shared
Streets & Alleys:**

**10
MPH**





**SPEED
LIMIT
20** is Plenty

seattle.gov/visionzero

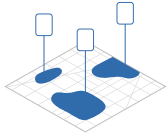
**VISION
ZERO**

SDOT
Seattle Department of Transportation

SEATTLE

Photo: City of Seattle

Defining Slow Zones



Defining Slow Zones

Slow zones are specifically designated areas with slower speeds than otherwise similar streets in the same jurisdiction. Neighborhood-scale or site-specific zones are useful for addressing high-priority areas such as areas with

elevated collision rates or sensitive land uses such as schools or parks. Cities should create slow zones based on their own location-specific needs, but several types of slow zones are relatively common.



Photo: City of New York

School, Park, & Senior Areas

School, park, and senior area slow zones, as well as slow zones in other sensitive environments, encourage slow speeds in areas with a high concentration of people who are at special risk on the street. In these zones, speeds on major streets may be set as low as 15 mph. Time-of-day school speed limits can be used when the school is an uncharacteristically sensitive place compared with the rest of the street (e.g., a 15 mph limit is appropriate near a school on a major street that would otherwise default to 25 mph).

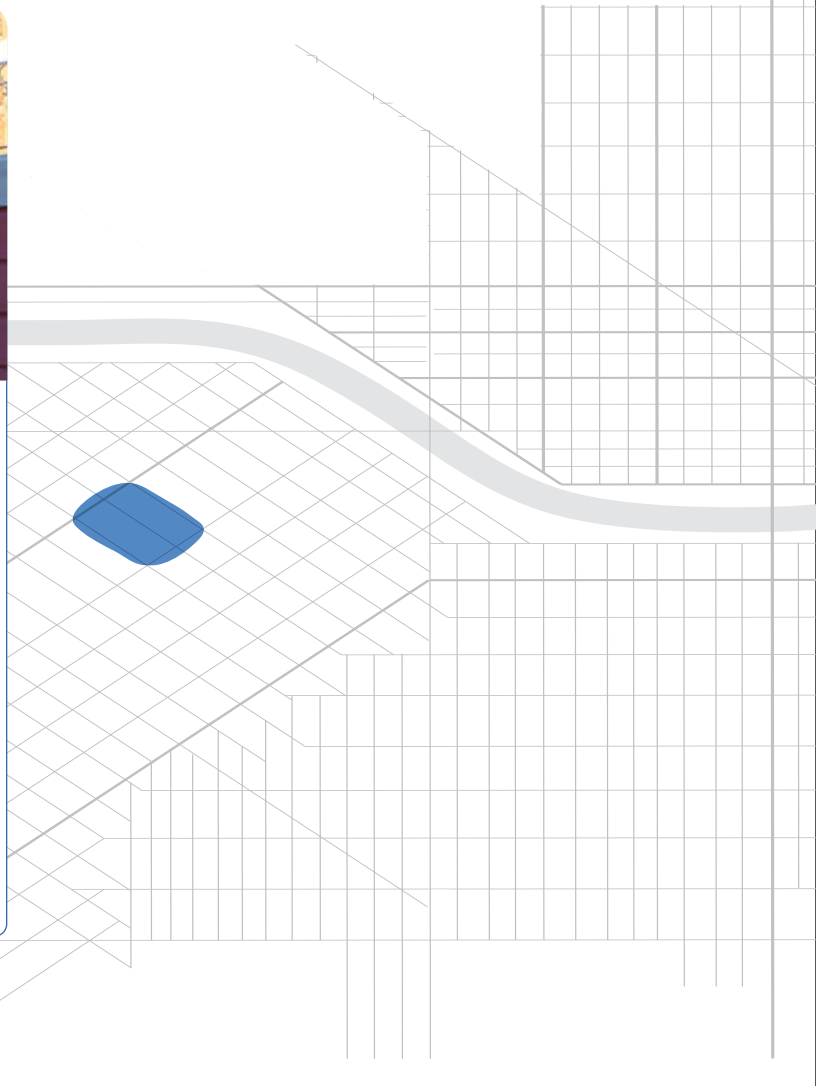




Photo: City of Boston

Neighborhoods & Districts

Neighborhood slow zones and district speed zones are implemented at a neighborhood-wide or district-wide scale. Sometimes these are also called Safety Zones or Neighborhood 20 mph Zones. The recommended maximum speed limit for these zones is 20 mph, and they are often accompanied by either vertical traffic calming elements or specific markings.



Photo: Scott Kocher, City of Portland

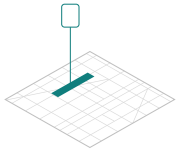
Downtown

Downtown slow zones or safety zones are a form of district speed zones in high density downtown areas or neighborhood downtowns where conflict is normal and should be expected, even on major streets. The recommended maximum speed limit for these zones is 20 mph.



Corridor Speed Limits

Applicable on major streets *only*



Setting Speeds on Major Street Corridors

In some jurisdictions or on certain types of streets, cities may be required to conduct a speed study to determine the appropriate speed limit. In other places, cities may want to conduct a speed study to justify lower speed limits on high-crash corridors below what they are typically authorized to do through citywide or category mechanisms. In these cases, a Safe Speed Study is the appropriate tool to use.

Safe Speed Studies are a contextually sensitive tool for determining the correct speed limit for a major street corridor. The Safe Speed Study methodology analyzes conflict density and activity level, among other contextual factors, to determine the speed limit that will best minimize the risk of a person being killed or seriously injured. In general, high conflict, high activity streets

will require lower speed limits since the risk of a crash is high, while somewhat higher speeds can be tolerated on low conflict, low activity streets.⁵⁶

This section provides step-by-step guidance for conducting a Safe Speed Study on major street corridors. Safe Speed Studies should be used whenever a corridor speed study is required or desired and should be used in lieu of a percentile-based speed study.

To minimize the risk of a person being killed or seriously injured, cities should set speeds based on conflict density and activity level.

LONGBOAT KEY, FLORIDA

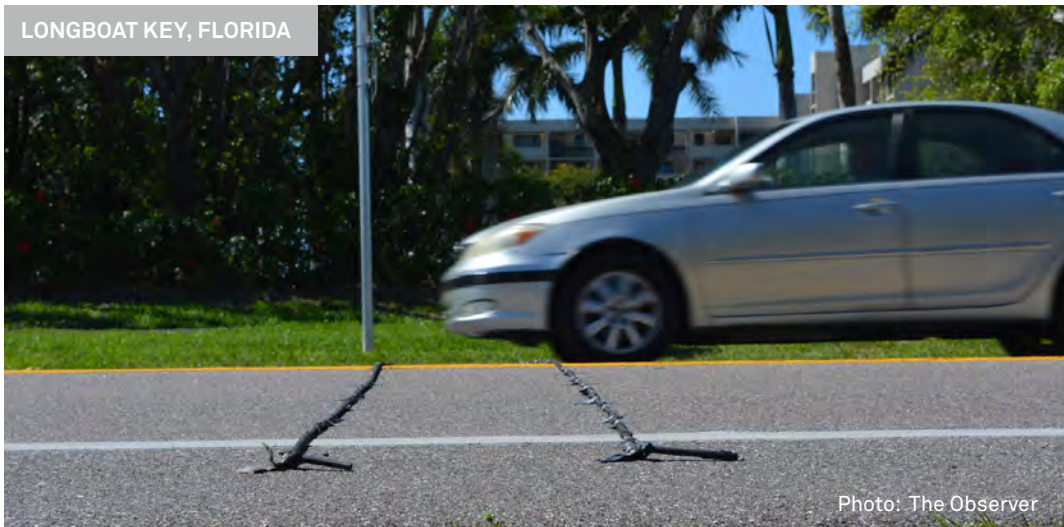


Photo: The Observer

How to Conduct a Safe Speed Study

There are four main components of a Safe Speed Study: collect data, analyze existing conditions, determine how to manage speeds down, and evaluate changes.

1 ● ○ ○ ○ Collect Before Data

Begin by collecting data about corridor conditions and crash history.

2 ● ● ○ ○ Analyze Existing Conditions

Analyze the corridor, focusing on the frequency of conflict and the amount of activity, and use the risk matrix on page 63 to determine the appropriate posted speed.

3 ● ● ● ○ Determine Best Option for Speed Management

Decide on the best option to manage speeds along the corridor using the decision tree on page 73.

4 ● ● ● ● Conduct an Evaluation

Evaluate speed management efforts through pre- and post-implementation data evaluation.

A Safe Speed Study should be conducted for the longest relevant segment of a street corridor. If a corridor changes significantly at a specific point, it can be divided into two or more segments.

Cities should avoid studying every block or every segment of a long corridor. Instead, cities should identify key locations for study and select the lowest practicable speed limit for the longer segment to manage both safety and legibility along the corridor.⁵⁷

A Safe Speed Study can also be performed for a large area or district. As with corridor studies, it is not necessary to record data on every block within the district. Instead, district-wide corridor speed limits can be set based on an assessment of a typical street within that district. In most cases, selecting 20 to 30 representative blocks at random will provide a reasonable sample of speeds for a category of similar streets, regardless of the size of the city.

1 ● ○ ○ ○

Collect Before Data

Collecting before/after data allows cities to better understand the need for changes and helps them to more clearly communicate project benefits and impacts to the public. Before implementing a speed management project or policy, cities should collect and evaluate data such as existing speeds, speeding opportunities, fatal and serious injury crashes, and conflict counts. More information about collecting and using data to improve safety is provided on page 82.

Each type of data provides different information. For example, information on speeding opportunities and conflict counts indicate the potential for a serious crash while a history of serious or fatal crashes indicates an existing problem that could be resolved with lower speeds. Before/after evaluation data is needed for understanding the conditions on a corridor but is not essential to determine what the new speed limit should be.

When using crash report forms to assess the issues on a corridor, it is important to remember that these reports are often inconsistent. The US does not have a uniform crash reporting form or protocol across jurisdictions. In addition, most crash report forms lack a way to record the secondary crash factors, such as speed or road design, that contribute to the incident.

According to the National Highway Traffic Safety Administration, speed is a major factor in 25% of traffic fatalities.⁵⁸ In 2018, eight percent of fatal crashes were primarily due to speeds being “too fast for conditions,” and the other 17% were due to some other type of speed-related issue. However, there is evidence suggesting that speed may be an even larger contributor to the rising US fatality rate than the national statistics show.

DATA TYPES



Existing speeds: how fast drivers are traveling on the street. Cities should evaluate a range of metrics, including high-end speeding, speeding, standard deviation, median speed, and 85th percentile speed (see page 85).



Speeding opportunities: locations where drivers are comfortable exceeding a safe speed because of the design and environment of the street.



Fatal and serious injury crashes: a five-year history (if possible) of all crashes that resulted in a fatality or a serious injury, including the location of the crash and the circumstances of the crash (e.g., left turning vehicle, sideswipe, etc.).



Conflict counts: how often two people or vehicles are on a collision course and must take evasive action to prevent a crash.

2 ●●○○

Analyze Existing Conditions

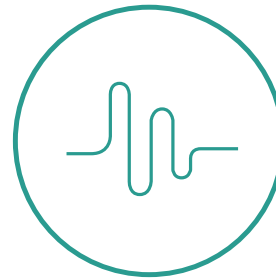
When determining a safe speed limit for a major street, there are two primary considerations:



CONFLICT DENSITY

How frequently potential conflicts arise on a given street

A conflict exists when a normal interaction, such as crossing the street while turning vehicles yield, is so close and at such a speed that a crash would happen unless sudden action is taken. In urban conditions, this is usually a factor of how separated modes are, and what the crossing demand is.



ACTIVITY LEVEL

How active a street currently is or is expected to be

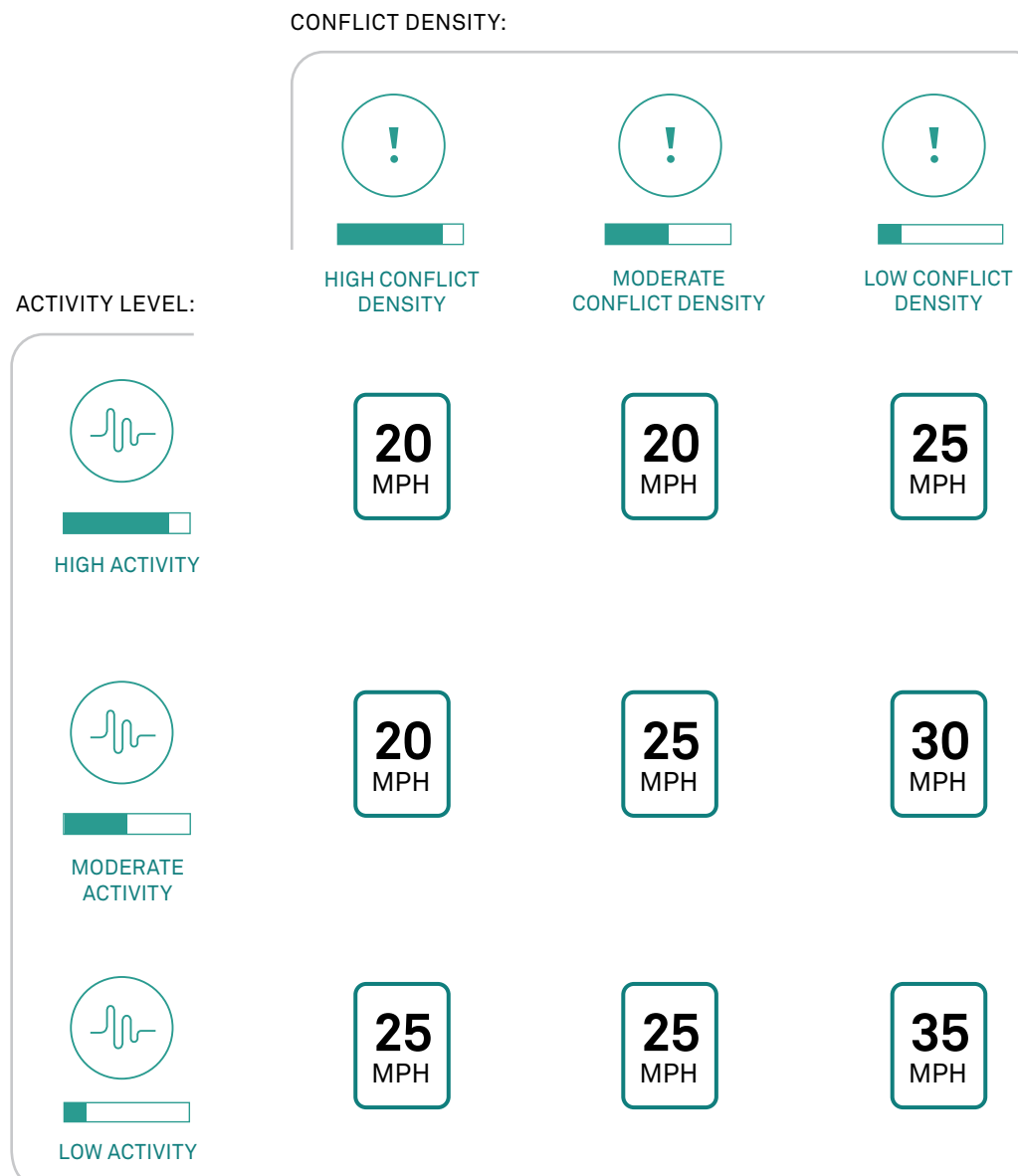
Crashes that cause fatalities or serious injuries are generally the result of conflicts happening at speeds that are too high for a human body to endure. Therefore, streets with a greater number of potentially serious conflicts and a higher level of activity should have lower speed limits.

RISK MATRIX: CONFLICT DENSITY AND ACTIVITY LEVEL

The framework below summarizes a method for determining maximum safe speed limits based on the density of conflict points and level of activity on a major street. On urban streets where cities are required to conduct a study to determine the correct speed limit, they should use this framework instead of

the passive 85th percentile speed study that the *MUTCD* recommends for highways.

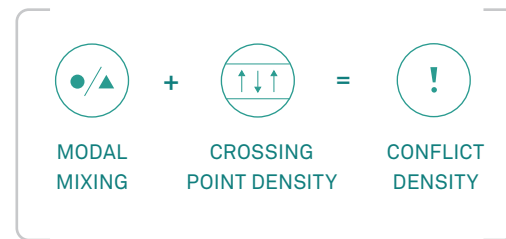
The following pages provide thresholds for each activity and conflict density level, and apply these thresholds to example streets in North America.





CONFLICT DENSITY

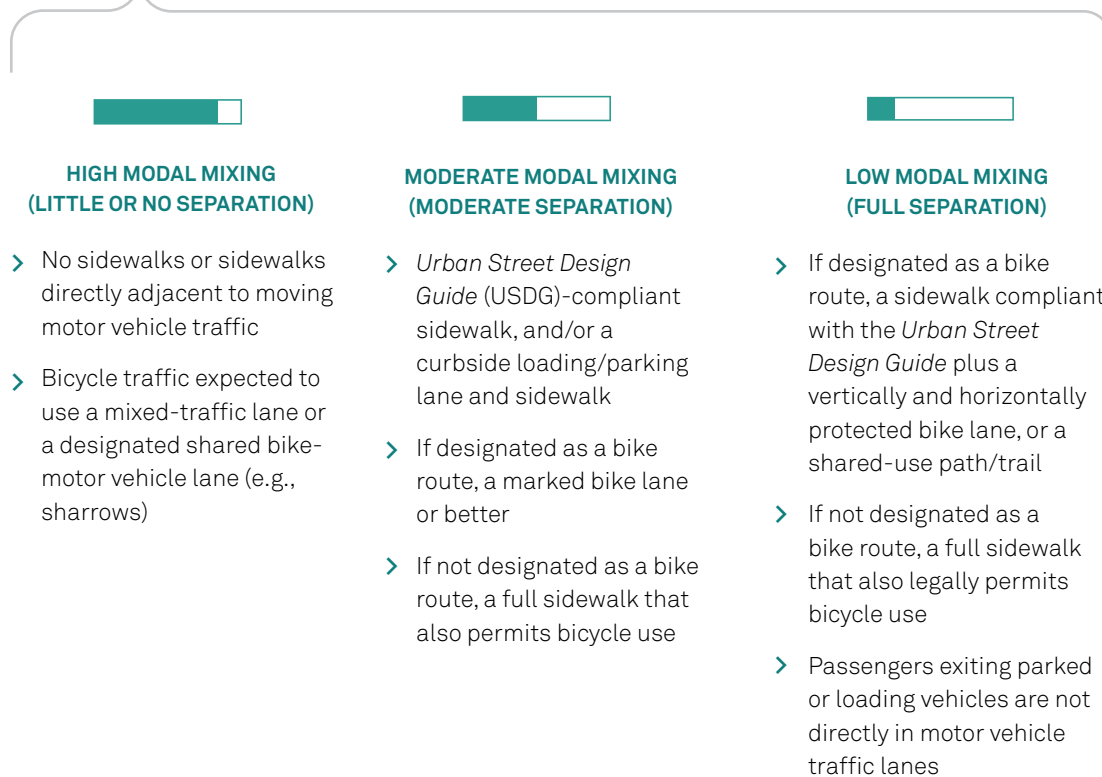
Two primary factors determine how frequently potential conflicts between motor vehicles and people walking or bicycling arise on the street:

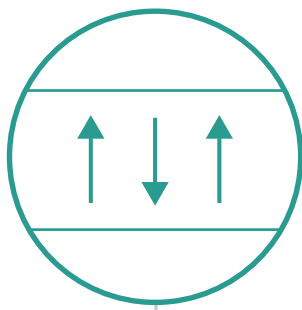


MODAL MIXING

How much physical separation the street offers people walking, biking, and rolling along the street.

Typical **modal separation** patterns in urban contexts:





CROSSING POINT DENSITY

How closely spaced intersections and other crossing locations are.

Typical **crossing point density** patterns in urban contexts:



HIGH DENSITY OF CROSSING POINTS for bicyclists, pedestrians, and motor vehicles

- > 3 or more “through” or “X” intersections (signalized or unsignalized), “T” intersections, driveways, curb cuts, or other crossing points per ¼ mile



MODERATE DENSITY OF CROSSING POINTS for bicyclists, pedestrians, and motor vehicles

- > 1-3 “through” or “X” intersections (signalized or unsignalized), “T” intersections, driveways, curb cuts, or other crossing points per ¼ mile



LOW DENSITY OF CROSSING POINTS for bicyclists, pedestrians, and motor vehicles

- > No “through” or “X” intersections (signalized or unsignalized), “T” intersections, driveways, curb cuts, or other crossing points per ¼ mile



APPLYING A **CONFLICT DENSITY ANALYSIS** ON EXAMPLE STREETS

Example Street A



+



=



Minimal separation for
cyclists: **HIGH MODAL MIXING**

Short blocks: **HIGH**
CROSSING POINT DENSITY

HIGH CONFLICT
DENSITY

Example Street B



+



=



Minimal separation for
cyclists: **HIGH MODAL MIXING**

Short blocks: **HIGH**
CROSSING POINT DENSITY

HIGH CONFLICT
DENSITY

*Page TK contains a set of checklists that practitioners can use to apply these concepts in practice to determine the safest speed limits for their streets.

Example Street C



USDG-compliant sidewalk:
MODERATE MODAL MIXING

+



Moderate length blocks: MODERATE
CROSSING POINT DENSITY

=



MODERATE
CONFLICT DENSITY

Example Street D



Full separation for cyclists
and pedestrians on multi-use
path: LOW MODAL MIXING

+



Very low demand for vehicular
or pedestrian crossing: LOW
CROSSING POINT DENSITY

=



LOW CONFLICT
DENSITY



ACTIVITY LEVEL & LAND USE

Activity levels influence the rate at which potential conflicts occur at any given site on the street. Activity can be measured directly where data is available, or through land use and transportation network proxies. Most urban streets are either high activity or moderate activity. This guidance intentionally does not set quantitative activity thresholds. Practitioners seeking to utilize quantitative thresholds should determine and set those based on what works well in their cities and what goals they are trying to meet.



Typical **activity** conditions and scenarios include:



HIGH ACTIVITY

Streets with lots of existing or expected pedestrian activity, active public spaces, important bike routes or planned bike routes, high curbside demand, and high density of transit stops

- Downtown / Central Business Districts
- Retail corridors
- High density residential and commercial streets



MODERATE ACTIVITY

Streets with moderate existing or expected pedestrian activity, moderately used public spaces, some existing or expected bike traffic, frequent driveways, curbside parking/loading, and moderate density of transit stops

- Moderate density residential and commercial streets
- Streets with light retail activity
- Mixed use corridors



LOW ACTIVITY

Streets with minimal expected pedestrian volumes, minimal expected or planned bike activity, low curbside demand, and few, if any, transit stops

- Low density industrial and residential streets

APPLYING AN **ACTIVITY LEVEL** ANALYSIS ON EXAMPLE STREETS

Example Street A



Downtown context with high-density residential, commercial, and retail land uses along both sides of the corridor

=



HIGH ACTIVITY

Example Street B



Mixed used corridor with moderate density commercial land uses

=



MODERATE ACTIVITY

APPLYING AN **ACTIVITY LEVEL** ANALYSIS (CONTINUED...)

Example Street C



Moderate density
residential street

=



MODERATE ACTIVITY

Example Street D



Low density manufacturing
and commercial land uses
on both sides of the corridor

=

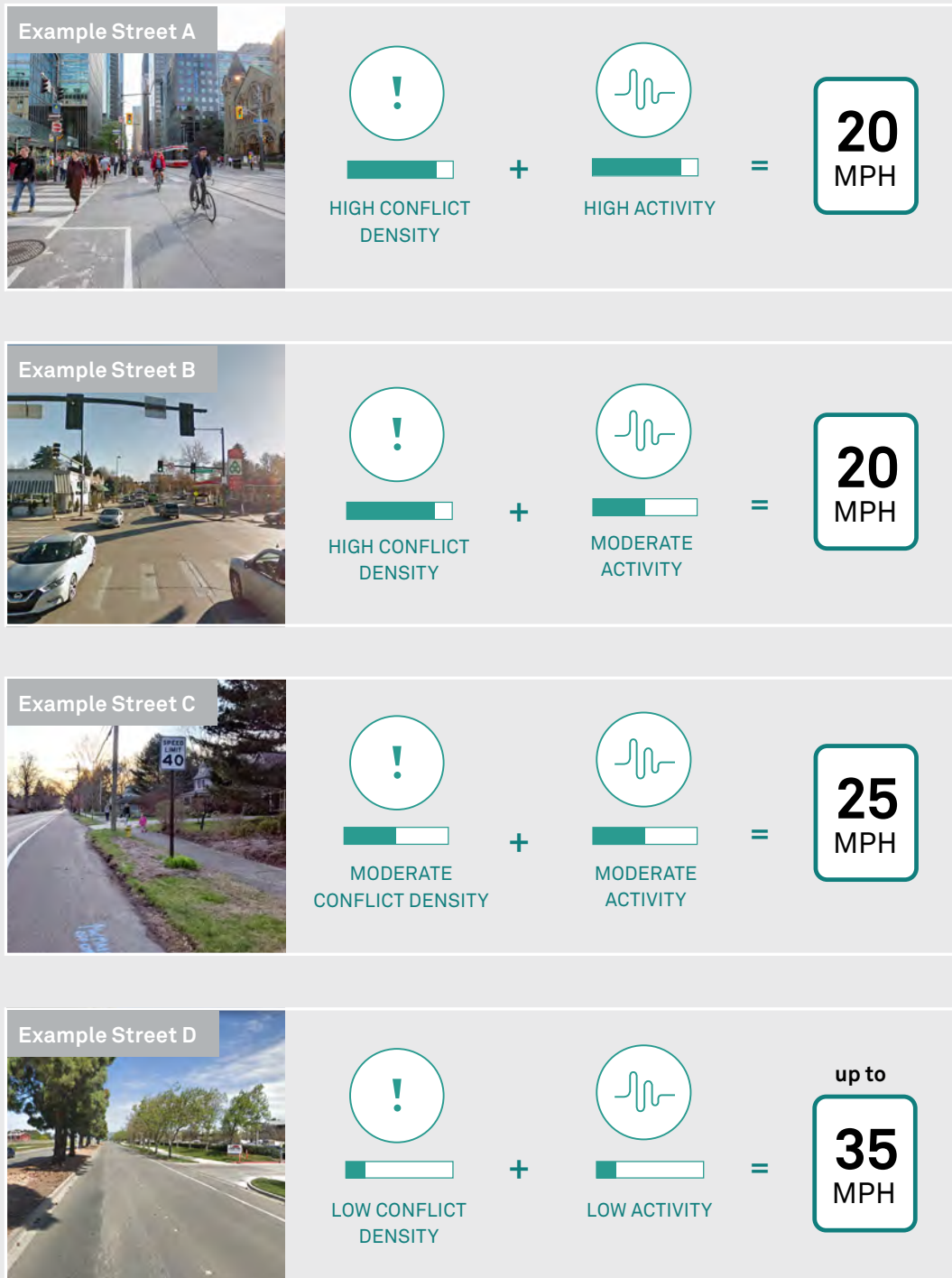


LOW ACTIVITY



COMBINING ANALYSES ON EXAMPLE STREETS

High activity streets with a high potential for conflict are the riskiest and command the lowest speed limits. Meanwhile, low activity streets with a relatively low potential for conflict may allow for slightly higher speed limits.



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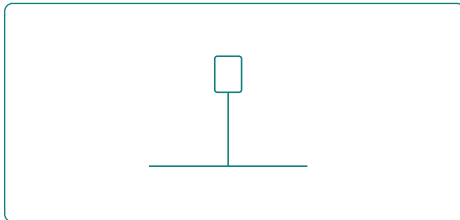
Determine Best Option for Speed Management

The Safe Speed Study will identify the recommended speed limit for a particular street (or category of street). This recommended speed limit will either be lower than or the same as the existing posted speed limit. Cities should collect

“before” data about the street (described in “Collect Before Data” on page 60) to determine the street’s current operating speeds. One of four situations will be apparent after conducting a Safe Speed Study, as shown on the next page.

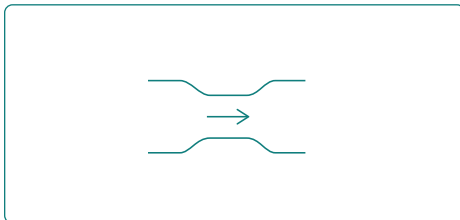
TOOLS FOR SPEED MANAGEMENT

A speed management program seeks to reduce both the overall number of vehicles exceeding the target speed and the even more dangerous high-end speeders.



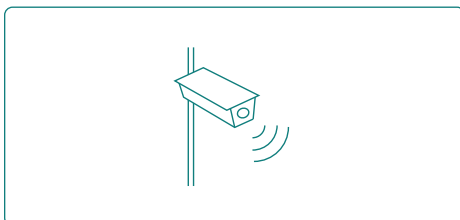
Signs & Markings

Signs and markings are necessary to communicate the speed limit and encourage safe speeds.



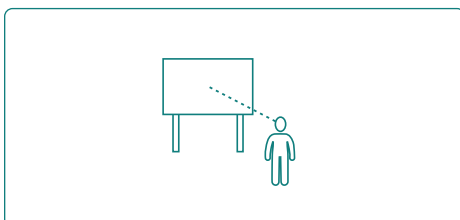
Design & Operations

Street design and operational changes are the most effective method for managing speeds. Street design is self-enforcing, making it a particularly powerful tool.



Automated Enforcement

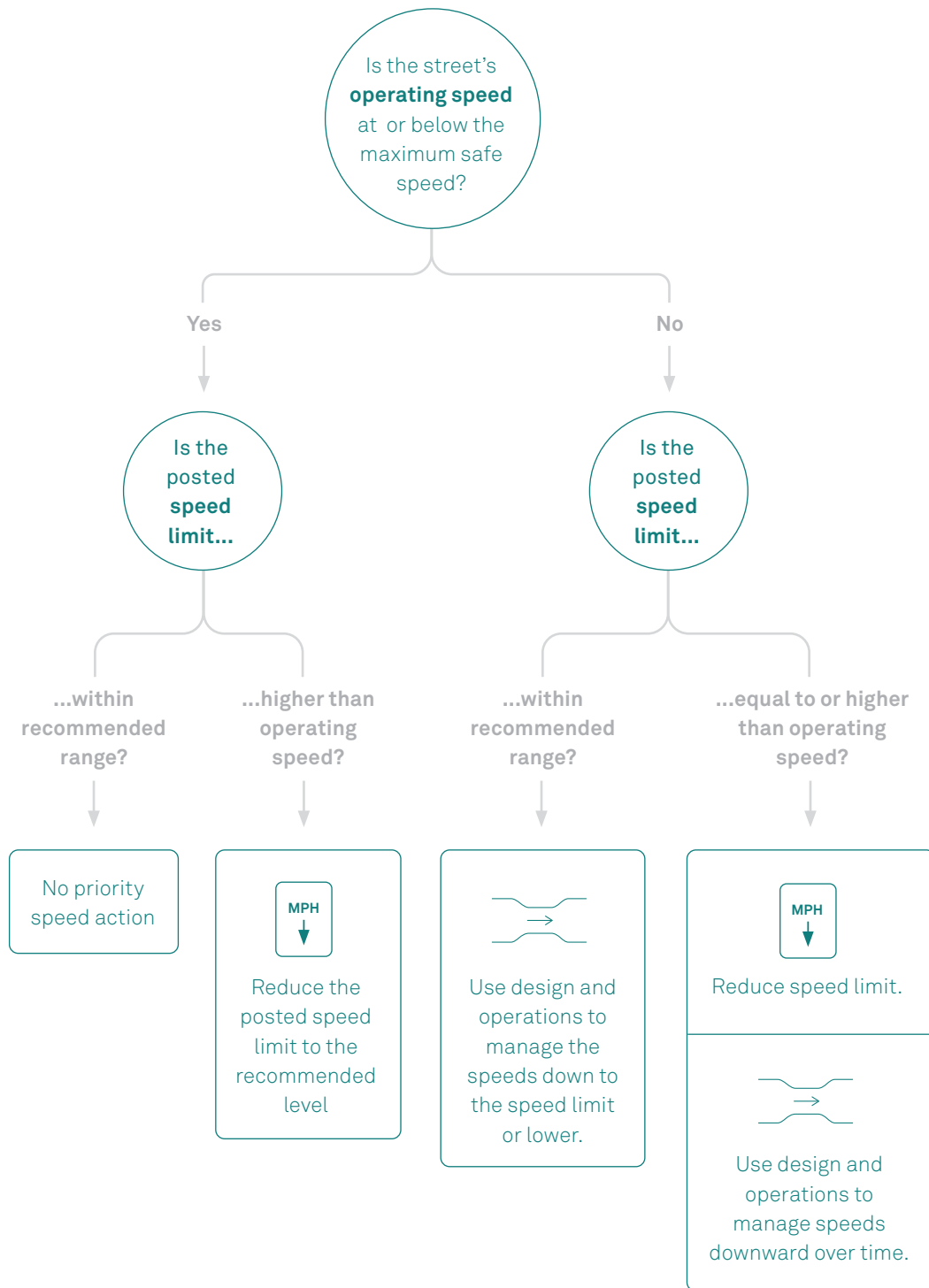
Automated speed enforcement can be a useful component of speed management.

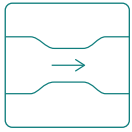


Messaging & Education

Marketing campaigns and education programs support cities’ efforts to reduce speeds through design and policy.

SELECTING A SPEED MANAGEMENT OPTION



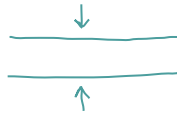


DESIGN & OPERATIONS

Street design and operational changes can reduce the number of opportunities drivers have to speed and reduce the top speeds at which motorists are comfortable driving. Most street design techniques reduce speeding in one of, or a combination of, three ways:



Making speeding physically impossible, usually through raised elements.



Reducing motor vehicle lane width to increase discomfort at higher speeds.⁶⁴



Adding gateway treatments or 'arterial slowpoints' that create visual cues to reduce speeds.

Arterials and other large urban streets present unique challenges for speed management. These streets typically feature high traffic volumes, higher posted speeds, both signalized and unsignalized crossing points, and multiple lanes. In total, arterials account for nearly a third of fatal crashes in the US, despite covering only 6% of roadways.⁵⁹ To address these challenges, cities will often need to deploy both design (street cross-section) and operational (signalization) tools to produce the necessary speed reductions. Combined, these tools can help the city achieve harmony between design speed, target speed, and the speed limit.⁶⁰

Examples of design changes include:

- Reducing the number of general-purpose motor-vehicle lanes. With fewer lanes, off-peak vehicle capacity can be more closely matched to vehicle volume using signal timing methods.
- Narrowing lanes, using excess space to add in-lane bus stops or bicycle or pedestrian facilities.

- Adding street trees, shrubbery, or other neighborhood elements to indicate a different environment.
- Adding speed cushions, raised intersections with gradual slopes, speed humps, or other bus- and emergency-vehicle-compatible raised elements.⁶¹
- Converting turn lanes into pedestrian safety islands or curb extensions.
- Repurposing under-utilized lanes for other modes or other needs.

Examples of operational changes include:

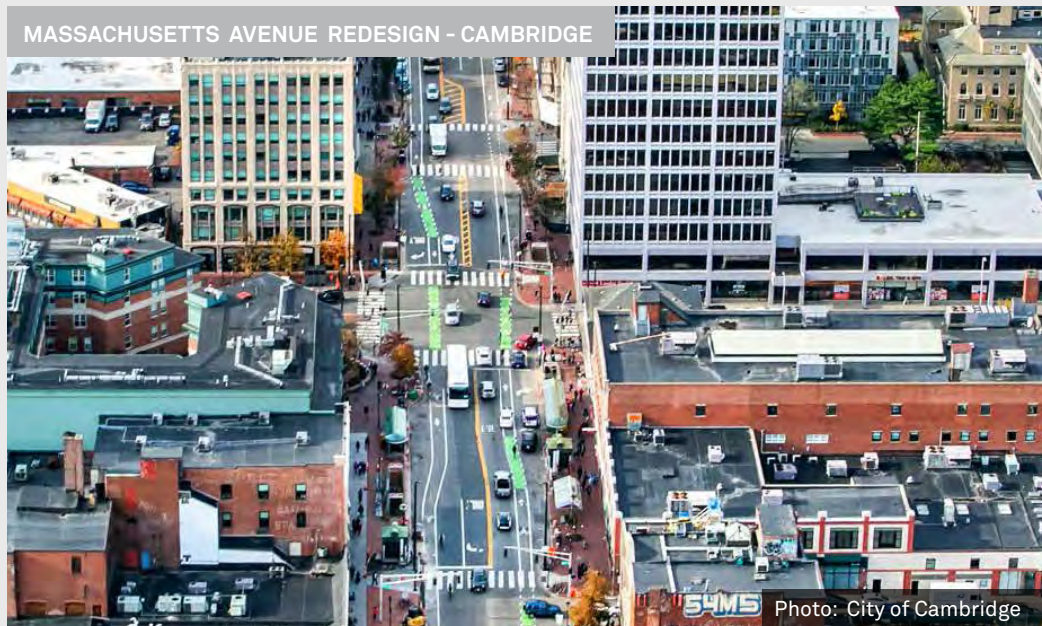
- Reducing the length of signal cycles or green signal time on the major street, particularly at non-peak times.⁶²
- Reprogramming signal timing for a lower progression speed, usually 2-3 mph below the target speed (for both one-way and two-way streets) or breaking progressions into shorter distances (for two-way streets).⁶³

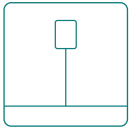
DESIGN & OPERATIONS IN PRACTICE

BEFORE & AFTER - 10TH ST., ATLANTA



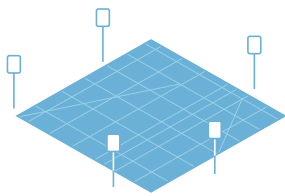
MASSACHUSETTS AVENUE REDESIGN - CAMBRIDGE



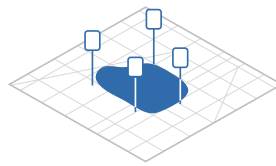


SIGNS & MARKINGS

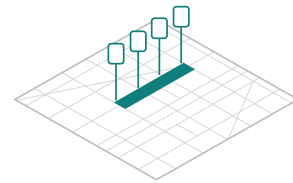
Communicating new speed limits via signage and markings is essential for effectively managing speeds. Laws and policies about where speed limit signs should be placed vary from city to city. Placing identical speed limit signs on every block of a corridor where the speed limit never changes is costly and does not have proven speed-management benefits. However, preliminary studies out of Seattle show that increasing sign density to one sign every ¼ mile from one sign every mile does result in lower speeds and fewer crashes. At a minimum, cities should follow the guidance below about speed limit signs, making specific decisions about sign density and placement based on local context.



Cities with **default speed limits** or **category speed limits** should post “Speed Limit X Unless Otherwise Posted” signs at gateways into the city: highway off-ramps before an intersection, major streets at city limits, bridge and tunnel entrances, ferry terminals, and airport car rental facilities. Signs should be placed on any street that diverts from that default limit.



Cities with **slow zones** should post the limit for that zone at gateways into the designated area. On-street markings can also be utilized at the points where the speed limit changes or at key entrances to slow zones.



Cities with **major arterial slow zones and high-crash corridors** can post signs on those streets to reinforce the importance of adhering to the speed limit.

SIGNAGE & MARKINGS IN PRACTICE



Top left: Seattle DOT posts these signs at entrances into the city.

Top right: NYC DOT identifies arterial slow zones using special signage.

Bottom: Boston uses signs and on-street markings to alert drivers that they are entering a 20 mph slow zone.



AUTOMATED ENFORCEMENT

There is a long history of police officers using traffic stops to target people of color in the United States.⁶⁶ A Black driver is up to four times more likely to be stopped by a police officer than a White driver, and once stopped, Black drivers are up to five times more likely to be searched than White drivers.⁶⁷ In the US, enforcement has come to be the domain of the police, and police departments are an active partner in most, if not all, Vision Zero programs. However, recognizing the biased and sometimes deadly practices of US police forces, some cities and national organizations are reconsidering the role of police in making streets safe. Some options include: increasing emphasis on street redesign, automated speed enforcement or cameras, and more recently, moving traffic enforcement responsibilities out of police departments and into other agencies.

A growing body of evidence in places like Seattle, Boston, and Toronto shows that drivers respond to posted speed limits even without any enforcement efforts. On streets where operating speeds are consistently higher than the posted limit, cities should prioritize changes to street geometry over other tools. Changing the design and operations of streets to better match desired speeds and posted speed limits can often diminish the need for any enforcement, and is ultimately the most effective way to reduce speeds, fatalities, and injuries.

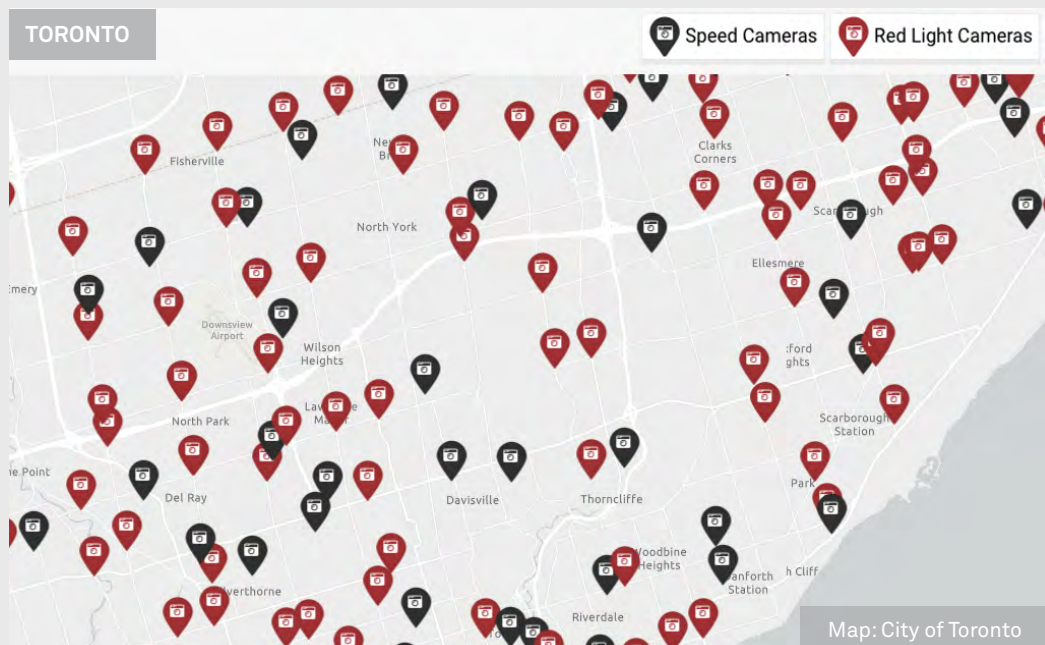
Automated speed enforcement (ASE) can be an effective tool for reducing operating speeds, especially in locations where data shows that there are frequent speed-related fatal and serious injury crashes.⁶⁸ Studies find that cameras reduce the percentage of speeding vehicles by 14-65% percent, and serious injury and fatal crashes by 11-44% percent.⁶⁹ Results from NYC's speed camera program found that, in the zones where cameras were installed, total crashes declined by 15%, total injuries by 17%, fatalities by 55%, and excessive speeding violations by 60%.⁷⁰

In particular, ASE programs are more effective at reducing speeding than manual enforcement because cameras are consistent and predictable for drivers. Data from NYC's speed camera program shows that, on average, daily violations at typical camera locations decline over time as drivers become aware of the cameras and drive more responsibly.⁷¹ NYC DOT also found that between 2014-2016, 81% of drivers do not receive more than one violation, further evidence that the cameras created an overall behavioral change.⁷²

When developing ASE programs, cities should keep several primary considerations in mind. First, while ASE technology itself may be impartial, cities must think critically about camera placement to avoid undue impacts on certain neighborhoods or communities. For example, cities often find that low income communities and communities of color experience higher than average serious injury and fatal crashes due to bad street design or underinvestment, leading them to disproportionately site cameras in those areas. Instead, in siting speed cameras, cities should simultaneously use crash data hotspot analysis to prioritize locations for street improvement projects, and evaluate regularly to determine if cameras are still necessary once the street has been changed. In addition, cities should layer multiple data points into camera placement analysis, including crashes and serious injuries, and the presence of schools, daycares, parks, and recreation and senior centers.

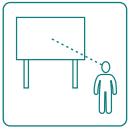
Second, cities should never use ASE to generate revenue. Instead, ASE should only be a tool for reducing speeds and/or achieving compliance with the posted speed limit. Especially when contracting with private ASE vendors, camera programs should be evaluated based on reductions in speed, not number of tickets issued. The distribution of camera locations, as well as the messaging behind enforcement, should match the goals of the program.

AUTOMATED ENFORCEMENT IN PRACTICE



Top: A speed limit sign on Queens Boulevard in New York signals that speed limits are enforced by camera in some parts of the city.

Bottom: Toronto has an interactive online map that allows residents to see all active red light and speed camera locations.



MESSAGING & EDUCATION

Communicating speed limit changes to the public is essential to a successful speed management program. Communications campaigns should begin well before implementation begins and continue after changes are in place. These campaigns serve a dual purpose, reminding the public about the policy rationale for reducing speeds—reducing traffic fatalities—while also preparing residents for the changes they will see on their streets.

Communications campaigns around speed limit changes should always link speed reductions with safety, constantly reminding the public, elected officials, and the media that reducing speed limits is a critical tool for reducing traffic deaths. Many effective campaigns focus on the people who are harmed by excessive speed, putting faces to the numbers. Others focus on reminding drivers that even small changes in their speed can increase the probability of surviving a crash.

Cities should be relentless and creative when spreading the word about speed limit changes. Examples include: TV, radio, and online ads, billboards, bus shelters, mailings, cross-promotional campaigns with local

sports teams, news stories, and op-eds. Free promotional materials such as buttons, stickers, and yard signs can extend the reach of an educational campaign beyond traditional media channels and outlets. For example, Portland, Seattle, Minneapolis, and others have distributed “20 is Plenty” yard signs as part of an education campaign about new 20 mph speed limits on residential streets.

City transportation departments should also look to incorporate speed reduction information into other city-issued collateral, including materials distributed by other agencies. For example, prior to reducing the citywide speed limit, New York City DOT added messaging about the new 25 mph limit to the backs of all municipal parking meter receipts.

Finally, community and advocacy partners are essential to successful campaigns. In New York, Families for Safe Streets, a group made up of the families and survivors of traffic crashes, regularly met with city and state-level lawmakers and was instrumental in pushing the NY State legislature to pass legislation authorizing a lower citywide speed limit.⁷⁴

MESSAGING & EDUCATION IN PRACTICE

PORTLAND



DEATH DUE TO SPEED

Graphic: City of Portland

NEW YORK CITY



Photo: NACTO

MINNEAPOLIS



Photo: City of Minneapolis

SANTA MONICA



Photo: City of Santa Monica

From top, clockwise: Portland's Vision Zero website includes graphics that clearly describe the relationship between speed and safety; Minneapolis Public Works disseminates "20 is Plenty" yard signs to spread the word about new lower speed limits in residential areas; Santa Monica uses brightly colored yard signs to remind drivers that children are present in this area; and New York City reminds drivers about the citywide speed limit on the back of municipal parking meter receipts.

4 ●●●●

Conduct an Evaluation

Determining the effectiveness of a speed limit change or safety project, and making further adjustments as necessary, is essential to reducing traffic fatalities. In addition, project data that shows how speed limit changes reduce speeding and can reduce fatalities is essential to making the case for future safety projects.

Cities should collect post-implementation data, mirroring the data that was collected before the project began, to conduct a full evaluation of their work. This data includes operating speeds, traffic incidents—paying special attention to fatal and serious pedestrian and cyclist injuries—conflict points, and speeding opportunities.

In collecting post-implementation data and conducting project evaluations, cities should remember that drivers typically adjust to speed limit changes slowly and therefore operating speeds may not change at all in the short-term. As tempting as it is to try to produce immediate results, cities should focus on reporting 6-month and 1-year after data for operating speeds to ensure a robust and accurate evaluation.⁷⁵ Transportation department leadership should prepare elected officials, policy makers, the media, and the public for some “lag-time” between project implementation and evaluation and results.

KEY METRICS

Key metrics for determining the effectiveness of a speed limit change or safety project include:



Change in the number of high-end or top-end speeders; change in operating speed



Change in the number of speeding opportunities



Change in the number of people killed or severely injured



Change in conflict counts



CHANGES IN HIGH-END SPEEDING

On city streets, the most substantial risk comes from high-end speeding, even if it is typically only a small percentage of total traffic. As a result, changes in the number of high-end speeders is a primary metric for determining the efficacy of a speed limit change or safety project.

High-end speeding is measured as the number or percent of drivers exceeding specific, high-risk speed thresholds (e.g., over 30 or 35 mph, or greater than 10 mph over the target speed for most streets), in a typical 24 hour period.

Because high-end speeding is set to a specific threshold that does not change with the speed limit, this metric allows for apples-to-apples comparisons before and after a project or from site to site. The prevalence of high-end speeding is a better indication of risk than 85th percentile speed or the number of speeding vehicles, since there is sometimes a ‘long tail’ of high-end speeders.⁷⁶ Well-done speed management can result in a dramatic change in high-end speeding, even when 85th percentile or median speeds do not change dramatically.

CASE STUDY

RAINIER AVENUE, SEATTLE

Speed management and street design changes can substantially reduce the amount of high-end speeding on a street. On Rainier Avenue in Seattle, a 4-lane-to-3-lane conversion resulted in up to a 16% decrease in median speed, and up to an 81% decrease in drivers exceeding 40 mph.⁷⁷

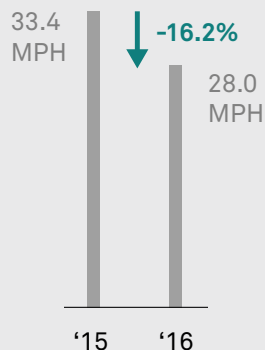
2015
speed
limit:

30
MPH

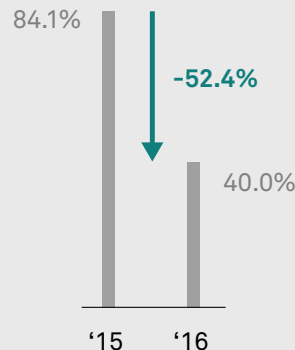
2016
speed
limit:

25
MPH

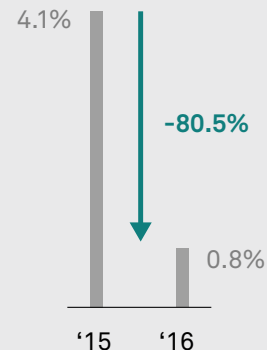
50TH PERCENTILE SPEED,
NORTHBOUND



SPEEDERS
(PERCENT SPEEDING)



TOP END SPEEDERS
(DRIVERS EXCEEDING 40 MPH)





CHANGES IN SPEEDING AND OPERATING SPEEDS

Changes in the total number of people speeding and the overall operating speed provide information about the typical or median experience on the street or corridor. This metric is important to capture because it is the simplest. However, unlike high-end speeding, the number and percent of drivers exceeding the speed limit definitionally changes as the speed limit is reduced, so policy makers should be careful when using this metric to explain the impact of a project.

When necessary, the speed of the median or 50th percentile driver can be used to understand the typical experience on a street. Assuming traffic along the corridor is distributed normally, the majority of drivers will cluster around the median. A large difference between the median and 95th-percentile speed can indicate a high prevalence of high-end speeders or that there are too many opportunities to speed.



Photo: Cyrus Tetteh City of Detroit-CCSD⁷⁸

ANALYZING SPEED DATA

Methods for Documenting Speeds

Single-point speed studies help identify high-end speeding locations. Handheld radar, fixed-location radars such as those used for automated speed enforcement, speed feedback signs, and multi-tube vehicle counters are all sources of single-point speed data of varying quality and sample size.

Speed profiles show the range of speeds found along a street, making it easy to identify where vehicles speed up or slow down along a corridor. This data is increasingly available from city fleets or third-party providers.

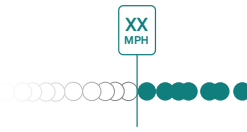
Metrics for Documenting Speeds

Several metrics are applicable to Safe Speed Studies on urban streets and before-after evaluation.



High-end speeding:

The number or percent of drivers exceeding specific, high-risk speed thresholds. (e.g., over 25 mph, over 30 mph, over 35 mph). A decrease within this indicator indicates effective speed management.



Speeding: The percent or number of drivers exceeding the speed limit.



Standard Deviation:

The standard deviation of speeds indicates how much faster the high end of vehicle speeds are from the low end. A large standard deviation shows that speed varies greatly on the street, leading to less predictability and higher crash risk.



Median speed: The speed of the 50th percentile driver. This number can be used to understand the speed of typical drivers, rather than the fastest drivers.



85th percentile speed: The speed of the 85th percentile driver. Cities should not collect and report on 85th percentile speeds in isolation—95th percentile speeds and median speeds help round out the picture of dangerous speeds on the street.



95th percentile speed: The speed of the 95th percentile driver. This number can be used as an estimate of the fastest speed that a typical user will encounter, and can be used as a measure of how well speeds have been managed.

X

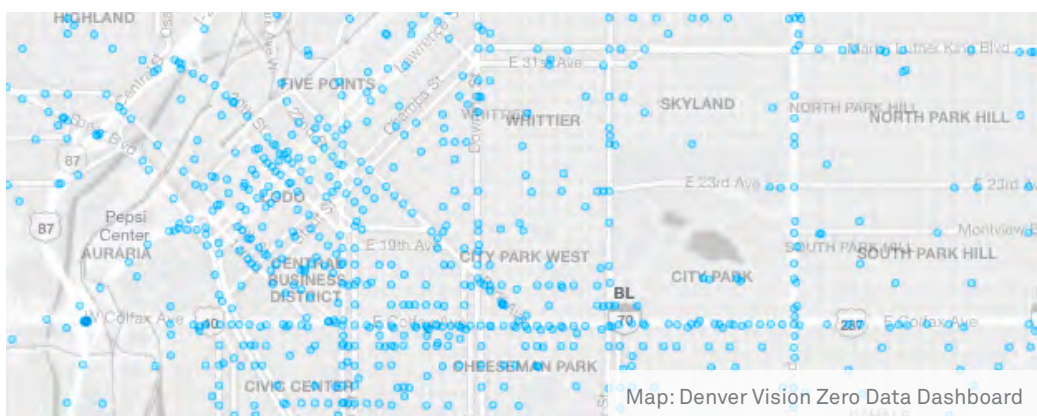


CHANGES IN FATAL AND SERIOUS CRASHES

Streets with a history of multiple people killed or seriously injured in traffic crashes over five years may have underlying safety risks that are likely to recur. Examining crash history by travel mode provides a basis for understanding the existing risks on the street. Even when “speed” or “speeding” is not listed on a crash report, speed may be an underlying factor; speeding is underreported in US traffic crashes, and speed at crash is not always available.⁷⁹ Further, fatal and serious injury crashes involving pedestrians, bicycles, and left turning vehicles often can be addressed in part through speed reduction. Cities should use data about fatal and serious injury crashes (when and where

they occurred, and what caused them) to both prioritize projects and make design and engineering decisions.

Short-term crash data can be unreliable, especially for the most serious crashes. Using three to five “before” years of crash data and evaluating how the “after” condition differs will help practitioners draw conclusions about the effectiveness of a safety project. Combining severe injury with fatality data is another way to improve the reliability of crash analysis at the project level.



A five-year history of fatal and serious injury crashes can help practitioners understand the risks already present on a street. Denver uses a dashboard to track and display crashes on the street network. In addition to understanding where crashes happen, cities should also look into why they are happening, and use that to make decisions about street design and project prioritization.



CHANGES IN SPEEDING OPPORTUNITY

Speeding occurs where drivers are comfortable exceeding a safe speed because of the design of the street, and when they have an opportunity to speed because there are no other cars ahead. Streets with excess motor vehicle capacity at either peak or non-peak times tend to provide opportunities to speed. Similarly, multilane streets as well as signalized streets with long green phases and/or high-speed progressions provide, by definition, more opportunities to speed than a one-lane street.

Analyzing speeding opportunities on a corridor can provide planners with information about the best speed mitigation strategies, for example through signal operations changes, limiting the number of motor vehicle lanes, or repurposing motor vehicle lanes to other uses.

Speeding opportunity can be modeled as the number of motor vehicles arriving at a point no other vehicles have passed for a set time, such as five seconds. For example, for signalized intersections, drivers have a speeding opportunity if they arrive at the intersection on a green signal at least five seconds after the previous vehicle.

Speeding opportunity can also be discussed as a daily vehicle volume: a street with several hundred opportunities to speed per day will produce far fewer injuries than one with several thousand opportunities to speed per day, assuming each vehicle has a similar potential for conflicts. Speed management projects should aim to greatly reduce the number of speeding opportunities in a given street, corridor, or zone.



Photo: Lauren Ann Davies



CHANGES IN CONFLICT COUNTS

Conflict counts are a surrogate measure of safety. They should be prioritized as part of a Safe Speed Study when changes to street design or activity levels mean that simpler measures, such as crash history, will not sufficiently approximate risks on the street.

Conflict counts are completed by observing the number of times per day or per hour that two people or vehicles are on a collision course and must take evasive action to prevent a crash. Common conflict classification methods for urban streets include time-to-collision

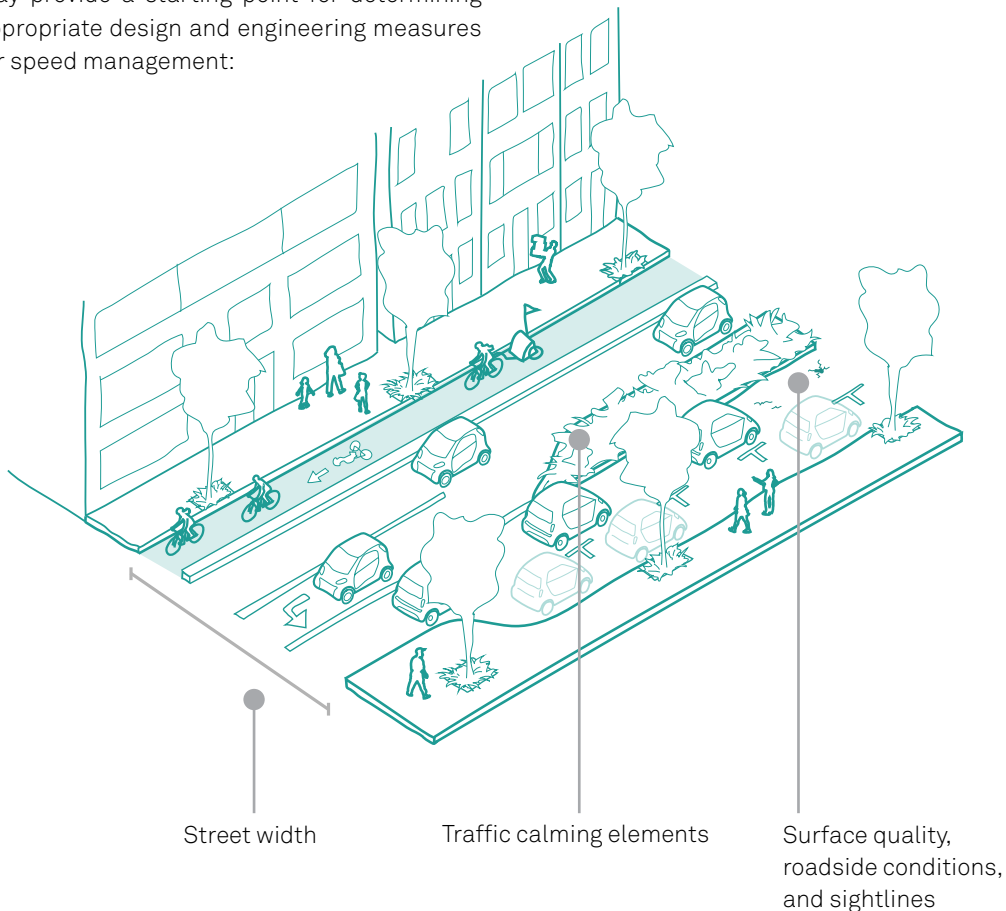
(if no evasive action is taken) or post-encroachment time (how soon after one participant passes a specific point does the other participant go through it).

Conflicts per entry (conflict counts divided by the vehicle and person-entries) into an intersection provide the likelihood that each person using the street at a particular location for a particular movement will be involved in a conflict.⁸⁰



ADDITIONAL DATA

Several other street characteristics are routinely considered in speed limit studies, and may provide a starting point for determining appropriate design and engineering measures for speed management:



Section 3 Endnotes

53. Jurewicz, C., Sobhani, A., Woolley, J., Dutschke, J., Corben, B., (2016). Exploration of vehicle impact speed – injury severity relationships for application in safer road design. Transportation Research Procedia 14, 4247-4256.
54. Tefft, B.C. (2011). Impact Speed and a Pedestrian's Risk of Severe Injury or Death. AAA Foundation for Traffic Safety. Retrieved from: <https://aaaafoundation.org/impactspeed-pedestrians-risk-severe-injurydeath/>.
55. Jurewicz, C., Sobhani, A., Woolley, J., Dutschke, J., Corben, B., (2016). Exploration of vehicle impact speed – injury severity relationships for application in safer road design. Transportation Research Procedia 14, 4247-4256.
56. Federal Highway Administration. Functional Classification Concepts, Criteria and Procedures. Retrieved from: https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/section03.cfm.
57. Federal Highway Administration (2012). Methods and Practices for Setting Speed Limits. Retrieved from: https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa12004/fhwasa12004.pdf (page 10).
58. Ibid (page 26).
59. National Safety Council. Motor Vehicle Safety Issues: Speeding. Retrieved from: <https://injuryfacts.nsc.org/motor-vehicle/motor-vehicle-safety-issues/speeding/>.
60. National Highway Traffic Safety Administration. Fatality Analysis and Reporting System. Retrieved from: <https://www.nhtsa.gov/es/research-data/fatality-analysis-reporting-system-fars>.
61. Federal Highway Administration (2018). Self-Enforcing Roadways: A Guidance Report. Publication No. FHWA-HRT-17-098. Retrieved from: <https://www.fhwa.dot.gov/publications/research/safety/17098/17098.pdf>.
62. These treatments are appropriate for some major streets, but not large multi-lane arterials.
63. Furth, P. G., Halawani, A. T. M., Li, J., Hu, W. (Jake), & Cesme, B. (2018). Using Traffic Signal Control to Limit Speeding Opportunities on Bidirectional Urban Arterials. Transportation Research Record, 2672(18), 107–116. Retrieved from: <https://doi.org/10.1177/0361198118790638>.
64. Ibid.
65. Karim, Dewan Masud (2015). Narrower Lanes, Safer Streets. Accepted Paper for CITE Conference.
66. Photo: Bruce Englehardt/Seattle Transit Blog
67. Stanford Open Policing Project. Retrieved from: <https://openpolicing.stanford.edu/>.
68. Ibid.
69. National Highway Traffic Safety Administration (2016). System Analysis of Automated Speed Enforcement Implementation. Retrieved from: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/812257_systemanalysisase.pdf.
70. Centers for Disease Control and Prevention. Motor Vehicle Safety: Automated Speed-Camera Enforcement. Retrieved from: <https://www.cdc.gov/motorvehiclesafety/calculator/factsheet/speed.html>.
71. New York City Department of Transportation (2018). Automated Speed Enforcement Program Report 2014-2017. Retrieved from: <http://www.nyc.gov/html/dot/downloads/pdf/speed-camera-report-june2018.pdf>.
72. Ibid.
73. Ibid.
74. www.metouhey.com
75. Transportation Alternatives. Our Story. Retrieved from: <https://www.transalt.org/ourstory?rq=speed%20limit>.
76. Note that a simple before-after comparison may not show the true effect of a speed management project. The comparison does not control for other factors that may have affected the number of crashes or speeds. It is important to include an appropriate control group to control for these factors.
77. Federal Highway Administration (1998). Synthesis of Safety Research Related to Speed and Speed Management. Retrieved from: <https://www.fhwa.dot.gov/publications/research/safety/98154/speed.cfm>.
78. Seattle Department of Transportation (2017). Rainier Avenue South Safety Corridor: Rainier Pilot Project Evaluation. Retrieved from: https://www.seattle.gov/Documents/Departments/SDOT/MaintenanceProgram/RainierAveS_BeforeAfter.pdf (page 13).
79. Permission to use photo by K. Shabu Supervising Photographer.
80. Cherry, Christopher et al. (November 2018). Completing the Picture of Traffic Injuries: Understanding Data Needs and Opportunities for Road Safety. Collaborative Sciences Center for Road Safety. Retrieved from: https://www.roadsafety.unc.edu/wp-content/uploads/2018/11/CSCRS_R4_FinalReport.pdf.
81. More information on the major conflict techniques can be found at Kraay, J., et al. (2013). Manual conflict observation technique DOCTOR. Road Safety for All. https://www.ictct.net/wp-content/uploads/SMoS_Library/LIB_Kraay_et_al_2013.pdf.



OUTFRONT



4

Checklists

Analyzing Existing Conditions & Using the Risk Matrix

These checklists are a starting point for analyzing how dense conflicts are on a given street and how active that street is, in order to determine a safe speed limit for a street.

To support quantitative analysis, cities can determine specific thresholds (e.g., What does “high pedestrian volume” mean in your city?) based on local conditions. This guidance avoids determining thresholds so as not to be overly prescriptive.



CONFLICT DENSITY ANALYSIS CHECKLIST

START:

IF any of these apply to the street...

☐

No sidewalks

OR

☐

Bicycle traffic in the traffic lane, even where marked or signed (e.g., sharrows)

OR

☐

Sidewalks directly adjacent to moving traffic

OR

☐

≥ 3 “through” or “T” intersections (signalized or unsignalized), major driveways, or other crossing points per ¼ mile

THEN the street has:

HIGH CONFLICT DENSITY



PROCEED to the Activity Analysis.

IF NOT, proceed...

IF the street has...

☐

1-3 “through” or “T” intersections (signalized or unsignalized), major driveways, or other crossing points per ¼ mile

AND

☐

Curbside loading/parking lane and sidewalk, or a USDG-compliant sidewalk

AND

EITHER:

☐

A marked bike lane or better, if designated bike route

OR

☐

A full sidewalk with permissible bike use, if not a designated bike route

THEN the street has:

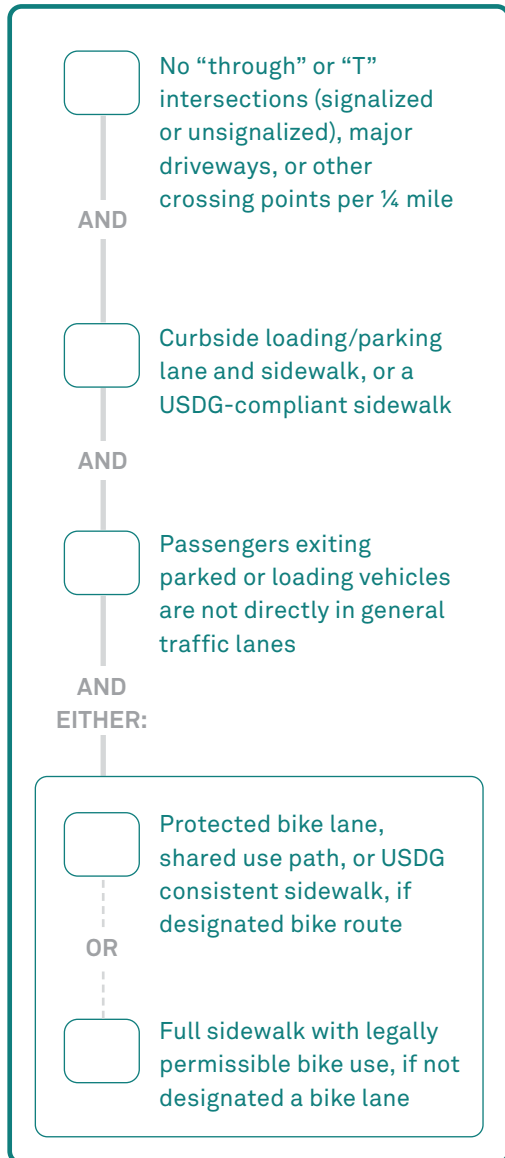
MODERATE CONFLICT DENSITY



PROCEED to the Activity Analysis.


IF NOT, proceed...

IF the street has...



THEN the street has:

LOW CONFLICT DENSITY



PROCEED to the Activity Analysis.

Sample Conflict Density Metrics

There are many metrics that a city can use to measure a street’s conflict levels. The list below provides a starting point. Cities can set quantitative thresholds based on local conditions.

Pedestrian crossing volume per day or hour

Pedestrians walking in the street per hour

Left turn volume per day or hour

Midblock or uncontrolled-intersection crossings per hour per ¼ mile

Motor vehicle lane blockage or bike-lane blockage percent per hour

RESULTS FOR: Conflict Density Analysis



Based on the **conflict density** analysis, the street has:



HIGH CONFLICT DENSITY



MODERATE CONFLICT DENSITY



LOW CONFLICT DENSITY





ACTIVITY LEVEL ANALYSIS CHECKLIST

START:

IF the street is any of the following...

☐

Downtown / Central Business District street

OR

☐

Retail corridor

OR

☐

High density residential or commercial street

THEN the street has:

HIGH ACTIVITY

IF NOT, proceed...

IF the street is a...

☐

Moderate density residential or commercial street

OR

☐

Street with light retail activity

OR

☐

Mixed use corridor

THEN the street has:

MODERATE ACTIVITY

IF NOT, proceed...

PROCEED to the Risk Matrix to determine the correct speed limit for the street.

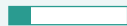
PROCEED to the Risk Matrix.

IF the street is a...

Low density industrial
or residential street

THEN the street has:

LOW ACTIVITY

PROCEED to the
Risk Matrix.

Sample Activity Level Metrics

There are many metrics that a city can use to measure a street's activity levels. The list below provides a starting point. Cities can use land use metrics as an alternative in the absence of the volumes below. Cities can set quantitative high, medium, and low activity thresholds based on local conditions.

Pedestrian
sidewalk volume
per day or hourScheduled transit
stops per hourBicycle volume
per day or hourSocial and public
space use volume
per day or hourParking or curbside
loading maneuvers
per hourCrash volumes
by mode

RESULTS FOR: Activity Level Analysis

Based on the **activity level**
analysis, the street has:

HIGH ACTIVITY

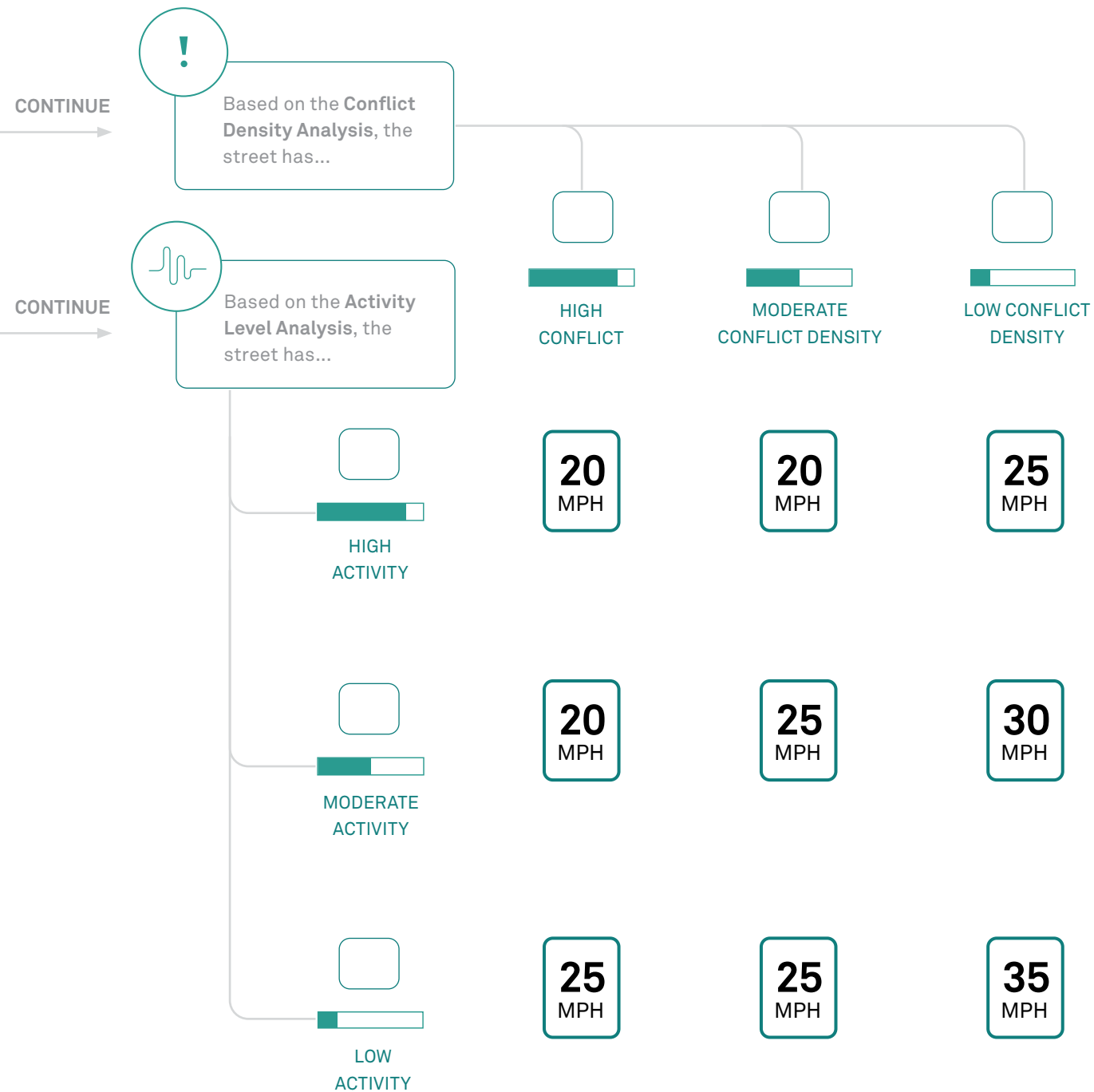
MODERATE
ACTIVITY

LOW ACTIVITY





APPLYING THE CONFLICT & ACTIVITY LEVEL ANALYSIS TO THE RISK MATRIX



FINISH
→

Based on the analyses, the major street's speed limit should be:

☐
20
MPH☐
25
MPH☐
30
MPH☐
35
MPH





Meeting Date	October 13, 2022
Originating Department	Police Department
Contact Person	Chief Mike Harden
Title	Resolution 1858/Authorizing the staff to contract for cloud storage services with Axon Enterprise Inc

Legislative History

- First Presentation October 13, 2022, Regular Meeting

Attachments:

1. Resolution 1858
2. Axon Quote for five years of cloud storage service with Standard Terms and Conditions
3. 2020 Master Services and Purchasing Agreement

Executive Summary

Lake Forest Park Police Department ("Department") utilizes body-worn cameras and taser devices from Axon Enterprises Inc. ("Axon"). These devices use Axon's cloud storage services. The Department's contract with Axon in 2020 included two years of cloud storage service. Staff has now negotiated a five-year cloud service agreement with Axon. The five-year storage and licenses agreement is \$9,001.52 per year or a five-year total of \$45,007.60. The quote at this price expires on October 14, 2022, so the Department is asking for City Council approval at the October 13, 2022 meeting.

Background

“Axon Cloud Services” means Axon’s web services for Axon Evidence, Axon Records, Axon Dispatch, and interactions between Evidence.com and Axon Devices or Axon client software. The Axon cloud service evidence.com system stores all the Department’s data from body-worn cameras to audio and video evidence files, while streamlining data management and sharing with others (prosecutors).

This proposal is to continue the cloud service agreement for a 5-year term. The current cloud storage plan has not exceeded the storage space, and the Department implements storage settings that will continue to use this plan. If the storage goes over the allotment, further discussions will occur at future council meetings on budget adjustments. At this time, we are well within the storage requirements and do not see any changes in the next few years.

Upon completion of the 5-year term, Axon may increase the pricing on all line items up to 3% at the beginning of each year of the Renewal Term. New devices and services may require additional terms.

Fiscal & Policy Implications

The rate is a decrease from previous years. The initial purchase included two years of Axon cloud service at \$9,498.00 per year. This purchase will be for a 5-year term at \$9,001.52 per year. The current budget has included this cloud service in the Police Technology account, and it will be included in future budgets. If this purchase order is not approved, our body cameras will not function as designed.

Alternatives

Discontinue service with Axon and try other vendors. This will be cost prohibited as it will require new hardware and installation.

Staff Recommendation

Approve Resolution XXXX authorizing the staff to contract for services with Axon Enterprise Inc.

RESOLUTION NO. 1858

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
LAKE FOREST PARK, WASHINGTON, AUTHORIZING
STAFF TO CONTRACT WITH AXON ENTERPRISES, INC.
FOR THE PURCHASE OF CLOUD STORAGE SERVICE
RELATED TO POLICE DEPARTMENT EQUIPMENT**

WHEREAS, the Lake Forest Police Department (“Department”) entered into a Master Services and Purchasing Agreement with Axon Enterprises, Inc. in 2020 for the purchase of body-worn cameras and taser equipment and two years of cloud storage service (“2020 Agreement”); and

WHEREAS, the Department has negotiated an additional five years of cloud storage service for \$45,007.60, which is included in the Mayor’s budget in the Police Technology account; and

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Lake Forest Park, as follows:

Section 1. AUTHORIZATION. The City Council authorizes Police Chief Harden to contract for the purchase of cloud storage service from Axon Enterprises, Inc. for an amount to not exceed \$46,000.

Section 2. CORRECTIONS. The City Clerk is authorized to make necessary corrections to this resolution, including, but not limited to, the correction of scrivener’s/clerical errors, references, ordinance numbering, section/subsection numbers, and any references thereto.

PASSED BY A MAJORITY VOTE of the members of the Lake Forest Park City Council this 13th day of October, 2022.

APPROVED:

Jeff Johnson
Mayor

ATTEST/AUTHENTICATED:

Matt McLean
City Clerk

FILED WITH THE CITY CLERK:
PASSED BY THE CITY COUNCIL:
RESOLUTION NO.:



Axon Enterprise, Inc.
17800 N 85th St.
Scottsdale, Arizona 85255
United States
VAT: 86-0741227
Domestic: (800) 978-2737
International: +1.800.978.2737

Q-42 **Section 10, ItemA.**

Issued: 09/07/2022

Quote Expiration: 10/14/2022

Estimated Contract Start Date: 11/15/2022

Account Number: 106697

Payment Terms: N30

Delivery Method:

SHIP TO	BILL TO
Business;Delivery;Invoice;Other-17425 Ballinger Way NE 17425 Ballinger Way NE Lake Forest Park, WA 98155-5556 USA	Lake Forest Park Police Dept. - WA 17425 Ballinger Way NE Lake Forest Park, WA 98155-5556 USA Email:

SALES REPRESENTATIVE	PRIMARY CONTACT
Jared Romain Phone: Email: jromain@axon.com Fax:	Michael Harden Phone: Email: mharden@cityofffp.com Fax:

Quote Summary

Program Length	60 Months
TOTAL COST	\$42,420.00
ESTIMATED TOTAL W/ TAX	\$45,007.60

Discount Summary

Average Savings Per Year	\$0.00
TOTAL SAVINGS	\$0.00

Payment Summary

Date	Subtotal	Tax	Total
Oct 2022	\$8,484.00	\$517.52	\$9,001.52
Oct 2023	\$8,484.00	\$517.52	\$9,001.52
Oct 2024	\$8,484.00	\$517.52	\$9,001.52
Oct 2025	\$8,484.00	\$517.52	\$9,001.52
Oct 2026	\$8,484.00	\$517.52	\$9,001.52
Total	\$42,420.00	\$2,587.60	\$45,007.60

Quote Unbundled Price:

Quote List Price:

Quote Subtotal:

Section 10, ItemA.

\$42,420.00

\$42,420.00

Pricing

All deliverables are detailed in Delivery Schedules section lower in proposal

Item	Description	Qty	Term	Unbundled	List Price	Net Price	Subtotal	Tax	Total
A la Carte Software									
73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	700	60		\$0.40	\$0.40	\$16,800.00	\$0.00	\$16,800.00
BasicLicense	Basic License Bundle	15	60		\$15.00	\$15.00	\$13,500.00	\$1,363.50	\$14,863.50
ProLicense	Pro License Bundle	5	60		\$39.00	\$39.00	\$11,700.00	\$1,181.70	\$12,881.70
BasicLicense	Basic License Bundle	15	1		\$15.00	\$15.00	\$225.00	\$22.70	\$247.70
ProLicense	Pro License Bundle	5	1		\$39.00	\$39.00	\$195.00	\$19.70	\$214.70
Total							\$42,420.00	\$2,587.60	\$45,007.60

Delivery Schedule

Section 10, ItemA.

Software

Bundle	Item	Description	QTY	Estimated Start Date	Estimated End Date
Basic License Bundle	73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	15	10/15/2022	11/14/2022
Basic License Bundle	73840	EVIDENCE.COM BASIC LICENSE	15	10/15/2022	11/14/2022
Pro License Bundle	73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	15	10/15/2022	11/14/2022
Pro License Bundle	73746	PROFESSIONAL EVIDENCE.COM LICENSE	5	10/15/2022	11/14/2022
Basic License Bundle	73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	15	11/15/2022	11/14/2027
Basic License Bundle	73840	EVIDENCE.COM BASIC LICENSE	15	11/15/2022	11/14/2027
Pro License Bundle	73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	15	11/15/2022	11/14/2027
Pro License Bundle	73746	PROFESSIONAL EVIDENCE.COM LICENSE	5	11/15/2022	11/14/2027
A la Carte	73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	700	11/15/2022	11/14/2027

Payment Details

Section 10, ItemA.

Oct 2022

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Year 1	73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	700	\$3,360.00	\$0.00	\$3,360.00
Year 1	BasicLicense	Basic License Bundle	15	\$2,700.00	\$272.70	\$2,972.70
Year 1	BasicLicense	Basic License Bundle	15	\$45.00	\$4.54	\$49.54
Year 1	ProLicense	Pro License Bundle	5	\$2,340.00	\$236.34	\$2,576.34
Year 1	ProLicense	Pro License Bundle	5	\$39.00	\$3.94	\$42.94
Total				\$8,484.00	\$517.52	\$9,001.52

Oct 2023

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Year 2	73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	700	\$3,360.00	\$0.00	\$3,360.00
Year 2	BasicLicense	Basic License Bundle	15	\$2,700.00	\$272.70	\$2,972.70
Year 2	BasicLicense	Basic License Bundle	15	\$45.00	\$4.54	\$49.54
Year 2	ProLicense	Pro License Bundle	5	\$2,340.00	\$236.34	\$2,576.34
Year 2	ProLicense	Pro License Bundle	5	\$39.00	\$3.94	\$42.94
Total				\$8,484.00	\$517.52	\$9,001.52

Oct 2024

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Year 3	73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	700	\$3,360.00	\$0.00	\$3,360.00
Year 3	BasicLicense	Basic License Bundle	15	\$2,700.00	\$272.70	\$2,972.70
Year 3	BasicLicense	Basic License Bundle	15	\$45.00	\$4.54	\$49.54
Year 3	ProLicense	Pro License Bundle	5	\$2,340.00	\$236.34	\$2,576.34
Year 3	ProLicense	Pro License Bundle	5	\$39.00	\$3.94	\$42.94
Total				\$8,484.00	\$517.52	\$9,001.52

Oct 2025

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Year 4	73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	700	\$3,360.00	\$0.00	\$3,360.00
Year 4	BasicLicense	Basic License Bundle	15	\$2,700.00	\$272.70	\$2,972.70
Year 4	BasicLicense	Basic License Bundle	15	\$45.00	\$4.54	\$49.54
Year 4	ProLicense	Pro License Bundle	5	\$2,340.00	\$236.34	\$2,576.34
Year 4	ProLicense	Pro License Bundle	5	\$39.00	\$3.94	\$42.94
Total				\$8,484.00	\$517.52	\$9,001.52

Oct 2026

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Year 5	73683	10 GB EVIDENCE.COM A-LA-CART STORAGE-	700	\$3,360.00	\$0.00	\$3,360.00
Year 5	BasicLicense	Basic License Bundle	15	\$2,700.00	\$272.70	\$2,972.70
Year 5	BasicLicense	Basic License Bundle	15	\$45.00	\$4.54	\$49.54
Year 5	ProLicense	Pro License Bundle	5	\$2,340.00	\$236.34	\$2,576.34

Oct 2026

Section 10, ItemA.

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Year 5	ProLicense	Pro License Bundle	5	\$39.00	\$3.94	\$42.94
Total				\$8,484.00	\$517.52	\$9,001.52

Tax is estimated based on rates applicable at date of quote and subject to change at time of invoicing. If a tax exemption certificate should be applied, prior to invoicing.

Section 10, Item A.

Standard Terms and Conditions

Axon Enterprise Inc. Sales Terms and Conditions

Axon Master Services and Purchasing Agreement:

This Quote is limited to and conditional upon your acceptance of the provisions set forth herein and Axon's Master Services and Purchasing Agreement (posted at www.axon.com/legal/sales-terms-and-conditions), as well as the attached Statement of Work (SOW) for Axon Fleet and/or Axon Interview Room purchase, if applicable. In the event you and Axon have entered into a prior agreement to govern all future purchases, that agreement shall govern to the extent it includes the products and services being purchased and does not conflict with the Axon Customer Experience Improvement Program Appendix as described below.

ACEIP:

The Axon Customer Experience Improvement Program Appendix, which includes the sharing of de-identified segments of Agency Content with Axon to develop new products and improve your product experience (posted at www.axon.com/legal/sales-terms-and-conditions), is incorporated herein by reference. By signing below, you agree to the terms of the Axon Customer Experience Improvement Program.

Acceptance of Terms:

Any purchase order issued in response to this Quote is subject solely to the above referenced terms and conditions. By signing below, you represent that you are lawfully able to enter into contracts. If you are signing on behalf of an entity (including but not limited to the company, municipality, or government agency for whom you work), you represent to Axon that you have legal authority to bind that entity. If you do not have this authority, please do not sign this Quote.

Signature

Date Signed

9/7/2022





Master Services and Purchasing Agreement

This Master Services and Purchasing Agreement ("**Agreement**") is between Axon Enterprise, Inc., a Delaware corporation ("**Axon**"), and the agency on the Quote ("**Agency**"). This Agreement is effective as of the later of the (a) last signature date on this Agreement or (b) signature date on the Quote ("**Effective Date**"). Axon and Agency are each a "**Party**" and collectively "**Parties**". This Agreement governs Agency's purchase and use of the Axon Devices and Services detailed in the Quote Appendix ("**Quote**"). It is the intent of the Parties that this Agreement act as a master agreement governing all subsequent purchases by Agency for the same Axon products and services in the Quote, and all such subsequent quotes accepted by Agency shall be also incorporated into this Agreement by reference as a Quote. The Parties therefore agree as follows:

1 Definitions.

"**Axon Cloud Services**" means Axon's web services for Axon Evidence, Axon Records, Axon Dispatch, and interactions between Evidence.com and Axon Devices or Axon client software. Axon Cloud Service excludes third-party applications, hardware warranties, and my.evidence.com.

"**Axon Device**" means all hardware provided by Axon under this Agreement.

"**Quote**" means an offer to sell and is only valid for devices and services on the quote at the specified prices. Any terms within Agency's purchase order in response to a Quote will be void. Orders are subject to prior credit approval. Changes in the deployment estimated ship date may change charges in the Quote. Shipping dates are estimates only. Axon is not responsible for typographical errors in any offer by Axon, and Axon reserves the right to cancel any orders resulting from such errors.

"**Services**" means all services provided by Axon under this Agreement, including software, Axon Cloud Services, and professional services.

2 Term. This Agreement begins on the Effective Date and continues until all subscriptions hereunder have expired or have been terminated ("**Term**").

All subscriptions including Axon Evidence, Axon Fleet, Officer Safety Plans, Technology Assurance Plans, and TASER 7 plans begin after shipment of the applicable Axon Device. If Axon ships the Axon Device in the first half of the month, the start date is the 1st of the following month. If Axon ships the Axon Device in the second half of the month, the start date is the 15th of the following month. For purchases solely of Axon Evidence subscriptions, the start date is the Effective Date. Each subscription term ends upon completion of the subscription stated in the Quote ("**Subscription Term**").

Upon completion of the Subscription Term, the Subscription Term will automatically renew for an additional 5 years ("**Renewal Term**"). For purchase of TASER 7 as a standalone, Axon may increase pricing to its then-current list pricing for any Renewal Term. For all other purchases, Axon may increase pricing on all line items in the Quote up to 3% at the beginning of each year of the Renewal Term. New devices and services may require additional terms. Axon will not authorize services until Axon receives a signed Quote or accepts a purchase order, whichever is first.

3 Payment. Axon invoices upon shipment. Payment is due net 30 days from the invoice date. Payment obligations are non-cancelable. Agency will pay invoices without setoff, deduction, or withholding. If Axon sends a past due account to collections, Agency is responsible for collection and attorneys' fees.

4 Taxes. Agency is responsible for sales and other taxes associated with the order unless Agency provides Axon a valid tax exemption certificate.

5 Shipping. Axon may make partial shipments and ship Axon Devices from multiple locations. All shipments are FOB shipping point via common carrier. Title and risk of loss pass to Agency upon Axon's delivery to the common carrier. Agency is responsible for any shipping charges in the Quote.

6 Returns. All sales are final. Axon does not allow refunds or exchanges, except warranty returns or as provided by state or federal law.

Title: Master Services and Purchasing Agreement between Axon and Agency

Department: Legal

Version: 11.0

Release Date: 8/6/2020



Master Services and Purchasing Agreement

7 Warranty.

7.1 Hardware Limited Warranty. Axon warrants that Axon-manufactured Devices are free from defects in workmanship and materials for 1 year from the date of Agency's receipt, except Signal Sidearm, which Axon warrants for 30 months from the date of Agency's receipt. Axon warrants its Axon-manufactured accessories for 90-days from the date of Agency's receipt. Used conducted energy weapon ("CEW") cartridges are deemed to have operated properly. Extended warranties run from the expiration of the 1-year hardware warranty through the extended warranty term. Non-Axon manufactured Devices are not covered by Axon's warranty. Agency should contact the manufacturer for support of non-Axon manufactured Devices.

7.2 Claims. If Axon receives a valid warranty claim for an Axon manufactured Device during the warranty term, Axon's sole responsibility is to repair or replace the Device with the same or like Device, at Axon's option. A replacement Axon Device will be new or like new. Axon will warrant the replacement Axon Device for the longer of (a) the remaining warranty of the original Axon Device or (b) 90-days from the date of repair or replacement.

If Agency exchanges a device or part, the replacement item becomes Agency's property, and the replaced item becomes Axon's property. Before delivering a Axon Device for service, Agency must upload Axon Device data to Axon Evidence or download it and retain a copy. Axon is not responsible for any loss of software, data, or other information contained in storage media or any part of the Axon Device sent to Axon for service.

7.3 Spare Axon Devices. Axon may provide Agency a predetermined number of spare Axon Devices as detailed in the Quote ("**Spare Axon Devices**"). Spare Axon Devices will replace broken or non-functioning units. If Agency utilizes a Spare Axon Device, Agency must return to Axon, through Axon's warranty return process, any broken or non-functioning units. Axon will repair or replace the unit with a replacement Axon Device. Upon termination, Axon will invoice Agency the MSRP then in effect for all Spare Axon Devices provided. If Agency returns the Spare Axon Devices to Axon within 30 days of the invoice date, Axon will issue a credit and apply it against the invoice.

7.4 Limitations. Axon's warranty excludes damage related to: (a) failure to follow Axon Device use instructions; (b) Axon Devices used with equipment not manufactured or recommended by Axon; (c) abuse, misuse, or intentional damage to Axon Device; (d) force majeure; (e) Axon Devices repaired or modified by persons other than Axon without Axon's written permission; or (f) Axon Devices with a defaced or removed serial number.

7.4.1 To the extent permitted by law, the above warranties and remedies are exclusive. Axon disclaims all other warranties, remedies, and conditions, whether oral, written, statutory, or implied. If statutory or implied warranties cannot be lawfully disclaimed, then such warranties are limited to the duration of the warranty described above and by the provisions in this Agreement.

7.4.2 Axon's cumulative liability to any Party for any loss or damage resulting from any claim, demand, or action arising out of or relating to any Axon Device or Service will not exceed the purchase price paid to Axon for the Axon Device, or if for Services, the amount paid for such Services over the 12 months preceding the claim. Neither Party will be liable for direct, special, indirect, incidental, punitive or consequential damages, however caused, whether for breach of warranty or contract, negligence, strict liability, tort or any other legal theory.

8 Statement of Work. Certain Axon Devices and Services, including Axon Interview Room, Axon Channel Services, and Axon Fleet, may require a Statement of Work that details Axon's Service deliverables ("**SOW**"). In the event Axon provides an SOW to Agency, Axon is only responsible to perform Services described in the SOW. Additional services are out of scope. The Parties must document scope changes in a written and signed change order. Changes may require an equitable adjustment in fees or schedule. The SOW is incorporated into this Agreement by reference.

9 Axon Device Warnings. See www.axon.com/legal for the most current Axon Device warnings.



Master Services and Purchasing Agreement

- 10 **Design Changes.** Axon may make design changes to any Axon Device or Service without notifying Agency or making the same change to Axon Devices and Services previously purchased by Agency.
- 11 **Bundled Offerings.** Some offerings in bundled offerings may not be generally available at the time of Agency's purchase. Axon will not provide a refund, credit, or additional discount beyond what is in the Quote due to a delay of availability or Agency's election not to utilize any portion of an Axon bundle.
- 12 **Insurance.** Axon will maintain General Liability, Workers' Compensation, and Automobile Liability insurance. Upon request, Axon will supply certificates of insurance.
- 13 **Indemnification.** Axon will indemnify Agency's officers, directors, and employees ("**Agency Indemnitees**") against all claims, demands, losses, and reasonable expenses arising out of a third-party claim against an Agency Indemnatee resulting from any negligent act, error or omission, or willful misconduct by Axon under this Agreement, except to the extent of Agency's negligence or willful misconduct, or claims under workers compensation.
- 14 **IP Rights.** Axon owns and reserves all right, title, and interest in Axon devices and services and suggestions to Axon, including all related intellectual property rights. Agency will not cause any Axon proprietary rights to be violated.
- 15 **IP Indemnification.** Axon will indemnify Agency Indemnitees against all claims, losses, and reasonable expenses from any third-party claim alleging that the use of Axon Devices or Services infringes or misappropriates the third-party's intellectual property rights. Agency must promptly provide Axon with written notice of such claim, tender to Axon the defense or settlement of such claim at Axon's expense and cooperate fully with Axon in the defense or settlement of such claim. Axon's IP indemnification obligations do not apply to claims based on (a) modification of Axon Devices or Services by Agency or a third-party not approved by Axon; (b) use of Axon Devices and Services in combination with hardware or services not approved by Axon; (c) use of Axon Devices and Services other than as permitted in this Agreement; or (d) use of Axon software that is not the most current release provided by Axon.
- 16 **Agency Responsibilities.** Agency is responsible for (a) Agency's use of Axon Devices; (b) breach of this Agreement or violation of applicable law by Agency or an Agency end user; and (c) a dispute between Agency and a third-party over Agency's use of Axon Devices.
- 17 **Termination.**
- 17.1 **For Breach.** A Party may terminate this Agreement for cause if it provides 30 days written notice of the breach to the other Party, and the breach remains uncured at the end of 30 days. If Agency terminates this Agreement due to Axon's uncured breach, Axon will refund prepaid amounts on a prorated basis based on the effective date of termination.
- 17.2 **By Agency.** If sufficient funds are not appropriated or otherwise legally available to pay the fees, Agency may terminate this Agreement. Agency will deliver notice of termination under this section as soon as reasonably practicable.
- 17.3 **Effect of Termination.** Upon termination of this Agreement, Agency rights immediately terminate. Agency remains responsible for all fees incurred before the effective date of termination. If Agency purchases Axon Devices for less than the manufacturer's suggested retail price ("**MSRP**") and this Agreement terminates before the end of the Term for any reason other than Axon's breach, Axon will invoice Agency the difference between the MSRP for Axon Devices received and amounts paid towards those Axon Devices. Only if terminating for non-appropriation, Agency may return Axon Devices to Axon within 30 days of termination. MSRP is the standalone price of the individual Axon Device at the time of sale. For bundled Axon Devices, MSRP is the standalone price of all individual components.
- 18 **Confidentiality.** "**Confidential Information**" means nonpublic information designated as confidential or, given the nature of the information or circumstances surrounding disclosure, should reasonably be

Title: Master Services and Purchasing Agreement between Axon and Agency

Department: Legal

Version: 11.0

Release Date: 8/6/2020



Master Services and Purchasing Agreement

understood to be confidential. Each Party will take reasonable measures to avoid disclosure, dissemination, or unauthorized use of the other Party's Confidential Information. Unless required by law, neither Party will disclose the other Party's Confidential Information during the Term and for 5-years thereafter. Axon pricing is Confidential Information and competition sensitive. If Agency is required by law to disclose Axon pricing, to the extent allowed by law, Agency will provide notice to Axon before disclosure. Axon may publicly announce information related to this Agreement.

19 General.

19.1 Force Majeure. Neither Party will be liable for any delay or failure to perform due to a cause beyond a Party's reasonable control.

19.2 Independent Contractors. The Parties are independent contractors. Neither Party has the authority to bind the other. This Agreement does not create a partnership, franchise, joint venture, agency, fiduciary, or employment relationship between the Parties.

19.3 Third-Party Beneficiaries. There are no third-party beneficiaries under this Agreement.

19.4 Non-Discrimination. Neither Party nor its employees will discriminate against any person based on race; religion; creed; color; sex; gender identity and expression; pregnancy; childbirth; breastfeeding; medical conditions related to pregnancy, childbirth, or breastfeeding; sexual orientation; marital status; age; national origin; ancestry; genetic information; disability; veteran status; or any class protected by local, state, or federal law.

19.5 Export Compliance. Each Party will comply with all import and export control laws and regulations.

19.6 Assignment. Neither Party may assign this Agreement without the other Party's prior written consent. Axon may assign this Agreement, its rights, or obligations without consent: (a) to an affiliate or subsidiary; or (b) for purposes of financing, merger, acquisition, corporate reorganization, or sale of all or substantially all its assets. This Agreement is binding upon the Parties respective successors and assigns.

19.7 Waiver. No waiver or delay by either Party in exercising any right under this Agreement constitutes a waiver of that right.

19.8 Severability. If a court of competent jurisdiction holds any portion of this Agreement invalid or unenforceable, the remaining portions of this Agreement will remain in effect.

19.9 Survival. The following sections will survive termination: Payment, Warranty, Axon Device Warnings, Indemnification, IP Rights, and Agency Responsibilities.

19.10 Governing Law. The laws of the state where Agency is physically located, without reference to conflict of law rules, govern this Agreement and any dispute arising from it. The United Nations Convention for the International Sale of Goods does not apply to this Agreement.

19.11 Notices. All notices must be in English. Notices posted on Agency's Axon Evidence site are effective upon posting. Notices by email are effective on the sent date of the email. Notices by personal delivery are effective immediately. Contact information for notices:

Axon: Axon Enterprise, Inc.
Attn: Legal
17800 N. 85th Street
Scottsdale, Arizona 85255
legal@axon.com

Agency:
Attn:
Street Address
City, State, Zip
Email

19.12 Prior Agreement. The Parties have agreed that the City is terminating the Fleet five (5) year contract for \$66,974.60 issued August 23, 2019, and signed by the City's representative Chief of

Police Mike Harden on August 29, 2019 ("2019 Contract"). No penalties will be assessed for this termination due to outstanding issues. The City will remove the Fleet 2 equipment and return it to Axon by the return label provided by Axon.

19.13 Entire Agreement. This Agreement, including the Appendices and any SOW(s), represents the entire agreement between the Parties. This Agreement supersedes all prior agreements or understandings, whether written or verbal, regarding the subject matter of this Agreement. This Agreement may only be modified or amended in a writing signed by the Parties.

Each representative identified below declares they have been expressly authorized to execute this Agreement as of the date of signature.

Axon Enterprise, Inc.

DocuSigned by:
Signature: 
55DAEBB131A4424...
Name: Robert Driscoll

Title: VP, Assoc. General Counsel

Date: 9/21/2020 | 4:43 PM MST

Agency

Signature: 
Name: MICHAEL HARDEN

Title: CHIEF OF POLICE

Date: 9-21-20



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Axon Cloud Services Terms of Use Appendix

1 **Definitions.**

"Agency Content" is data uploaded into, ingested by, or created in Axon Cloud Services within Agency's tenant, including media or multimedia uploaded into Axon Cloud Services by Agency. Agency Content includes Evidence but excludes Non-Content Data.

"Evidence" is media or multimedia uploaded into Axon Evidence as 'evidence' by an Agency. Evidence is a subset of Agency Content.

"Non-Content Data" is data, configuration, and usage information about Agency's Axon Cloud Services tenant, Axon Devices and client software, and users that is transmitted or generated when using Axon Devices. Non-Content Data includes data about users captured during account management and customer support activities. Non-Content Data does not include Agency Content.

"Personal Data" means any information relating to an identified or identifiable natural person. An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

- 2** **Access.** Upon Axon granting Agency a subscription to Axon Cloud Services, Agency may access and use Axon Cloud Services to store and manage Agency Content. Agency may not exceed more end users than the Quote specifies. Axon Air requires an Axon Evidence subscription for each drone operator. For Axon Evidence Lite, Agency may access and use Axon Evidence only to store and manage TASER CEW and TASER CAM data ("**TASER Data**"). Agency may not upload non-TASER Data to Axon Evidence Lite.

- 3** **Agency Owns Agency Content.** Agency controls and owns all right, title, and interest in Agency Content. Except as outlined herein, Axon obtains no interest in Agency Content, and Agency Content are not business records of Axon. Agency is solely responsible for uploading, sharing, managing, and deleting Agency Content. Axon will have limited access to Agency Content solely for providing and supporting Axon Cloud Services to Agency and Agency end users.

- 4** **Security.** Axon will implement commercially reasonable and appropriate measures to secure Agency Content against accidental or unlawful loss, access or disclosure. Axon will maintain a comprehensive information security program to protect Axon Cloud Services and Agency Content including logical, physical access, vulnerability, risk, and configuration management; incident monitoring and response; encryption of uploaded digital evidence; security education; and data protection. Axon agrees to the Federal Bureau of Investigation Criminal Justice Information Services Security Addendum.

- 5** **Agency Responsibilities.** Agency is responsible for (a) ensuring Agency owns Agency Content; (b) ensuring no Agency Content or Agency end user's use of Agency Content or Axon Cloud Services violates this Agreement or applicable laws; and (c) maintaining necessary computer equipment and Internet connections for use of Axon Cloud Services. If Agency becomes aware of any violation of this Agreement by an end user, Agency will immediately terminate that end user's access to Axon Cloud Services.

Agency will also maintain the security of end user names and passwords and security and access by end users to Agency Content. Agency is responsible for ensuring the configuration and utilization of Axon Cloud Services meet applicable Agency regulation and standards. Agency may not sell, transfer, or sublicense access to any other entity or person. Agency shall contact Axon immediately if an unauthorized party may be using Agency's account or Agency Content, or if account information is lost or stolen.

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- 6 **Privacy.** Axon will not disclose Agency Content or information about Agency except as compelled by a court or administrative body or required by law or regulation. If Axon receives a disclosure request for Agency Content, Axon will give Agency notice, unless legally prohibited from doing so, to allow Agency to file an objection with the court or administrative body. Agency agrees to allow Axon access to certain information from Agency to (a) perform troubleshooting services upon request or as part of regular diagnostic screening; (b) enforce this Agreement or policies governing the use of Axon Evidence; or (c) perform analytic and diagnostic evaluations of the systems.
- 7i **Axon Body 3 Wi-Fi Positioning.** Axon Body 3 cameras offer a feature to enhance location services where GPS/GNSS signals may not be available, for instance, within buildings or underground. Agency administrators can manage their choice to use this service within the administrative features of Axon Cloud Services. If Agency chooses to use this service, Axon must also enable the usage of the feature for Agency's Axon Cloud Services tenant. Agency will not see this option with Axon Cloud Services unless Axon has enabled Wi-Fi Positioning for Agency's Axon Cloud Services tenant. When Wi-Fi Positioning is enabled by both Axon and Agency, Non-Content and Personal Data will be sent to Skyhook Holdings, Inc. ("Skyhook") to facilitate the Wi-Fi Positioning functionality. Data controlled by Skyhook is outside the scope of the Axon Cloud Services Privacy Policy and is subject to the Skyhook Services Privacy Policy.
- 8 **Storage.** For Axon Unlimited Device Storage subscriptions, Agency may store unlimited data in Agency's Axon Evidence account only if data originates from Axon Capture or the applicable Axon Device. Axon may charge Agency additional fees for exceeding purchased storage amounts. Axon may place Agency Content that Agency has not viewed or accessed for 6 months into archival storage. Agency Content in archival storage will not have immediate availability and may take up to 24 hours to access.
- 9 **Location of Storage.** Axon may transfer Agency Content to third-party subcontractors for storage. Axon will determine the locations of data centers for storage of Agency Content. For United States agencies, Axon will ensure all Agency Content stored in Axon Cloud Services remains within the United States. Ownership of Agency Content remains with Agency.
- 10 **Suspension.** Axon may temporarily suspend Agency's or any end user's right to access or use any portion or all of Axon Cloud Services immediately upon notice, if Agency or end user's use of or registration for Axon Cloud Services may (a) pose a security risk to Axon Cloud Services or any third-party; (b) adversely impact Axon Cloud Services, the systems, or content of any other customer; (c) subject Axon, Axon's affiliates, or any third-party to liability; or (d) be fraudulent.
- Agency remains responsible for all fees incurred through suspension. Axon will not delete Agency Content because of suspension, except as specified in this Agreement.
- 11 **Axon Cloud Services Warranty.** Axon disclaims any warranties or responsibility for data corruption or errors before Agency uploads data to Axon Cloud Services.
- 12 **Axon Records.** Axon Records is the software-as-a-service product that is generally available at the time Agency purchases an OSP 7 bundle. During Agency's Axon Records Subscription Term, Agency will be entitled to receive Axon's Update and Upgrade releases on an if-and-when available basis.

An "Update" is a generally available release of Axon Records that Axon makes available from time to time. An "Upgrade" includes (i) new versions of Axon Records that enhance features and functionality, as solely determined by Axon; and/or (ii) new versions of Axon Records that provide additional features or perform additional functions. Upgrades exclude new products that Axon introduces and markets as distinct products or applications.

New or additional Axon products and applications, as well as any Axon professional services

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needed to configure Axon Records, are not included. If Agency purchases Axon Records as part of a bundled offering, the Axon Record subscription begins on the later of the (1) start date of that bundled offering, or (2) date Axon provisions Axon Records to Agency.

- 13 **Axon Cloud Services Restrictions.** Agency and Agency end users (including employees, contractors, agents, officers, volunteers, and directors), may not, or may not attempt to:
- 13.1 copy, modify, tamper with, repair, or create derivative works of any part of Axon Cloud Services;
 - 13.2 reverse engineer, disassemble, or decompile Axon Cloud Services or apply any process to derive any source code included in Axon Cloud Services, or allow others to do the same;
 - 13.3 access or use Axon Cloud Services with the intent to gain unauthorized access, avoid incurring fees or exceeding usage limits or quotas;
 - 13.4 use trade secret information contained in Axon Cloud Services, except as expressly permitted in this Agreement;
 - 13.5 access Axon Cloud Services to build a competitive device or service or copy any features, functions, or graphics of Axon Cloud Services;
 - 13.6 remove, alter, or obscure any confidentiality or proprietary rights notices (including copyright and trademark notices) of Axon's or Axon's licensors on or within Axon Cloud Services; or
 - 13.7 use Axon Cloud Services to store or transmit infringing, libelous, or other unlawful or tortious material; to store or transmit material in violation of third-party privacy rights; or to store or transmit malicious code.
- 14 **After Termination.** Axon will not delete Agency Content for 90-days following termination. There will be no functionality of Axon Cloud Services during these 90-days other than the ability to retrieve Agency Content. Agency will not incur additional fees if Agency downloads Agency Content from Axon Cloud Services during this time. Axon has no obligation to maintain or provide Agency Content after these 90-days and will thereafter, unless legally prohibited, delete all Agency Content. Upon request, Axon will provide written proof that Axon successfully deleted and fully removed all Agency Content from Axon Cloud Services.
- 15 **Post-Termination Assistance.** Axon will provide Agency with the same post-termination data retrieval assistance that Axon generally makes available to all customers. Requests for Axon to provide additional assistance in downloading or transferring Agency Content, including requests for Axon's data egress service, will result in additional fees and Axon will not warrant or guarantee data integrity or readability in the external system.
- 16 **U.S. Government Rights.** If Agency is a U.S. Federal department or using Axon Cloud Services on behalf of a U.S. Federal department, Axon Cloud Services is provided as a "commercial item," "commercial computer software," "commercial computer software documentation," and "technical data", as defined in the Federal Acquisition Regulation and Defense Federal Acquisition Regulation Supplement. If Agency is using Axon Cloud Services on behalf of the U.S. Government and these terms fail to meet the U.S. Government's needs or are inconsistent in any respect with federal law, Agency will immediately discontinue use of Axon Cloud Services.
- 17 **Survival.** Upon any termination of this Agreement, the following sections in this Appendix will survive: Agency Owns Agency Content, Storage, Axon Cloud Services Warranty, and Axon Cloud Services Restrictions.



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Professional Services Appendix

- 1 **Utilization of Services.** Agency must use professional services as outlined in the Quote and this Appendix within 6 months of the Effective Date.
- 2 **Body-Worn Camera Full Service (BWC Full Service).** BWC Full Service includes advance remote project planning and configuration support and up to 4 consecutive days of on-site service and a professional services manager to work with Agency to assess Agency's deployment and determine which on-site services are appropriate. If Agency requires more than 4 consecutive on-site days, Agency must purchase additional days. BWC Full Service options include:

System set up and configuration

- Instructor-led setup of Axon View on smartphones (if applicable)
- Configure categories and custom roles based on Agency need
- Register cameras to Agency domain
- Troubleshoot IT issues with Axon Evidence and Axon Dock ("Dock") access
- One on-site session included

Dock configuration

- Work with Agency to decide the ideal location of Docks and set configurations on Dock
- Authenticate Dock with Axon Evidence using admin credentials from Agency
- On-site assistance, not to include physical mounting of docks

Best practice implementation planning session

- Provide considerations for the establishment of video policy and system operations best practices based on Axon's observations with other agencies
- Discuss the importance of entering metadata in the field for organization purposes and other best practice for digital data management
- Provide referrals of other agencies using the Axon camera devices and Axon Evidence
- Recommend rollout plan based on review of shift schedules

System Admin and troubleshooting training sessions

Step-by-step explanation and assistance for Agency's configuration of security, roles & permissions, categories & retention, and other specific settings for Axon Evidence

Axon instructor training (Train the Trainer)

Training for Agency's in-house instructors who can support Agency's Axon camera and Axon Evidence training needs after Axon has fulfilled its contractual on-site obligations

Evidence sharing training

Tailored workflow instruction for Investigative Units on sharing Cases and Evidence with local prosecuting agencies

End user go-live training and support sessions

- Assistance with device set up and configuration
- Training on device use, Axon Evidence, and Evidence Sync

Implementation document packet

Axon Evidence administrator guides, camera implementation guides, network setup guide, sample policies, and categories & roles guide

Post go-live review

- 3 **Body-Worn Camera Starter Service (BWC Starter).** BWC Starter includes advance remote project planning and configuration support and one day of on-site Services and a professional services manager to work closely with Agency to assess Agency's deployment and determine which Services are appropriate. If Agency requires more than 1 day of on-site Services, Agency must purchase additional on-site Services. The BWC Starter options include:

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System set up and configuration (Remote Support)

- Instructor-led setup of Axon View on smartphones (if applicable)
- Configure categories & custom roles based on Agency need
- Troubleshoot IT issues with Axon Evidence and Axon Dock ("Dock") access

Dock configuration

- Work with Agency to decide the ideal location of Dock setup and set configurations on Dock
- Authenticate Dock with Axon Evidence using "Administrator" credentials from Agency
- Does not include physical mounting of docks

Axon instructor training (Train the Trainer)

Training for Agency's in-house instructors who can support Agency's Axon camera and Axon Evidence training needs after Axon's has fulfilled its contracted on-site obligations

End user go-live training and support sessions

- Assistance with device set up and configuration
- Training on device use, Axon Evidence, and Evidence Sync

Implementation document packet

Axon Evidence administrator guides, camera implementation guides, network setup guide, sample policies, and categories & roles guide

- 4 **Body-Worn Camera Virtual 1-Day Service (BWC Virtual).** BWC Virtual includes all items in the BWC Starter Service Package, except one day of on-site services.

- 5 **CEW Services Packages.** CEW Services Packages are detailed below:

System set up and configuration

- Configure Axon Evidence categories & custom roles based on Agency need.
- Troubleshoot IT issues with Axon Evidence.
- Register users and assign roles in Axon Evidence.
- **For the CEW Full Service Package:** On-site assistance included
- **For the CEW Starter Package:** Virtual assistance included

Dedicated Project Manager

Assignment of specific Axon representative for all aspects of planning the rollout (Project Manager). Ideally, Project Manager will be assigned to Agency 4–6 weeks before rollout

Best practice implementation planning session to include:

- Provide considerations for the establishment of CEW policy and system operations best practices based on Axon's observations with other agencies
- Discuss the importance of entering metadata and best practices for digital data management
- Provide referrals to other agencies using TASER CEWs and Axon Evidence
- **For the CEW Full Service Package:** On-site assistance included
- **For the CEW Starter Package:** Virtual assistance included

System Admin and troubleshooting training sessions

On-site sessions providing a step-by-step explanation and assistance for Agency's configuration of security, roles & permissions, categories & retention, and other specific settings for Axon Evidence

Axon Evidence Instructor training

- Provide training on the Axon Evidence to educate instructors who can support Agency's subsequent Axon Evidence training needs.
- **For the CEW Full Service Package:** Training for up to 3 individuals at Agency
- **For the CEW Starter Package:** Training for up to 1 individual at Agency



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TASER CEW inspection and device assignment

Axon's on-site professional services team will perform functions check on all new TASER CEW Smart weapons and assign them to a user on Axon Evidence.

Post go-live review

For the CEW Full Service Package: On-site assistance included.

For the CEW Starter Package: Virtual assistance included.

6 **Smart Weapon Transition Service.** The Smart Weapon Transition Service includes:

Archival of CEW Firing Logs

Axon's on-site professional services team will upload CEW firing logs to Axon Evidence from all TASER CEW Smart Weapons that Agency is replacing with newer Smart Weapon models.

Return of Old Weapons

Axon's on-site professional service team will ship all old weapons back to Axon's headquarters.

Axon will provide Agency with a Certificate of Destruction

*Note: CEW Full Service packages for TASER 7 include Smart Weapon Transition Service instead of 1-Day Device Specific Instructor Course.

7 **Signal Sidearm Installation Service.** If Agency purchases Signal Sidearm Installation Service, Axon will provide one day of on-site Services and one professional services manager and will cover the installation of up to 100 Signal Sidearm devices per package purchased. Agency is responsible for providing an appropriate work area and ensuring all holsters that will have Signal Sidearm installed onto them are available on the agreed-upon installation date(s). Installation includes:

Removal of existing connection screws that affix a holster to a holster mount

Proper placement of the Signal Sidearm Mounting Plate between the holster and the mount

Reattachment of the holster to the mount using appropriate screws

Functional testing of Signal Sidearm device

8 **Out of Scope Services.** Axon is only responsible to perform the professional services described in the Quote and this Appendix. Any additional professional services are out of scope. The Parties must document scope changes in a written and signed change order. Changes may require an equitable adjustment in the charges or schedule.

9 **Delivery of Services.** Axon personnel will work Monday through Friday, 8:30 a.m. to 5:30 p.m., except holidays. Axon will perform all on-site tasks over a consecutive timeframe. Axon will not charge Agency travel time by Axon personnel to Agency premises as work hours.

10 **Access Computer Systems to Perform Services.** Agency authorizes Axon to access relevant Agency computers and networks, solely for performing the Services. Axon will work to identify as soon as reasonably practicable resources and information Axon expects to use and will provide an initial itemized list to Agency. Agency is responsible for and assumes the risk of any problems, delays, losses, claims, or expenses resulting from the content, accuracy, completeness, and consistency of all data, materials, and information supplied by Agency.

11 **Site Preparation.** Axon will provide a hardcopy or digital copy of current user documentation for the Axon Devices ("User Documentation"). User Documentation will include all required environmental specifications for the professional Services and Axon Devices to operate per the Axon Device User Documentation. Before installation of Axon Devices (whether performed by Agency or Axon), Agency must prepare the location(s) where Axon Devices are to be installed ("Installation Site") per the environmental specifications in the Axon Device User Documentation. Following installation, Agency must maintain the Installation Site per the environmental specifications. If Axon modifies Axon Device User Documentation for any Axon Devices under this Agreement, Axon will provide the update to Agency when Axon generally releases it. If Axon

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modifies Axon Device User Documentation for any Axon Devices under this Agreement, Axon will provide the update to Agency when Axon generally releases it

- 12 **Acceptance.** When Axon completes professional Services, Axon will present an acceptance form ("**Acceptance Form**") to Agency. Agency will sign the Acceptance Form acknowledging completion. If Agency reasonably believes Axon did not complete the professional Services in substantial conformance with this Agreement, Agency must notify Axon in writing of the specific reasons for rejection within 7 calendar days from delivery of the Acceptance Form. Axon will address the issues and re-present the Acceptance Form for signature. If Axon does not receive the signed Acceptance Form or written notification of reasons for rejection within 7 calendar days of delivery of the Acceptance Form, Axon will deem Agency to have accepted the professional Services.
- 13 **Agency Network.** For work performed by Axon transiting or making use of Agency's network, Agency is solely responsible for maintenance and functionality of the network. In no event will Axon be liable for loss, damage, or corruption of Agency's network from any cause.



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Technology Assurance Plan Appendix

If Technology Assurance Plan ("TAP") or a bundle including TAP is on the Quote, this appendix applies.

- 1 **TAP Warranty.** The TAP warranty is an extended warranty that starts at the end of the 1-year Hardware Limited Warranty.
- 2 **Officer Safety Plan.** If Agency purchases an Officer Safety Plan ("OSP"), Agency will receive the deliverables detailed in the Quote. Agency must accept delivery of the TASER CEW and accessories as soon as available from Axon.
- 3 **OSP 7 Term.** OSP 7 begins after Axon ships the Axon Body 3 or TASER 7 hardware to Agency. If Axon ships in the first half of the month, OSP 7 starts the 1st of the following month. If Axon ships in the second half of the month, OSP 7 starts the 15th of the following month ("**OSP 7 Term**").
- 4 **TAP BWC Upgrade.** If Agency has no outstanding payment obligations and purchased TAP, Axon will provide Agency a new Axon body-worn camera ("**BWC Upgrade**") as scheduled in the Quote. If Agency purchased TAP Axon will provide a BWC Upgrade that is the same or like Axon Device, at Axon's option. Axon makes no guarantee the BWC Upgrade will utilize the same accessories or Axon Dock.
- 5 **TAP Dock Upgrade.** If Agency has no outstanding payment obligations and purchased TAP, Axon will provide Agency a new Axon Dock as scheduled in the Quote ("**Dock Upgrade**"). Accessories associated with any Dock Upgrades are subject to change at Axon discretion. Dock Upgrades will only include a new Axon Dock bay configuration unless a new Axon Dock core is required for BWC compatibility. If Agency originally purchased a single-bay Axon Dock, the Dock Upgrade will be a single-bay Axon Dock model that is the same or like Axon Device, at Axon's option. If Agency originally purchased a multi-bay Axon Dock, the Dock Upgrade will be a multi-bay Axon Dock that is the same or like Axon Device, at Axon's option.
- 6 **Upgrade Delay.** Axon may ship the BWC and Dock Upgrades as scheduled in the Quote without prior confirmation from Agency unless the Parties agree in writing otherwise at least 90 days in advance. Axon may ship the final BWC and Dock Upgrade as scheduled in the Quote 60 days before the end of the Subscription Term without prior confirmation from Agency.
- 7 **Upgrade Change.** If Agency wants to change Axon Device models for the offered BWC or Dock Upgrade, Agency must pay the price difference between the MSRP for the offered BWC or Dock Upgrade and the MSRP for the model desired. If the model Agency desires has an MSRP less than the MSRP of the offered BWC Upgrade or Dock Upgrade, Axon will not provide a refund. The MSRP is the MSRP in effect at the time of the upgrade.
- 8 **Return of Original Axon Device.** Within 30 days of receiving a BWC or Dock Upgrade, Agency must return the original Axon Devices to Axon or destroy the Axon Devices and provide a certificate of destruction to Axon including serial numbers for the destroyed Axon Devices. If Agency does not return or destroy the Axon Devices, Axon will deactivate the serial numbers for the Axon Devices received by Agency.
- 9 **Termination.** If Agency's payment for TAP, OSP, or Axon Evidence is more than 30 days past due, Axon may terminate TAP or OSP. Once TAP or OSP terminates for any reason:
 - 9.1 TAP and OSP coverage terminate as of the date of termination and no refunds will be given.
 - 9.2 Axon will not and has no obligation to provide the Upgrade Models.
 - 9.3 Agency must make any missed payments due to the termination before Agency may purchase any future TAP or OSP.

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TASER 7 Appendix

This TASER 7 Appendix applies to Agency's TASER 7, OSP 7, or OSP 7 Plus purchase from Axon.

- 1 **Duty Cartridge Replenishment Plan.** If the Quote includes "Duty Cartridge Replenishment Plan", Agency must purchase the plan for each CEW user. A CEW user includes officers that use a CEW in the line of duty and those that only use a CEW for training. Agency may not resell cartridges received. Axon will only replace cartridges used in the line of duty.
- 2 **Training.** If the Quote includes a training voucher, Agency must use the voucher within 1 year of issuance, or the voucher will be void. Axon will issue Agency a voucher annually beginning on the start of the TASER Subscription Term. The voucher has no cash value. Agency cannot exchange it for another device or service. Unless stated in the Quote, the voucher does not include travel expenses and will be Agency's responsibility. If the Quote includes Axon Online Training or Virtual Reality Content Empathy Development for Autism/Schizophrenia (collectively, "Training Content"), Agency may access Training Content. Axon will deliver all Training Content electronically.
- 3 **Extended Warranty.** If the Quote includes an extended warranty, the extended warranty coverage period warranty will be for a 5-year term, which includes the hardware manufacturer's warranty plus the 4-year extended term.
- 4 **Trade-in.** If the Quote contains a discount on CEW-related line items, including items related to OSP, then that discount may only be applied as a trade-in credit, and Agency must return used hardware and accessories associated with the discount ("Trade-In Units") to Axon. Agency must ship batteries via ground shipping. Axon will pay shipping costs of the return. If Axon does not receive Trade-In Units within the timeframe below, Axon will invoice Agency the value of the trade-in credit. Agency may not destroy Trade-In Units and receive a trade-in credit.

Agency Size	Days to Return from Start Date of TASER 7 Subscription
Less than 100 officers	30 days
100 to 499 officers	90 days
500+ officers	180 days

- 5 **TASER 7 Subscription Term.** The TASER 7 Subscription Term for a standalone TASER 7 purchase begins on shipment of the TASER 7 hardware. The TASER 7 Subscription Term for OSP 7 begins on the OSP 7 Start date.
- 6 **Access Rights.** Upon Axon granting Agency a TASER 7 Axon Evidence subscription, Agency may access and use Axon Evidence for the storage and management of data from TASER 7 CEW devices during the TASER 7 Subscription Term. Agency may not upload any non-TASER 7 data or any other files to Axon Evidence. Agency may not exceed the number of end users than the Quote specifies.
- 7 **Privacy.** Axon will not disclose Agency Content or any information about Agency except as compelled by a court or administrative body or required by any law or regulation. Axon will give notice if any disclosure request is received for Agency Content, so Agency may file an objection with the court or administrative body. Agency acknowledges and agrees that Axon may access Agency Content to: (a) perform troubleshooting services upon request or as part of Axon's maintenance or diagnostic screenings; (b) enforce this Agreement or policies governing use of Axon Evidence; (c) generate aggregated data, excluding information that can be used to distinguish

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or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual (collectively, "PII"), to improve, analyze, support, and operate Axon's current and future devices and services.

- 8 **Termination.** If payment for TASER 7 is more than 30 days past due, Axon may terminate Agency's TASER 7 plan by notifying Agency. Upon termination for any reason, then as of the date of termination:
- 8.1 TASER 7 extended warranties and access to Training Content will terminate. No refunds will be given.
 - 8.2 Axon will invoice Agency the remaining MSRP for TASER 7 products received before termination. If terminating for non-appropriations, Axon will not invoice Agency if Agency returns the CEW, rechargeable battery, holster, dock, core, training suits, and unused cartridges to Axon within 30 days of the date of termination.
 - 8.3 Agency will be responsible for payment of any missed payments due to the termination before being allowed to purchase any future TASER 7 plan.



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Axon Auto-Tagging Appendix

- 1 **Scope.** Axon Auto-Tagging consists of the development of a module to allow Axon Evidence to interact with Agency's Computer-Aided Dispatch ("CAD") or Records Management Systems ("RMS"). This allows end users to auto-populate Axon video meta-data with a case ID, category, and location-based on data maintained in Agency's CAD or RMS.
- 2 **Support.** For thirty days after completing Auto-Tagging Services, Axon will provide up to 5 hours of remote support at no additional charge. Axon will provide free support due to a change in Axon Evidence, so long as long as Agency maintains an Axon Evidence and Auto-Tagging subscription. Axon will not provide support if a change is required because Agency changes its CAD or RMS.
- 3 **Changes.** Axon is only responsible to perform the Services in this Appendix. Any additional Services are out of scope. The Parties must document scope changes in a written and signed change order. Changes may require an equitable adjustment in fees or schedule.
- 4 **Agency Responsibilities.** Axon's performance of Auto-Tagging Services requires Agency to:
 - 4.1 Make available relevant systems, including Agency's current CAD or RMS, for assessment by Axon (including remote access if possible);
 - 4.2 Make required modifications, upgrades or alterations to Agency's hardware, facilities, systems and networks related to Axon's performance of Auto-Tagging Services;
 - 4.3 Provide access to the premises where Axon is performing Auto-Tagging Services, subject to Agency safety and security restrictions, and allow Axon to enter and exit the premises with laptops and materials needed to perform Auto-Tagging Services;
 - 4.4 Provide all infrastructure and software information (TCP/IP addresses, node names, network configuration) necessary for Axon to provide Auto-Tagging Services;
 - 4.5 Promptly install and implement any software updates provided by Axon;
 - 4.6 Ensure that all appropriate data backups are performed;
 - 4.7 Provide assistance, participation, and approvals in testing Auto-Tagging Services;
 - 4.8 Provide Axon with remote access to Agency's Axon Evidence account when required;
 - 4.9 Notify Axon of any network or machine maintenance that may impact the performance of the module at Agency; and
 - 4.10 Ensure reasonable availability of knowledgeable staff and personnel to provide timely, accurate, complete, and up-to-date documentation and information to Axon.
- 5 **Access to Systems.** Agency authorizes Axon to access Agency's relevant computers, network systems, and CAD or RMS solely for performing Auto-Tagging Services. Axon will work diligently to identify as soon as reasonably practicable resources and information Axon expects to use and will provide an initial list to Agency. Agency is responsible for and assumes the risk of any problems, delays, losses, claims, or expenses resulting from the content, accuracy, completeness, and consistency of all data, materials, and information supplied by Agency.



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Axon Fleet Appendix

- 1 **Agency Responsibilities.** Agency must ensure its infrastructure and vehicles adhere to the minimum requirements to operate Axon Fleet 2 or Axon Fleet 3 (collectively, "Axon Fleet") as established by Axon during the qualifier call and on-site assessment at Agency and in any technical qualifying questions. If Agency's representations are inaccurate, the Quote is subject to change.
- 2 **Cradlepoint.** If Agency purchases Cradlepoint Enterprise Cloud Manager, Agency will comply with Cradlepoint's end user license agreement. The term of the Cradlepoint license may differ from the Axon Evidence Subscription. If Agency requires Cradlepoint support, Agency will contact Cradlepoint directly.
- 3 **Third-party Installer.** Axon will not be liable for the failure of Axon Fleet hardware to operate per specifications if such failure results from installation not performed by, or as directed by Axon.
- 4 **Wireless Offload Server.**
 - 4.1 **License Grant.** Axon grants Agency a non-exclusive, royalty-free, worldwide, perpetual license to use Wireless Offload Server ("WOS"). "Use" means storing, loading, installing, or executing WOS solely for data communication with Axon Devices for the number of licenses purchased. The WOS term begins upon the start of the Axon Evidence Subscription.
 - 4.2 **Restrictions.** Agency may not: (a) modify, alter, tamper with, repair, or create derivative works of WOS; (b) reverse engineer, disassemble, or decompile WOS, apply any process to derive the source code of WOS, or allow others to do so; (c) access or use WOS to avoid incurring fees or exceeding usage limits; (d) copy WOS in whole or part; (e) use trade secret information contained in WOS; (f) resell, rent, loan or sublicense WOS; (g) access WOS to build a competitive device or service or copy any features, functions or graphics of WOS; or (h) remove, alter or obscure any confidentiality or proprietary rights notices (including copyright and trademark notices) of Axon or Axon's licensors on or within WOS.
 - 4.3 **Updates.** If Agency purchases WOS maintenance, Axon will make updates and error corrections to WOS ("**WOS Updates**") available electronically via the Internet or media as determined by Axon. Agency is responsible for establishing and maintaining adequate Internet access to receive WOS Updates and maintaining computer equipment necessary for use of WOS. The Quote will detail the maintenance term.
 - 4.4 **WOS Support.** Upon request by Axon, Agency will provide Axon with access to Agency's store and forward servers solely for troubleshooting and maintenance.
- 5 **Axon Vehicle Software.**
 - 5.1 **License Grant.** Axon grants Agency a non-exclusive, royalty-free, worldwide, perpetual license to use ViewXL or Dashboard (collectively, "Axon Vehicle Software".) "Use" means storing, loading, installing, or executing Axon Vehicle Software solely for data communication with Axon Devices. The Axon Vehicle Software term begins upon the start of the Axon Evidence Subscription.
 - 5.2 **Restrictions.** Agency may not: (a) modify, alter, tamper with, repair, or create derivative works of Axon Vehicle Software; (b) reverse engineer, disassemble, or decompile Axon Vehicle Software, apply any process to derive the source code of Axon Vehicle Software, or allow others to do so; (c) access or use Axon Vehicle Software to avoid incurring fees or exceeding usage limits; (d) copy Axon Vehicle Software in whole or part; (e) use trade secret information contained in Axon Vehicle Software; (f) resell, rent, loan or sublicense Axon Vehicle Software; (g) access Axon Vehicle Software to build a competitive device or service or copy any features, functions or graphics of Axon Vehicle Software; or (h) remove, alter or obscure any confidentiality or proprietary rights notices (including copyright and trademark notices) of Axon or Axon's licensors on or within Axon Vehicle Software.

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- 6 **Axon Fleet Upgrade.** If Agency has no outstanding payment obligations and has purchased the "Fleet Technology Assurance Plan" (Fleet TAP), Axon will provide Agency with the same or like model of Fleet hardware ("Fleet Upgrade") as schedule on the Quote.

If Agency would like to change models for the Axon Fleet Upgrade, Agency must pay the difference between the MSRP for the offered Axon Fleet Upgrade and the MSRP for the model desired. The MSRP is the MSRP in effect at the time of the upgrade. Agency is responsible for the removal of previously installed hardware and installation of the Axon Fleet Upgrade.

Within 30 days of receiving the Axon Fleet Upgrade, Agency must return the original Axon Devices to Axon or destroy the Axon Devices and provide a certificate of destruction to Axon, including serial numbers of the destroyed Axon Devices. If Agency does not destroy or return the Axon Devices to Axon, Axon will deactivate the serial numbers for the Axon Devices received by Agency.

- 7 **Privacy.** Axon will not disclose Agency Content or any information about Agency except as compelled by a court or administrative body or required by any law or regulation. Axon will give notice if any disclosure request is received for Agency Content, so Agency may file an objection with the court or administrative body. Agency acknowledges and agrees that Axon may access Agency Content to: (a) perform troubleshooting services upon request or as part of Axon's maintenance or diagnostic screenings; (b) enforce this Agreement or policies governing use of Axon Evidence; (c) generate aggregated data, excluding information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual (collectively, "PII"), to improve, analyze, support, and operate Axon's current and future devices and services.

- 8 **Axon Fleet Termination.** Axon may terminate Agency's Fleet subscription for non-payment. Upon any termination:

- 8.1 Axon Fleet subscription coverage terminates, and no refunds will be given.
- 8.2 Axon will not and has no obligation to provide the Axon Fleet Upgrade.
- 8.3 Agency will be responsible for payment of any missed payments due to the termination before being allowed to purchase any future Fleet TAP.



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Axon Aware Appendix

This Axon Aware Appendix applies to both Axon Aware and Axon Aware Plus.

- 1 **Axon Aware Subscription Term.** If Agency purchases Axon Aware as part of a bundled offering, the Axon Aware subscription begins on the later of the (1) start date of that bundled offering, or (2) date Axon provisions Axon Aware to Agency.

If Agency purchases Axon Aware as a standalone, the Axon Aware subscription begins the later of the (1) date Axon provisions Axon Aware to Agency, or (2) first day of the month following the Effective Date.

The Axon Aware subscription term will end upon the completion of the Axon Evidence Subscription associated with Axon Aware.

- 2 **Scope of Axon Aware.** The scope of Axon Aware is to assist Agency with real-time situational awareness during critical incidents to improve officer safety, effectiveness, and awareness. In the event Agency uses Axon Aware outside this scope, Axon may initiate good-faith discussions with Agency on upgrading Agency's Axon Aware to better meet Agency's needs.

- 3 **Axon Body 3 LTE Requirements.** Axon Aware is only available and usable with an LTE enabled body-worn camera. Axon is not liable if Agency utilizes the LTE device outside of the coverage area or if the LTE carrier is unavailable. LTE coverage is only available in the United States, including any U.S. territories. Axon may utilize a carrier of Axon's choice to provide LTE service. Axon may change LTE carriers during the Term without Agency's consent.

- 4 **Axon Fleet 3 LTE Requirements.** Axon Aware is only available and usable with a Fleet 3 system configured with LTE modem and service. Agency is responsible for providing LTE service for the modem. Coverage and availability of LTE service is subject to Agency's LTE carrier.

- 5 **Axon Aware Service Limitations.** Agency acknowledges that LTE service is made available only within the operating range of the networks. Service may be temporarily refused, interrupted, or limited because of: (a) facilities limitations; (b) transmission limitations caused by atmospheric, terrain, other natural or artificial conditions adversely affecting transmission, weak batteries, system overcapacity, movement outside a service area or gaps in coverage in a service area and other causes reasonably outside of the carrier's control such as intentional or negligent acts of third parties that damage or impair the network or disrupt service; or (c) equipment modifications, upgrades, relocations, repairs, and other similar activities necessary for the proper or improved operation of service.

With regard to Axon Body 3, Partner networks are made available as-is and the carrier makes no warranties or representations as to the availability or quality of roaming service provided by carrier partners, and the carrier will not be liable in any capacity for any errors, outages, or failures of carrier partner networks. Agency expressly understands and agrees that it has no contractual relationship whatsoever with the underlying wireless service provider or its affiliates or contractors and Agency is not a third-party beneficiary of any agreement between Axon and the underlying carrier.

- 6 **Termination.** Upon termination of this Agreement, or if Agency stops paying for Axon Aware or bundles that include Axon Aware, Axon will end Aware services, including any Axon-provided LTE service.

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Add-on Services Appendix

This Appendix applies to Axon Citizen for Communities, Axon Redaction Assistant, and Axon Performance.

- 1 **Subscription Term.** If Agency purchases Axon Citizen for Communities, Axon Redaction Assistant, or Axon Performance as part of OSP 7, the subscription begins on the later of the (1) start date of the OSP 7 Term, or (2) date Axon provisions Axon Citizen for Communities, Axon Redaction Assistant, or Axon Performance to Agency.

If Agency purchases Axon Citizen for Communities, Axon Redaction Assistant, or Axon Performance as a standalone, the subscription begins the later of the (1) date Axon provisions Axon Citizen for Communities, Axon Redaction Assistant, or Axon Performance to Agency, or (2) first day of the month following the Effective Date.

The subscription term will end upon the completion of the Axon Evidence Subscription associated with the add-on.

- 2 **Axon Citizen Storage.** For Axon Citizen, Agency may store an unlimited amount of data submitted through the public portal ("Portal Content"), within Agency's Axon Evidence instance. The post-termination provisions outlined in the Axon Cloud Services Terms of Use Appendix also apply to Portal Content.
- 3 **Performance Auto-Tagging Data.** In order to provide some features of Axon Performance to Agency, Axon will need to store call for service data from Agency's CAD or RMS.



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Flock Software Terms of Use Appendix

1 Definitions.

"Aggregated Data" means information that relates to a group or category of customers, from which individual customer identities have been removed, that is not linked or reasonably linkable to any customer, including via a device.

"Authorized End User" shall mean any individual employees, agents, or contractors of Customer accessing or using the Flock Services through the Web Interface, under the rights granted to Customer pursuant to this Agreement.

"Customer" will mean the Customer.

"Customer Data" will mean the data, media and content provided by Customer through the Flock Services. For the avoidance of doubt, the Customer Data will include the Footage and geolocation information and environmental data collected by sensors built into the Units.

"Documentation" will mean text and/or graphical documentation, whether in electronic or printed format, that describe the features, functions and operation of the Flock Services which are provided by Flock to Customer in accordance with the terms of this Agreement.

"Embedded Software" will mean the software and/or firmware embedded or preinstalled on the Flock Hardware.

"Flock IP" will mean the Flock Services, the Documentation, the Flock Hardware, the Embedded Software, the Installation Services, and any and all intellectual property therein or otherwise provided to Customer and/or its Authorized End Users in connection with the foregoing.

"Flock Hardware" shall mean the Flock Gate Cameras and any other physical elements that interact with the Embedded Software and the Web Interface to provide the Flock Services. The term "Flock Hardware" excludes the Embedded Software.

"Flock Services" means the provision, via the Web Interface, of Flock's software application for automatic license plate detection, searching image records, and sharing Footage.

"Flock System" means collectively, the Flock Hardware, Embedded Software, and Flock Services.

"Footage" means still images and/or video captured by the Flock Hardware in the course of and provided via the Flock Services.

"Non-Customer End User" means a Flock customer that has elected to give Customer access to its data in the Flock System.

"Non-Customer End User Data" means the Footage, geolocation data, environmental data and/or notifications of a Non-Customer End User.

"Unit(s)" shall mean the Flock Hardware together with the Embedded Software.

"Web Interface" means the website(s) or application(s) through which Customer and its Authorized End Users can access the Flock Services in accordance with the terms of this Agreement.

2 Flock Services.

2.1 Provision of Access. Subject to the terms of this Agreement, Flock hereby grants to Customer a non-exclusive, non-transferable right to access the features and functions of

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the Flock Services via the Web Interface during the term of Customer's agreement, solely for the Authorized End Users. The Footage will be available for Customer to access via the Web Interface for 30 days. Authorized End Users will be required to sign up for an account, and select a password and username ("User ID"). Flock will also provide Customer the Documentation to be used in accessing and using the Flock Services. Customer shall be responsible for all acts and omissions of Authorized End Users, and any act or omission by an Authorized End User which, if undertaken by Customer, would constitute a breach of this Agreement, shall be deemed a breach of this Agreement by Customer. Customer shall undertake reasonable efforts to make all Authorized End Users aware of the provisions of this Agreement as applicable to such Authorized End User's use of the Flock Services and shall cause Authorized End Users to comply with such provisions. Flock may use the services of one or more third parties to deliver any part of the Flock Services, including without limitation using a third party to host the Web Interface which make the Flock Services available to Customer and Authorized End Users. Customer agrees to comply with any acceptable use policies and other terms of any third-party service provider that are provided or otherwise made available to Customer from time to time.

- 2.2 Embedded Software License.** Subject to all terms of this Agreement, Flock grants Customer a limited, non-exclusive, non-transferable, non-sublicensable (except to the Authorized End Users), revocable right to use the Embedded Software as installed on the Flock Hardware by Flock; in each case, solely as necessary for Customer to use the Flock Services.
- 2.3 Documentation License.** Subject to the terms of this Agreement, Flock hereby grants to Customer a non-exclusive, non-transferable right and license to use the Documentation during the Service Term for Customer's internal purposes in connection with its use of the Flock Services as contemplated herein.
- 2.4 Usage Restrictions.** Customer will not, and will not permit any Authorized End Users to, (i) copy or duplicate any of the Flock IP; (ii) decompile, disassemble, reverse engineer or otherwise attempt to obtain or perceive the source code from which any software component of any of the Flock IP is compiled or interpreted, or apply any other process or procedure to derive the source code of any software included in the Flock IP, or attempt to do any of the foregoing, and Customer acknowledges that nothing in this Agreement will be construed to grant Customer any right to obtain or use such source code; (iii) modify, alter, tamper with or repair any of the Flock IP, or create any derivative product from any of the foregoing, or attempt to do any of the foregoing, except with the prior written consent of Flock; (vi) interfere or attempt to interfere in any manner with the functionality or proper working of any of the Flock IP; (v) remove, obscure, or alter any notice of any intellectual property or proprietary right appearing on or contained within any of the Application IP; (vii) use the Flock Services for timesharing or service bureau purposes or otherwise for the benefit of a third party or any purpose other than the Purpose; or (viii) assign, sublicense, sell, resell, lease, rent or otherwise transfer or convey, or pledge as security or otherwise encumber, Customer's rights under Sections 2.1, 2.2, or 2.3.
- 2.5 Retained Rights; Ownership.** As between the Parties, subject to the rights granted in this Agreement, Flock and its licensors retain all right, title and interest in and to the Flock IP and its components, and Customer acknowledges that it neither owns nor acquires any additional rights in and to the foregoing not expressly granted by this Agreement. Customer further acknowledges that Flock retains the right to use the foregoing for any purpose in Flock's sole discretion. There are no implied rights.
- 2.6 Suspension.** Notwithstanding anything to the contrary in this Agreement, Flock may temporarily suspend Customer's and any Authorized End User's access to any portion or all of the Flock IP if (i) Flock reasonably determines that (a) there is a threat or attack on

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any of the Flock IP; (b) Customer's or any Authorized End User's use of the Flock Service disrupts or poses a security risk to the Flock Service or any other customer or vendor of Flock; (c) Customer or any Authorized End User is/are using the Flock IP for fraudulent or illegal activities; (d) Flock's provision of the Flock Services to Customer or any Authorized End User is prohibited by applicable law; or (e) any vendor of Flock has suspended or terminated Flock's access to or use of any third party services or products required to enable Customer to access the Flock (each such suspension, in accordance with this Section 2.6, a "**Service Suspension**"). Flock will make commercially reasonable efforts, circumstances permitting, to provide written notice of any Service Suspension to Customer (including notices sent to Flock's registered email address) and to provide updates regarding resumption of access to the Flock IP following any Service Suspension. Flock will use commercially reasonable efforts to resume providing access to the Application Service as soon as reasonably possible after the event giving rise to the Service Suspension is cured. Flock will extend the Customer's term by the duration of any suspension (for any continuous suspension lasting at least one full day) where the service suspension is not caused by the direct Customer's actions or by the actions of parties associated with the Customer. Flock will have no liability for any damage, liabilities, losses (including any loss of data or profits) or any other consequences that Customer or any Authorized End User may incur as a result of a Service Suspension.

3 Installation Services.

3.1 Designated Locations. Prior to performing the physical installation of the Units, Flock shall advise Customer on the location and positioning of the Units for optimal license plate image capture, as conditions and location allow. While Flock will provide advice regarding the location of positioning of such Units, Customer will have the ultimate decision regarding the location, position, and angle of the Units (each Unit location so designated by Customer, a "**Designated Location**"). Due to the fact that Customer selects the Designated Location, Flock shall have no liability to Customer resulting from any poor performance, functionality or Footage resulting from or otherwise relating to the Designated Locations, or delay in installation due to Customer's delay in identifying the choices for the Designated Locations, in ordering and/or having the Designated Location ready for installation including having all electrical work preinstalled and permits ready. Designated Locations that are suggested by Flock and accepted by Customer without alteration will be known as Flock Designated Locations. After a deployment plan with Designated Locations and equipment has been agreed upon by both Flock and the Customer, any subsequent changes to the deployment plan ("**Reinstalls**") driven by Customer's request will incur a charge for Flock's then-current list price for Reinstalls, as listed in the then-current Reinstall Policy (available at <https://www.flocksafety.com/reinstall-fee-schedule>) and any equipment charges. These changes include but are not limited to camera re-positioning, adjusting of camera mounting, re-angling, removing foliage, camera replacement, changes to heights of poles, regardless of whether the need for Reinstalls related to vandalism, weather, theft, lack of criminal activity in view, and the like

3.2 Customer's Installation Obligations. Customer agrees to allow Flock and its agents reasonable access to the designated installation locations at all reasonable times upon reasonable notice for the purpose of performing the installation work. The "Customer Installation Obligations" include, to the extent required by the Deployment Plan, but are not limited to electrical work to provide a reliable source of 120V AC power that follow Flock guidelines and comply with local regulations if adequate solar exposure is not available. Customer is solely responsible for (i) any permits or associated costs, and managing the permitting process; (ii) any permits or associated costs, any federal, state or local taxes including property, license, privilege, sales, use, excise, gross receipts or other similar taxes which may now or hereafter become applicable to, measured by or imposed upon or with respect to the installation of the Flock Hardware, its use, or any other services performed in connection therewith and that Customer shall be solely responsible for the

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foregoing. Customer represents and warrants that it has all necessary right title and authority and hereby authorizes Flock to install the Flock Hardware at the Designated Locations and to make any necessary inspections or tests in connection with such installation.

- 3.3 Flock's Installation Obligations.** The Flock Hardware shall be installed in a workmanlike manner in accordance with Flock's standard installation procedures, and the installation will be completed within a reasonable time from the time the Designated Locations are selected by Customer. Following the initial installation of the Flock Hardware, Flock's obligation to perform installation work shall cease; however, Flock will continue to monitor the performance of the Units, and receive access to the Footage for a period of 3 business days for maintenance purposes. Customer can opt out of Flock's access in the preceding sentence, which would waive Flock's responsibility to ensure such action was successful. Customer understands and agrees that the Flock Services will not function without the Flock Hardware.
- 3.4 Theft and Damage.** Flock agrees to replace the Flock Hardware up to 1 time during the Term, at no cost to Customer, in the event of theft or damage. Subsequent replacement due to damage or theft will be at Customer's own expense, at a replacement cost of \$300 per camera. Customer shall not be required to replace subsequently damaged or stolen units; however, Customer understands and agrees that functionality, including Footage, will be materially affected due to such subsequently damaged or stolen units and that Flock will have no liability to Customer regarding such affected functionality nor shall the Fees owed be impacted.
- 3.5 Security Interest.** The Flock Hardware shall remain the personal property of Flock and will be removed upon the termination or expiration of Customer's Agreement. Customer agrees to perform all acts which may be necessary to assure the retention of title of the Flock Hardware by Flock. Should Customer default in any payment for the Flock Services or any part thereof or offer to sell or auction the Flock Hardware, then Customer authorizes and empowers Flock to remove the Flock Hardware or any part thereof. Such removal, if made by Flock, shall not be deemed a waiver of Flock's rights to any damages Flock may sustain as a result of Customer's default and Flock shall have the right to enforce any other legal remedy or right.
- 3.6 Hazardous Conditions.** Unless otherwise stated in the Agreement, Flock's price for its services under this Agreement does not contemplate work in any areas that contain hazardous materials, or other hazardous conditions, including, without limit, asbestos. In the event any such hazardous materials are discovered in the designated locations in which Flock is to perform services under this Agreement, Flock shall have the right to cease work immediately in the area affected until such materials are removed or rendered harmless. Any additional expenses incurred by Flock as a result of the discovery or presence of hazardous material or hazardous conditions shall be the responsibility of Customer and shall be paid promptly upon billing.

- 4 Customer Representations and Warranties.** Customer represents, covenants, and warrants that Customer will use the Flock Services only in compliance with this Agreement and all applicable laws and regulations, including but not limited to any laws relating to the recording or sharing of video, photo, or audio content and retention thereof. Customer hereby agrees to indemnify and hold harmless Flock against any damages, losses, liabilities, settlements and expenses, including without limitation costs and attorneys' fees, in connection with any claim or action that arises from an alleged violation of the foregoing, Customer's Installation Obligations, or otherwise from Customer's use of the Services, Hardware and any Software, including any claim that such actions violate any applicable law or third party right. Although Flock has no obligation to monitor Customer's use of the Services, Flock may do so and may prohibit any use of the Services it

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believes may be (or alleged to be) in violation of the foregoing

5 Data, Feedback; Aggregated Statistics.

5.1 **Customer and Non-Customer End User Data.** As between Flock and Customer, all right, title and interest in the Customer Data and Non-Customer End User Data, belong to and are retained solely by Customer. Customer hereby grants to Flock a limited, non-exclusive, royalty-free, worldwide license to use the Customer Data and Non-Customer End User Data and perform all acts with respect to the Customer Data and Non-Customer End User Data as may be necessary for Flock to provide the Flock Services to Customer, and a non-exclusive, perpetual, irrevocable, worldwide, royalty-free, fully paid license to use, reproduce, modify and distribute the Customer Data and Non-Customer End User Data as a part of the Aggregated Data (as defined in Section 5.3 below). This Agreement does not by itself make any Non-Customer End User Data the sole property or the Proprietary Information of Customer. Flock will automatically delete Footage older than 30 days. Customer has a 30-day window to view, save and/or transmit Footage to the relevant government agency prior to its deletion.

5.2 **Feedback.** If Customer provides any suggestions, ideas, enhancement requests, feedback, recommendations or other information relating to the subject matter hereunder, Customer hereby assigns (and will cause its agents and representatives to assign) to Flock all right, title and interest (including intellectual property rights) with respect to or resulting from any of the foregoing.

5.3 **Aggregated Data.** Notwithstanding anything in this Agreement to the contrary, Flock shall have the right to collect and analyze data that does not refer to or identify Customer or any individuals or de-identifies such data and other information relating to the provision, use and performance of various aspects of the Flock Services and related systems and technologies (including, without limitation, information concerning Customer Data and data derived therefrom). Customer acknowledges that Flock will be compiling Aggregated Data based on Customer Data and Non-Customer End User Data input into the Flock Services. Customer hereby grants Flock a non-exclusive, worldwide, perpetual, royalty-free right and license (during and after the Service Term hereof) to use and distribute such Aggregated Data to improve and enhance the Services and for other marketing, development, diagnostic and corrective purposes in connection with the Flock Services and other Flock offerings. No rights or licenses are granted except as expressly set forth herein.

6 **Fees and Term.** The initial term of the Flock Services shall be for the time period set forth on the Quote ("**Initial Flock Term**"). Following the Initial Flock Term, this Agreement will automatically renew for successive renewal terms of the length set forth on the Quote (each, a "**Flock Renewal Term**", and together with the Initial Flock Term, the "**Service Term**") unless either Party gives the other Party notice of non-renewal at least 30 days prior to the end of the then-current Service Term. The Service Term begins when all Flock Hardware is installed and has been validated as operational by Flock.

7 Remedy; Warranty; and Disclaimer.

7.1 **Remedy.** Upon a malfunction or failure of Flock Hardware or Embedded Software (a "**Defect**"), Customer must first make commercially reasonable efforts to address the problem by contacting Flock's technical support. If such efforts do not correct the Defect, Flock shall, or shall instruct one of its contractors to, in its sole discretion, repair or replace the Flock Hardware or Embedded Software suffering from the Defect. Flock reserves the right to refuse or delay replacement or its choice of remedy for a Defect until after it has inspected and tested the affected Unit; provided that such inspection and test shall occur within 72 hours after Customer notifies the Flock of defect. Except for cameras owned by Customer, Flock agrees to replace cameras at a fee according to the then-current Reinstall Policy (<https://www.flocksafety.com/reinstall-fee-schedule>). Customer shall not be required

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to replace subsequently damaged or stolen units; however, Customer understands and agrees that functionality, including Footage, will be materially affected due to such subsequently damaged or stolen units and that Flock will have no liability to Customer regarding such affected functionality nor shall the Fees owed be impacted.

- 7.2 Exclusions.** Flock will not provide the remedy described in Section 6.1 above if any of the following exclusions apply: (a) misuse of the Flock Hardware or Embedded Software in any manner, including operation of the Flock Hardware or Embedded Software in any way that does not strictly comply with any applicable specifications, documentation, or other restrictions on use provided by Flock; (b) damage, alteration, or modification of the Flock Hardware or Embedded Software in any way; or (c) combination of the Flock Hardware or Embedded Software with software, hardware or other technology that was not expressly authorized by Flock.
- 7.3 Warranty.** Flock shall use reasonable efforts consistent with prevailing industry standards to maintain the Services in a manner which minimizes errors and interruptions in the Flock Services. Flock Services may be temporarily unavailable for scheduled maintenance or for unscheduled emergency maintenance, either by Flock or by third-party providers, or because of other causes beyond Flock's reasonable control, but Flock shall use reasonable efforts to provide advance notice in writing or by e-mail of any scheduled service disruption.
- 7.4 Disclaimer.** THE REMEDY DESCRIBED IN SECTION 6.1 ABOVE IS CUSTOMER'S SOLE REMEDY, AND FLOCK'S SOLE LIABILITY, WITH RESPECT TO DEFECTIVE FLOCK HARDWARE AND/OR EMBEDDED SOFTWARE. THE FLOCK DOES NOT WARRANT THAT THE FLOCK SERVICES WILL BE UNINTERRUPTED OR ERROR FREE; NOR DOES IT MAKE ANY WARRANTY AS TO THE RESULTS THAT MAY BE OBTAINED FROM USE OF THE FLOCK SERVICES. EXCEPT AS EXPRESSLY SET FORTH IN THIS SECTION, THE FLOCK SERVICES AND INSTALLATION SERVICES ARE PROVIDED "AS IS" AND FLOCK DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.
- 7.5 Insurance.** Flock and Customer will each maintain commercial general liability policies with policy limits reasonably commensurate with the magnitude of their business risk. Certificates of Insurance will be provided upon request.

8 Limitation of Liability and Indemnity.

- 8.1 Limitation of Liability.** NOTWITHSTANDING ANYTHING TO THE CONTRARY, FLOCK AND ITS SUPPLIERS (INCLUDING BUT NOT LIMITED TO ALL FLOCK HARDWARE AND TECHNOLOGY SUPPLIERS), OFFICERS, AFFILIATES, REPRESENTATIVES, CONTRACTORS AND EMPLOYEES SHALL NOT BE RESPONSIBLE OR LIABLE WITH RESPECT TO ANY SUBJECT MATTER OF THIS AGREEMENT OR TERMS AND CONDITIONS RELATED THERETO UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY, PRODUCT LIABILITY, OR OTHER THEORY: (A) FOR ERROR OR INTERRUPTION OF USE OR FOR LOSS OR INACCURACY, INCOMPLETENESS OR CORRUPTION OF DATA OR FOOTAGE OR COST OF PROCUREMENT OF SUBSTITUTE GOODS, SERVICES OR TECHNOLOGY OR LOSS OF BUSINESS; (B) FOR ANY INDIRECT, EXEMPLARY, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES; (C) FOR ANY MATTER BEYOND FLOCK'S ACTUAL KNOWLEDGE OR REASONABLE CONTROL INCLUDING REPEAT CRIMINAL ACTIVITY OR INABILITY TO CAPTURE FOOTAGE OR IDENTIFY AND/OR CORRELATE A LICENSE PLATE WITH THE FBI DATABASE; (D) FOR ANY PUBLIC DISCLOSURE OF PROPRIETARY INFORMATION MADE IN GOOD FAITH; (E) FOR CRIME PREVENTION; OR (F) FOR ANY AMOUNTS THAT, TOGETHER WITH AMOUNTS ASSOCIATED WITH ALL OTHER



Master Services and Purchasing Agreement

CLAIMS, EXCEED THE FEES PAID AND/OR PAYABLE BY CUSTOMER TO FLOCK FOR THE FLOCK SERVICES UNDER THIS AGREEMENT IN THE 12 MONTHS PRIOR TO THE ACT THAT GAVE RISE TO THE LIABILITY, IN EACH CASE, WHETHER OR NOT FLOCK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN THE EVENT OF AN EMERGENCY, CUSTOMER SHOULD CONTACT 911 AND SHOULD NOT RELY ON THE FLOCK SERVICES.

- 8.2 Responsibility.** Each Party to this Agreement shall assume the responsibility and liability for the acts and omissions of its own employees, deputies, officers, or agents, in connection with the performance of their official duties under this Agreement. Each Party to this Agreement shall be liable (if at all) only for the torts of its own officers, agents, or employees that occur within the scope of their official duties. Customer will not pursue any claims or actions against Flock's suppliers.
- 8.3 Indemnity.** Customer hereby agrees to indemnify and hold harmless Flock against any damages, losses, liabilities, settlements and expenses (including without limitation costs and attorneys' fees) in connection with any claim or action that arises from an alleged violation of Section 3, a breach of this Agreement, Customer's sharing of any data in connection with the Flock system, Flock employees or agent or Non-Customer End Users, or otherwise from Customer's use of the Flock Services, Flock Hardware and any Software, including any claim that such actions violate any applicable law or third party right. Although Flock has no obligation to monitor Customer's use of the Flock Services, Flock may do so and may prohibit any use of the Flock Services it believes may be (or alleged to be) in violation of the Section 3 or this Agreement.
- 9 Data Preservation.** The Customer agrees to store Customer Data and Non-Customer End User Data in compliance with all applicable local, state, and federal laws, regulations, policies and ordinances and their associated record retention schedules. As part of Customer's consideration for paid access and no-fee access to the Flock System, to the extent that Flock is required by local, state or federal law to store the Customer Data or the Non-Customer End User Data, Customer agrees to preserve and securely store this data on Flock's behalf so that Flock can delete the data from its servers and, should Flock be legally compelled by judicial or government order, Flock may retrieve the data from Customer upon demand.
- 10 Publicity.** Flock has the right to reference and use Customer's name and trademarks and disclose the nature of the Flock Services provided hereunder in each case in business and development and marketing efforts, including without limitation on Flock's website.
- 11 Export.** Customer may not remove or export from the United States or allow the export or re-export of the Flock IP or anything related thereto, or any direct product thereof in violation of any restrictions, laws or regulations of the United States Department of Commerce, the United States Department of Treasury Office of Foreign Assets Control, or any other United States or foreign Customer or authority. As defined in FAR section 2.101, the Flock Services, the Flock Hardware, the Embedded Software and Documentation are "commercial items" and according to DFAR section 252.2277014(a)(1) and (5) are deemed to be "commercial computer software" and "commercial computer software documentation." Consistent with DFAR section 227.7202 and FAR section 12.212, any use, modification, reproduction, release, performance, display, or disclosure of such commercial software or commercial software documentation by the U.S. Government will be governed solely by the terms of this Agreement and will be prohibited except to the extent expressly permitted by the terms of this Agreement.

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Master Services and Purchasing Agreement

Axon Commander™ Software Appendix

- 1 **License.** Axon owns all executable instructions, images, icons, sound, and text in Commander. All rights are reserved to Axon. Axon grants a non-exclusive, royalty-free, worldwide right and license to use Commander. "Use" means storing, loading, installing, or executing Commander exclusively for data communication with an Axon Device. Agency may use Commander in a networked environment on computers other than the computer it installs Commander on, so long as each execution of Commander is for data communication with an Axon Device. Agency may make copies of Commander for archival purposes only. Agency shall retain all copyright, trademark, and proprietary notices in Commander on all copies or adaptations.
- 2 **Term.** The Quote will detail the duration of the Commander license, as well as any maintenance. The term will begin upon installation of Commander by Axon.
- 3 **License Restrictions.** All licenses will immediately terminate if Agency does not comply with any term of this Agreement. Agency may not use Commander for any purpose other than as expressly permitted by this Agreement. Agency may not:
 - 3.1 modify, tamper with, repair, or otherwise create derivative works of Commander;
 - 3.2 reverse engineer, disassemble, or decompile Commander or apply any process to derive the source code of Commander, or allow others to do the same;
 - 3.3 access or use Commander to avoid incurring fees or exceeding usage limits or quotas;
 - 3.4 copy Commander in whole or part, except as expressly permitted in this Agreement;
 - 3.5 use trade secret information contained in Commander;
 - 3.6 resell, rent, loan or sublicense Commander;
 - 3.7 access Commander to build a competitive device or service or copy any features, functions, or graphics of Commander; or
 - 3.8 remove, alter, or obscure any confidentiality or proprietary rights notices (including copyright and trademark notices) of Axon or Axon's licensors on or within Commander or any copies of Commander.
- 4 **Support.** Axon may make available updates and error corrections ("**Updates**") to Commander. Axon will provide Updates electronically via the Internet or media as determined by Axon. Agency is responsible for establishing and maintaining adequate access to the Internet to receive Updates. Agency is responsible for maintaining the computer equipment necessary to use Commander. Axon may provide technical support of a prior release/version of Commander for 6 months from when Axon made the subsequent release/version available.
- 5 **Termination.** Axon may terminate Agency's license immediately for Agency's failure to comply with any of the terms in this Agreement. Upon termination, Axon may disable Agency's right to login to Axon Commander.



Master Services and Purchasing Agreement

Axon Application Programming Interface Appendix

1. **Definitions.**

"API Client" means the software that acts as the interface between Agency's computer and the server, which is already developed or to be developed by Agency.

"API Interface" means software implemented by Agency to configure Agency's independent API Client Software to operate in conjunction with the API Service for Agency's authorized Use.

"Axon Evidence Partner API, API or AXON API" (collectively **"API Service"**) means Axon's API which provides a programmatic means to access data in Agency's Axon Evidence account or integrate Agency's Axon Evidence account with other systems.

"Use" means any operation on Agency's data enabled by the supported API functionality.
2. **Purpose and License.**
 - 2.1 Agency may use API Service and data made available through API Service, in connection with an API Client developed by Agency. Axon may monitor Agency's use of API Service to ensure quality, improve Axon devices and services, and verify compliance with this Agreement. Agency agrees to not interfere with such monitoring or obscure from Axon Agency's use of API Service. Agency will not use API Service for commercial use.
 - 2.2 Axon grants Agency a non-exclusive, non-transferable, non-sublicensable, worldwide, revocable right and license during the Term to use API Service, solely for Agency's Use in connection with Agency's API Client.
 - 2.3 Axon reserves the right to set limitations on Agency's use of the API Service, such as a quota on operations, to ensure stability and availability of Axon's API. Axon will use reasonable efforts to accommodate use beyond the designated limits.
3. **Configuration.** Agency will work independently to configure Agency's API Client with API Service for Agency's applicable Use. Agency will be required to provide certain information (such as identification or contact details) as part of the registration. Registration information provided to Axon must be accurate. Agency will inform Axon promptly of any updates. Upon Agency's registration, Axon will provide documentation outlining API Service information.
4. **Agency Responsibilities.** When using API Service, Agency and its end users may not:
 - 4.1 use API Service in any way other than as expressly permitted under this Agreement;
 - 4.2 use in any way that results in, or could result in, any security breach to Axon;
 - 4.3 perform an action with the intent of introducing any viruses, worms, defect, Trojan horses, malware, or any items of a destructive nature to Axon Devices and Services;
 - 4.4 interfere with, modify, disrupt or disable features or functionality of API Service or the servers or networks providing API Service;
 - 4.5 reverse engineer, decompile, disassemble, or translate or attempt to extract the source code from API Service or any related software;
 - 4.6 create an API Interface that functions substantially the same as API Service and offer it for use by third parties;
 - 4.7 provide use of API Service on a service bureau, rental or managed services basis or permit other individuals or entities to create links to API Service;
 - 4.8 frame or mirror API Service on any other server, or wireless or Internet-based device;
 - 4.9 make available to a third-party, any token, key, password or other login credentials to API Service;
 - 4.10 take any action or inaction resulting in illegal, unauthorized or improper purposes; or disclose Axon's API manual.
5. **API Content.** All content related to API Service, other than Agency Content or Agency's API Client



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content, is considered Axon's API Content, including:

- 5.1 the design, structure and naming of API Service fields in all responses and requests;
- 5.2 the resources available within API Service for which Agency takes actions on, such as evidence, cases, users, or reports; and
- 5.3 the structure of and relationship of API Service resources; and
- 5.4 the design of API Service, in any part or as a whole.

6 **Prohibitions on API Content.** Neither Agency nor its end users will use API content returned from the API Interface to:

- 6.1 scrape, build databases, or otherwise create permanent copies of such content, or keep cached copies longer than permitted by the cache header;
- 6.2 copy, translate, modify, create a derivative work of, sell, lease, lend, convey, distribute, publicly display, or sublicense to any third-party;
- 6.3 misrepresent the source or ownership; or
- 6.4 remove, alter, or obscure any confidentiality or proprietary rights notices (including copyright and trademark notices).

7 **API Updates.** Axon may update or modify the API Service from time to time ("**API Update**"). Agency is required to implement and use the most current version of API Service and to make any applicable changes to Agency's API Client required as a result of such API Update. API Updates may adversely affect how Agency's API Client access or communicate with API Service or the API Interface. Each API Client must contain means for Agency to update API Client to the most current version of API Service. Axon will provide support for 1 year following the release of an API Update for all depreciated API Service versions.



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Advanced User Management Appendix

- 1 **Scope.** Advanced User Management allows Agency to (a) utilize bulk user creation and management, (b) automate user creation and management through System for Cross-domain Identity Management ("**SCIM**"), and (c) automate group creation and management through SCIM.
- 2 **Advanced User Management Configuration.** Agency will work independently to configure Agency's Advanced User Management for Agency's applicable Use. Upon request, Axon will provide general guidance to Agency, including documentation that details the setup and configuration process.



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Axon Channel Services Appendix

- 1 **Definitions.**

"Axon Digital Evidence Management System" means Axon Evidence or Axon Commander, as specified in the attached Channel Services Statement of Work.

"Active Channel" means a third-party system that is continuously communicating with an Axon Digital Evidence Management System.

"Inactive Channel" means a third-party system that will have a one-time communication to an Axon Digital Evidence Management System.
- 2 **Scope.** Agency currently has a third-party system or data repository from which Agency desires to share data with Axon Digital Evidence Management. Axon will facilitate the transfer of Agency's third-party data into an Axon Digital Evidence Management System or the transfer of Agency data out of an Axon Digital Evidence Management System as defined in the Channel Services Statement of Work ("**Channel Services SOW**"). Channel Services will not delete any Agency Content. Agency is responsible for verifying all necessary data is migrated correctly and retained per Agency policy.
- 3 **Purpose and Use.** Agency is responsible for verifying Agency has the right to share data from and provide access to third-party system as it relates to the Services described in this Appendix and the Channel Services SOW. For Active Channels, Agency is responsible for any changes to a third-party system that may affect the functionality of the channel service. Any additional work required for the continuation of the Service may require additional fees. An Axon Field Engineer may require access to Agency's network and systems to perform the Services described in the Channel Services SOW. Agency is responsible for facilitating this access per all laws and policies applicable to Agency.
- 4 **Project Management.** Axon will assign a Project Manager to work closely with Agency's project manager and project team members and will be responsible for completing the tasks required to meet all contract deliverables on time and budget.
- 5 **Warranty.** Axon warrants that it will perform the Channel Services in a good and workmanlike manner.
- 6 **Monitoring.** Axon may monitor Agency's use of Channel Services to ensure quality, improve Axon devices and services, prepare invoices based on the total amount of data migrated, and verify compliance with this Agreement. Agency agrees not to interfere with such monitoring or obscure from Axon Agency's use of channel services.
- 7 **Agency's Responsibilities.** Axon's successful performance of the Channel Services requires Agency:
 - 7.1 Make available its relevant systems for assessment by Axon (including making these systems available to Axon via remote access);
 - 7.2 Provide access to the building facilities and where Axon is to perform the Channel Services, subject to safety and security restrictions imposed by the Agency (including providing security passes or other necessary documentation to Axon representatives performing the Channel Services permitting them to enter and exit Agency premises with laptop personal computers and any other materials needed to perform the Channel Services);
 - 7.3 Provide all necessary infrastructure and software information (TCP/IP addresses, node names, and network configuration) for Axon to provide the Channel Services;
 - 7.4 Ensure all appropriate data backups are performed;
 - 7.5 Provide Axon with remote access to the Agency's network and third-party systems when required for Axon to perform the Channel Services;
 - 7.6 Notify Axon of any network or machine maintenance that may impact the performance of

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-
- 7.7 the Channel Services; and
Ensure the reasonable availability by phone or email of knowledgeable staff, personnel, system administrators, and operators to provide timely, accurate, complete, and up-to-date documentation and information to Axon (these contacts are to provide background information and clarification of information required to perform the Channel Services).



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VIEVU Data Migration Appendix

- 1 **Scope.** Agency currently has legacy data in the VIEVU Solution from which Agency desires to move to Axon Evidence. Axon will work with Agency to copy legacy data from the VIEVU solution into Axon Evidence ("**Migration**"). Before Migration, Agency and Axon will work together to develop a Statement of Work ("**Migration SOW**") to detail all deliverables and responsibilities. The Migration will require the availability of Agency resources. Such resources will be identified in the SOW. On-site support during Migration is not required. Upon Agency's request, Axon will provide on-site support for an additional fee. Any request for on-site support will need to be pre-scheduled and is subject to Axon's resource availability.

A small amount of unexposed data related to system information will not be migrated from the VIEVU solution to Axon Evidence. Upon request, some of this data can be manually exported before Migration and provided to Agency. The Migration SOW will provide further detail.

- 2 **Changes.** Axon is only responsible to perform the Services described in this Appendix and Migration SOW. Any additional services are out of scope. The Parties must document scope changes in a written and signed change order. Changes may require an equitable adjustment in the charges or schedule.
- 3 **Project Management.** Axon will assign a Project Manager to work closely with Agency's project manager and project team members and will be responsible for completing the tasks required to meet all contract deliverables on time and budget.
- 4 **Downtime.** There may be downtime during the Migration. The duration of the downtime will depend on the amount of data that Agency is migrating. Axon will work with Agency to minimize any downtime. Any VIEVU mobile application will need to be disabled upon Migration.
- 5 **Functionality Changes.** Due to device differences between the VIEVU solution and the Axon's Axon Evidence solution, there may be functionality gaps that will not allow for all migrated data to be displayed the same way in the user interface after Migration.
- 6 **Acceptance.** Once the Migration is complete, Axon will notify Agency and an acceptance form. Agency is responsible for verifying that the scope of the project has been completed and all necessary data is migrated correctly and retained per Agency policy. Agency will have 90 days to provide Axon acceptance that the Migration was successful, or Axon will deem the Migration accepted.

In the event Agency does not accept the Migration, Agency agrees to notify the Axon within a reasonable time. Agency also agrees to allow Axon a reasonable time to resolve any issue. In the event Agency does not provide the Axon written rejection of the Migration during these 90 days, Agency may be charged for additional monthly storage costs. After Agency provides acceptance of the Migration, the Axon will delete all data from the VIEVU solution 90 days after the Migration.

- 7 **Post-Migration.** After Migration, the VIEVU solution may not be supported and updates may not be provided. Axon may end of life the VIEVU solution in the future. If Agency elects to maintain data within the VIEVU solution, Axon will provide Agency 90 days' notice before ending support for the VIEVU solution.
- 8 **Warranty.** Axon warrants that it will perform the Migration in a good and workmanlike manner.
- 9 **Monitoring.** Axon may monitor Agency's use of Migration to ensure quality, improve Axon devices and services, prepare invoices based on the total amount of data migrated, and verify compliance with this Agreement. Agency agrees not to interfere with such monitoring or obscure from Axon Agency's use of Migration.

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Axon Support Engineer Appendix

- 1 **Axon Support Engineer Payment.** Axon will invoice for Axon Support Engineer ("ASE") services, as outlined in the Quote, when the Axon Support Engineer commences work on-site at Agency.
- 2 **Full-Time ASE Scope of Services.**
 - 2.1 A Full-Time ASE will work on-site four (4) days per week.
 - 2.2 Agency's Axon sales representative and Axon's Agency Success team will work with Agency to define its support needs and ensure the Full-Time ASE has skills to align with those needs. There may be up to a 6-month waiting period before the Full-Time ASE can work on-site, depending upon Agency's needs and availability of a Full-Time ASE.
 - 2.3 The purchase of Full-Time ASE Services includes 2 complimentary Axon Accelerate tickets per year of the Agreement, so long as the ASE has started work at Agency, and Agency is current on all payments for the Full-Time ASE Service.

The Full-Time ASE Service options are listed below:

Ongoing System Set-up and Configuration	
<ul style="list-style-type: none"> Assisting with assigning cameras and registering docks Maintaining Agency's Axon Evidence account Connecting Agency to "Early Access" programs for new devices 	
Account Maintenance	
<ul style="list-style-type: none"> Conducting on-site training on new features and devices for Agency leadership team(s) Thoroughly documenting issues and workflows and suggesting new workflows to improve the effectiveness of the Axon program Conducting weekly meetings to cover current issues and program status 	
Data Analysis	
<ul style="list-style-type: none"> Providing on-demand Axon usage data to identify trends and insights for improving daily workflows Comparing Agency's Axon usage and trends to peers to establish best practices Proactively monitoring the health of Axon equipment and coordinating returns when needed 	
Direct Support	
<ul style="list-style-type: none"> Providing on-site, tier 1 and tier 2 technical support for Axon devices Proactively monitoring the health of Axon equipment Creating and monitoring RMAs on-site Providing Axon app support Monitoring and testing new firmware and workflows before they are released to Agency's production environment 	
Agency Advocacy	
<ul style="list-style-type: none"> Coordinating bi-annual voice of customer meetings with Axon's Device Management team Recording and tracking Agency feature requests and major bugs 	

- 3 **Regional ASE Scope of Services**
 - 3.1 A Regional ASE will work on-site for 3 consecutive days per quarter. Agency must schedule the on-site days at least 2 weeks in advance. The Regional ASE will also be available by phone and email during regular business hours up to 8 hours per week.
 - 3.2 There may be up to a 6-month waiting period before Axon assigns a Regional ASE to Agency, depending upon the availability of a Regional ASE.
 - 3.3 The purchase of Regional ASE Services includes 2 complimentary Axon Accelerate tickets per year of the Agreement, so long as the ASE has started work at Agency and Agency is current on all payments for the Regional ASE Service.

The Regional ASE service options are listed below:



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Account Maintenance

- Conducting remote training on new features and devices for Agency's leadership
- Thoroughly documenting issues and workflows and suggesting new workflows to improve the effectiveness of the Axon program
- Conducting weekly conference calls to cover current issues and program status
- Visiting Agency quarterly (up to 3 consecutive days) to perform a quarterly business review, discuss Agency's goals for your Axon program, and continue to ensure a successful deployment of Axon devices

Direct Support

- Providing remote, tier 1 and tier 2 technical support for Axon devices
- Creating and monitoring RMAs remotely

Data Analysis

- Providing quarterly Axon usage data to identify trends and program efficiency opportunities
- Comparing an Agency's Axon usage and trends to peers to establish best practices
- Proactively monitoring the health of Axon equipment and coordinating returns when needed

Agency Advocacy

- Coordinating bi-yearly Voice of Agency meetings with Device Management team
- Recording and tracking Agency feature requests and major bugs

- 4** **Out of Scope Services.** The ASE is responsible to perform only the Services described in this Appendix. Any additional Services discussed or implied that are not defined explicitly in this Appendix will be considered out of the scope.
- 5** **ASE Leave Time.** The ASE will be allowed up 7 days of sick leave and up to 15 days of vacation time per each calendar year. The ASE will work with Agency to coordinate any time off and will provide Agency with at least 2 weeks' notice before utilizing any vacation days.



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Redaction Services Appendix

- 1 **Scope.** Each month of Axon Redaction Service, Agency may utilize up to the number of redacted videos included on the Quote, or the maximum number of hours, whichever comes first. In order to be considered one video, a video an Agency submits to Axon for redaction must be less than 1 hour. If a video is longer than 1 hour, it will be rounded up to the next hour. For example, if Agency submits a video for redaction and that video is 150 minutes, the video will be considered 3 hours. Agency may not rollover unused redactions and hours from one month to the next.
- 2 **Agency Responsibilities.**
 - 2.1 **Access.** Agency will create an account for Axon within Agency's Axon Evidence tenant. Agency must provision Axon to have only permission to view and redact videos identified for redaction. Upon completion of work or on a periodic basis in alignment with Agency's policy, Agency must manage or disable Axon's access within Agency's Axon Evidence tenant.
 - 2.2 **Policy.** Agency is responsible for providing Axon Agency's standard policy regarding redaction ("**Redaction Policy**"). The Redaction Policy should identify typical objects and audio that need to be redacted from video. Axon will redact videos per the Redaction Policy unless otherwise instructed in writing.
- 3 **Submission.** Agency will identify video for redaction and will submit requests to redactionservices@axon.com. Axon will redact the video according to the Redaction Policy within 72 hours. The redaction will be performed using Axon Evidence's Redaction Studio.
- 4 **Security.** Axon will use CJIS certified employees to perform all redaction services. Axon employees will perform all redactions in a CJIS compliant room.
- 5 **Acceptance of Redacted Video.** Upon completing the redaction, Axon will assign the redacted video to Agency. Agency will review the video within 5 business days of receipt and notify Axon of any required changes. If changes are necessary, Axon will perform such changes within 48 hours of notification. In the event Agency does not notify Axon of any requested changes within 5 business days of receipt of the redacted video, Axon will deem the redacted video accepted by Agency.
- 6 **Changes.** Axon is only responsible to perform the Services in this Appendix. Any additional Services are out of scope. The Parties must document scope changes in a written and signed change order. Changes may require an equitable adjustment in fees or schedule.



Axon Enterprise, Inc.
17800 N 85th St.
Scottsdale, Arizona 85255
United States
Phone: (800) 978-2737

Q-2658 Section 10, Item A.

Issued: 08/20/2020

Quote Expiration: 09/30/2020

Account Number: 106697

Payment Terms: Net 30
Delivery Method: Fedex - Ground

SALES REPRESENTATIVE

Lindsey McElroy
Phone: 480-502-6200
Email: lmcclroy@axon.com
Fax:

PRIMARY CONTACT

Michael Harden
Phone: (206) 957-2851
Email: mharden@ci.lake-forest-park.wa.us

SHIP TO

Michael Harden
Lake Forest Park Police Dept. - WA
17425 Ballinger Way NE
Lake Forest Park, WA 98155-5556
US

BILL TO

Lake Forest Park Police Dept. - WA
17425 Ballinger Way NE
Lake Forest Park, WA 98155-5556
US

Group1

Item	Description	Term (Months)	Quantity	List Unit Price	Net Unit Price	Total (USD)
Axon Plans & Packages						
73683	10 GB EVIDENCE.COM A-LA-CART STORAGE	12	700	0.00	0.00	0.00
73683	10 GB EVIDENCE.COM A-LA-CART STORAGE	12	18	0.00	0.00	0.00
73840	EVIDENCE.COM BASIC ACCESS LICENSE	12	18	0.00	0.00	0.00
73683	10 GB EVIDENCE.COM A-LA-CART STORAGE	12	15	0.00	0.00	0.00
73746	PROFESSIONAL EVIDENCE.COM LICENSE	12	5	0.00	0.00	0.00
Hardware						
73202	AXON BODY 3 - NA10		21	699.00	0.00	0.00
74210	AXON BODY 3 - 8 BAY DOCK		2	1,495.00	0.00	0.00
74028	WING CLIP MOUNT, AXON RAPIDLOCK		21	0.00	0.00	0.00
11534	USB-C to USB-A CABLE FOR AB3 OR FLEX 2		21	0.00	0.00	0.00
Other						
71019	NORTH AMER POWER CORD FOR AB3 8-BAY, AB2 1-BAY / 6-BAY DOCK		2	0.00	0.00	0.00
73831	10 GB EVIDENCE.COM A-LA-CART STORAGE PAYMENT	12	700	4.80	4.80	3,360.00
73841	EVIDENCE.COM BASIC LICENSE PAYMENT	12	18	180.00	180.00	3,240.00

Group1 (Continued)

Section 10, ItemA.

Item	Description	Term (Months)	Quantity	List Unit Price	Net Unit Price	Total (USD)
Other (Continued)						
73837	EVIDENCE.COM PROFESSIONAL LICENSE PAYMENT	12	5	468.00	468.00	2,340.00
					Subtotal	8,940.00
					Estimated Shipping	0.00
					Estimated Tax	558.00
					Total	9,498.00

Year 2

Item	Description	Term (Months)	Quantity	List Unit Price	Net Unit Price	Total (USD)
Other						
73837	EVIDENCE.COM PROFESSIONAL LICENSE PAYMENT	12	5	468.00	468.00	2,340.00
73841	EVIDENCE.COM BASIC LICENSE PAYMENT	12	18	180.00	180.00	3,240.00
73831	10 GB EVIDENCE.COM A-LA-CART STORAGE PAYMENT	12	700	4.80	4.80	3,360.00
					Subtotal	8,940.00
					Estimated Tax	558.00
					Total	9,498.00

Grand Total 18,996.00

Discounts (USD)

Quote Expiration: 09/30/2020

List Amount	35,549.00
Discounts	17,669.00
Total	17,880.00

**Total excludes applicable taxes*

Tax is subject to change at order processing with valid exemption. The Parties agreed that this Quote and the Master Service and Purchasing Agreement reference below replace in full the five (5) year contract for \$66,974.60 issued August 23, 2019 and signed by the City's representative Chief of Police Mike Harden on August 29, 2019 ("2019 Contract"). The agreement to replace the 2019 Contract is part of the consideration between the Parties.

Axon's Sales Terms and Conditions

This Quote is limited to and conditional upon your acceptance of the provisions set forth herein and Axon's Master Services and Purchasing Agreement (posted at www.axon.com/legal/sales-terms-and-conditions), as well as the attached Statement of Work (SOW) for Axon Fleet and/or Axon Interview Room purchase, if applicable. Any purchase order issued in response to this Quote is subject solely to the above referenced terms and conditions. By signing below, you represent that you are lawfully able to enter into contracts. If you are signing on behalf of an entity (including but not limited to the company, municipality, or government agency for whom you work), you represent to Axon that you have legal authority to bind that entity. If you do not have this authority, please do not sign this Quote.

Signature:

Date:

9-21-20

Name (Print):

MICHAEL HARDEN

Title:

CHIEF OF POLICEPO# (Or write
N/A):N/A

Please sign and email to Lindsey McElroy at lmcelroy@axon.com or fax to

Thank you for being a valued Axon customer. For your convenience on your next order, please check out our online store buy.axon.com

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Axon Internal Use Only

		SFDC Contract#: Order Type: RMA #: Address Used: SO #:
Review 1	Review 2	Comments:



CITY OF LAKE FOREST PARK

CITY COUNCIL

AGENDA COVER SHEET

Meeting Date October 13, 2022

Originating Department Finance

Contact Person Lindsey Vaughn, Finance Director

Title Ordinance 1249 – Amending Chapter 13.08 of the Lake Forest Park Municipal Code, Sewer Service and Use, regarding rates

Legislative History

- First Presentation September 8, 2022, Regular Meeting
- Second Presentation September 22, 2022, Regular Meeting
- Third Presentation October 13, 2022, Regular Meeting

Attachments:

1. Ordinance 1249

Executive Summary

A majority of the rates and fees in the City are set by a consolidated resolution approved by the City Council. While conducting an audit of the Lake Forest Park Municipal Code (LFPMC), staff discovered that the sewer rates are required to be adopted by Council in its biennial budget document. To be consistent with other fees, the staff is recommending that chapter 13.08 LFPMC be amended to allow sewer rate fees to be adopted by resolution.

Background

The Sewer Service and Use chapter of the LFPMC was established by Ordinance 1098 in 2015 by the City Council. While the majority of fees charged by the City are approved annually in a consolidated resolution, the sewer rates are adopted in the biennial budget document. For consistency and ease of use by citizens, the staff is recommending that all rates and fees be set using the same process. In order to accomplish this, LFPMC 13.08.090 needs to be amended to allow the sewer rates to be set by resolution.

Fiscal & Policy Implications

Setting the sewer rates by resolution will allow for greater transparency with the public. Amending the code will be a minimal publication cost.

Alternatives

<i>Options</i>	<i>Results</i>
<ul style="list-style-type: none">• Pass the Ordinance and amend the city's municipal code	This will allow the city to set sewer rates by resolution and allow greater transparency for the public
<ul style="list-style-type: none">• Don't amend the municipal code	The setting of sewer rates will be included in the biennial budget document

Staff Recommendation

Staff recommends passing the Ordinance and amending the LFPMC to allow the setting of sewer rates by resolution.

ORDINANCE NO. 1249

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LAKE FOREST PARK, WASHINGTON, AMENDING CHAPTER 13.08 OF THE LAKE FOREST PARK MUNICIPAL CODE, SEWER SERVICE AND USE, REGARDING RATES; PROVIDING FOR SEVERABILITY, AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, chapter 13.08, Sewer Service and Use, was adopted by Ordinance 1098 in 2015, and provides for the protection and use of the City of Lake Forest Park's sewer infrastructure; and

WHEREAS, the City has consolidated fees it charges into one schedule adopted by City Council resolution each year, which makes for easier annual review and ease of reference for users; and

WHEREAS, section 13.08.090 of the Lake Forest Park Municipal Code currently requires that rates for sanitary sewer services be adopted in the City's biennial budget; and

WHEREAS, the proposed amendment would authorize sanitary sewer service rate changes to be made by resolution adopted by the City Council.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAKE FOREST PARK, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. AMENDMENT. The City Council of the City of Lake Forest Park hereby amends section 13.08.090 LFPMC, Sewer rates and charges, as follows:

13.08.090 Sewer rates and charges

- A. Rates. Rates for sanitary sewer service are ~~adopted by the city council in the city's biennial budget document established by city council resolution.~~

...

Section 2. SEVERABILITY. Should any portion of this ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, such decision shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

Section 3. CORRECTIONS. The City Clerk is authorized to make necessary corrections to this ordinance including, but not limited to, the correction of scrivener’s/clerical errors, references, ordinance numbering, section/subsection numbers and any references thereto.

Section 4. EFFECTIVE DATE. This ordinance shall take effect five (5) days after passage and publication.

APPROVED BY A MAJORITY the Lake Forest Park City Council this XXX day of XXX, 2022.

APPROVED:

Jeff Johnson
Mayor

ATTEST/AUTHENTICATED:

Matthew McLean
City Clerk

APPROVED AS TO FORM:

Kim Adams Pratt
City Attorney

Introduced: _____
Adopted: _____
Posted: _____
Published: _____
Effective: _____

City Administrator Report

City of Lake Forest Park

Date: October 13, 2022

TO: Honorable Deputy Mayor and Councilmembers

FR: Phillip Hill, City Administrator

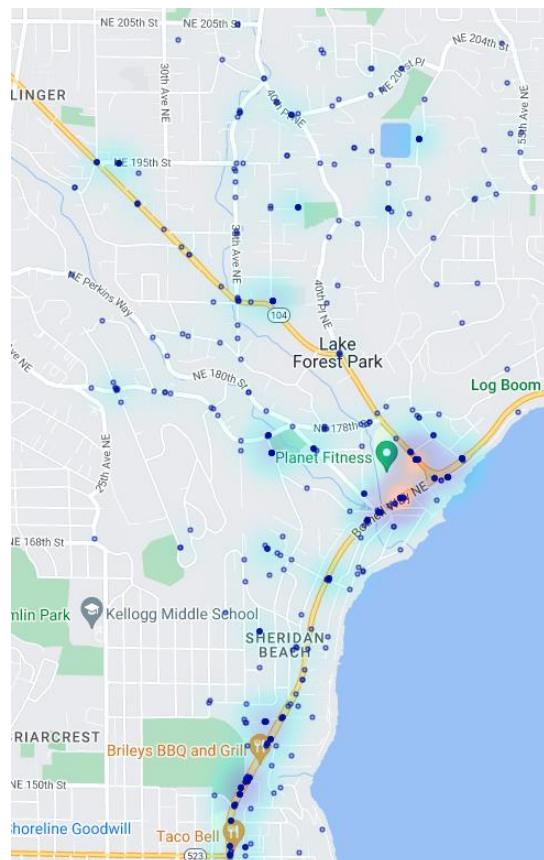
CC: Honorable Mayor Jeff Johnson
Leadership Team

The City Administrator Report is meant to provide the council, staff and community an update on the activities of the City and on issues that concern the City. This memo will be provided in each Council packet and is divided into key sections.

Please let me know if you have any questions or need additional information about any of the following items and please feel free to contact any of the department heads for additional information.

I. Intergovernmental and local issues update.

Police Department



Police incidents heatmap for

September 2022:

Each blue dot is an incident generated by dispatch or an officer. This map represents **913** incidents in **September**.

Notable Calls/Incidents:

Type	Calls
Suspicious Circumstances	73
Subject Stop	20
Theft	19
Welfare Check	19
Traffic Accident	17
Disturbance	11
Domestic	7

Notable Incidents

Officers responded to an animal complaint. A dog walker reported another dog came out of a residence and attacked her dog. She tried to

separate the dogs and was bit in the hand and legs before the owner came out and pulled their dog away. The victim was treated for her wounds and the case forwarded for investigation.

Officers responded to a fraud case at Ace Hardware. Two suspects attempted to purchase items with a counterfeit \$100 bill. Once the suspects were aware of police response, they fled in a vehicle.

While on patrol, a sergeant found graffiti in the 15500blk of SR522. Photographs were taken of the graffiti and PW was notified for clean-up.



Two cases of identity theft and multiple theft report cases from stores at the town center were reported. In two of the shoplift cases, officers made arrests. Those cases were filed with the prosecutor.



An officer contacted a subject in their vehicle by the water reservoir. The officer observed items used to consume illegal substances. After obtaining consent to search, the officer located fentanyl pills and loaded syringes with suspected heroin. The officer issued a written warning for possessing a controlled substance and provided the suspect a flyer with drug rehabilitation resources. A search in a law enforcement database showed the subject had previous contacts for drug possession.

Officers responded to a subject that was waving around a stick (PVC pipe) in the town center. He was yelling “kill her” and swung the stick near a citizen. As officers contacted the subject he refused to stop, an officer then used the non-lethal device “Bola Wrap.” This was the first time the device has been used. The device successfully deployed to wrap the subject’s arms. He was then detained with no injuries. The subject was suffering from mental and emotional health issues. The subject was transported to the hospital for a mental health evaluation.



Community Connections

Detective Troxell presented a safety talk to the local Girl Scouts troop about personal safety and online/internet safety.



Sgt. Parrish stopped by a youth sports team (Pacific Fury Fastpitch Softball) charity car wash in Kenmore at Les Schwab to support the players.



Black Rifle Coffee Company stopped by and donated some coffee for the officers. To show our appreciation, Officer Coleman crafted a custom-made wooden board with our shield, officer call signs, and a coin. Black Rifle Coffee Company is founded by veterans and is committed to hiring 10,000 veterans.



October is Breast Cancer Awareness month. In partnership with agencies across the country LFPPD participates in the Pink Patch Project to bring awareness to the fight against breast cancer. With the sale of our pink patches and pink coins we strive to bring support to organizations helping those affected by this devastating disease. All proceeds will be donated to Cancer Lifeline.

www.cancerlifeline.org

Lake Forest Park Police Department Pink Patch Project - 2022



October is Breast Cancer Awareness month. In partnership with agencies across the country LFPPD participates in the **Pink Patch Project** to bring awareness to the fight against breast cancer. With the sale of our pink patches and pink coins we strive to bring support to organizations helping those affected by this devastating disease.

All proceeds will be donated to Cancer Lifeline. www.cancerlifeline.org

Pink Patches and Coins are for sale at

Lake Forest Park Police Department.

17425 Ballinger Way NE, Lake Forest Park, WA 98155

Contact: Lt. R. Lehman
rlhman@cityoflfp.com or 206-364-8216

Patches - \$10 each

Challenge coins - \$10 each



II. Internal City Information

ID2023**ARE YOU READY?**

Passport Services Can Help You Prepare for Travel after the May 2023 REAL ID Enforcement Deadline

Due to the COVID-19 pandemic, the Department of Homeland Security extended the REAL ID enforcement deadline. Beginning May 3, 2023, every air traveler 18 years of age and older will need a REAL ID-compliant driver's license, state-issued enhanced driver's license, or another acceptable form of ID, like a US passport, to fly within the United States. A standard Washington state driver's license or ID card will no longer be sufficient identification.

Read more about REAL ID and your options here: <https://www.tsa.gov/real-id>.

If you are an adult who already has a US passport, you may qualify to renew it by mail. The US Department of State website, www.travel.state.gov, can help you figure out whether you need to apply in person or can renew by mail.

The City of Lake Forest Park is a passport acceptance facility. Our [Passport Services page](#) has helpful information about applying for a passport, our passport office hours, making an appointment at our office, and fees.

Passport processing times are currently 7-10 weeks for routine processing and 4-6 weeks for expedited processing (additional fee) and we are booking appointments two months in advance. Don't delay—start the process now!

III. Council Information

IV. Response to Citizen and Council Comments

V. Contract Reporting

Nothing new to report.

VI. Legislative Update

VII. Community Events

VIII. Upcoming City Sponsored Events**IX. Meetings Calendar****Planning Commission Special Meeting (hybrid meeting)**

October 18, 2022, 7:00 PM - 9:00 PM @ City Hall and via Zoom

City Council Budget & Finance Committee Meeting (hybrid meeting)

October 20, 2022, 6:00 PM - 7:30 PM @ City Hall and via Zoom

City Council Committee of the Whole Meeting (hybrid meeting)

October 24, 2022, 6:00 PM - 7:30 PM @ City Hall and via Zoom

Parks and Recreation Advisory Board Meeting (hybrid meeting)

October 26, 2022, 7:00 PM - 8:30 PM @ City Hall and via Zoom