



City Council Workshop Agenda

February 13, 2024 at 6:30 PM

City Hall Council Chambers - 210 W. 6th Ave and Virtual

The City of Kennewick broadcasts Council meetings on the City's website at
<https://www.go2kennewick.com/CouncilMeetingBroadcasts>.
Public comment is not heard at workshop meetings.

1. CALL TO ORDER
2. KENNEWICK FIRE DEPARTMENT STANDARD OF COVER
3. FIRE DEPARTMENT APPARATUS PURCHASE
4. CITY REVENUE SOURCES: OVERVIEW
5. ADJOURN



KFD Standard of Coverage



Tonight's Focus

The main focus for this evening is to:

- Briefly recap KFD's Standard of Coverage assessment
- Revisit KFD's immediate, mid-term and long-term recommendations and receive feedback
- Review key data to consider when developing KFD's response time goals
- Receive feedback and guidance from Council about KFD's response time standards, including how Council would like them presented for adoption





Review of Project Purpose

KFD developed our Standard of Cover because:

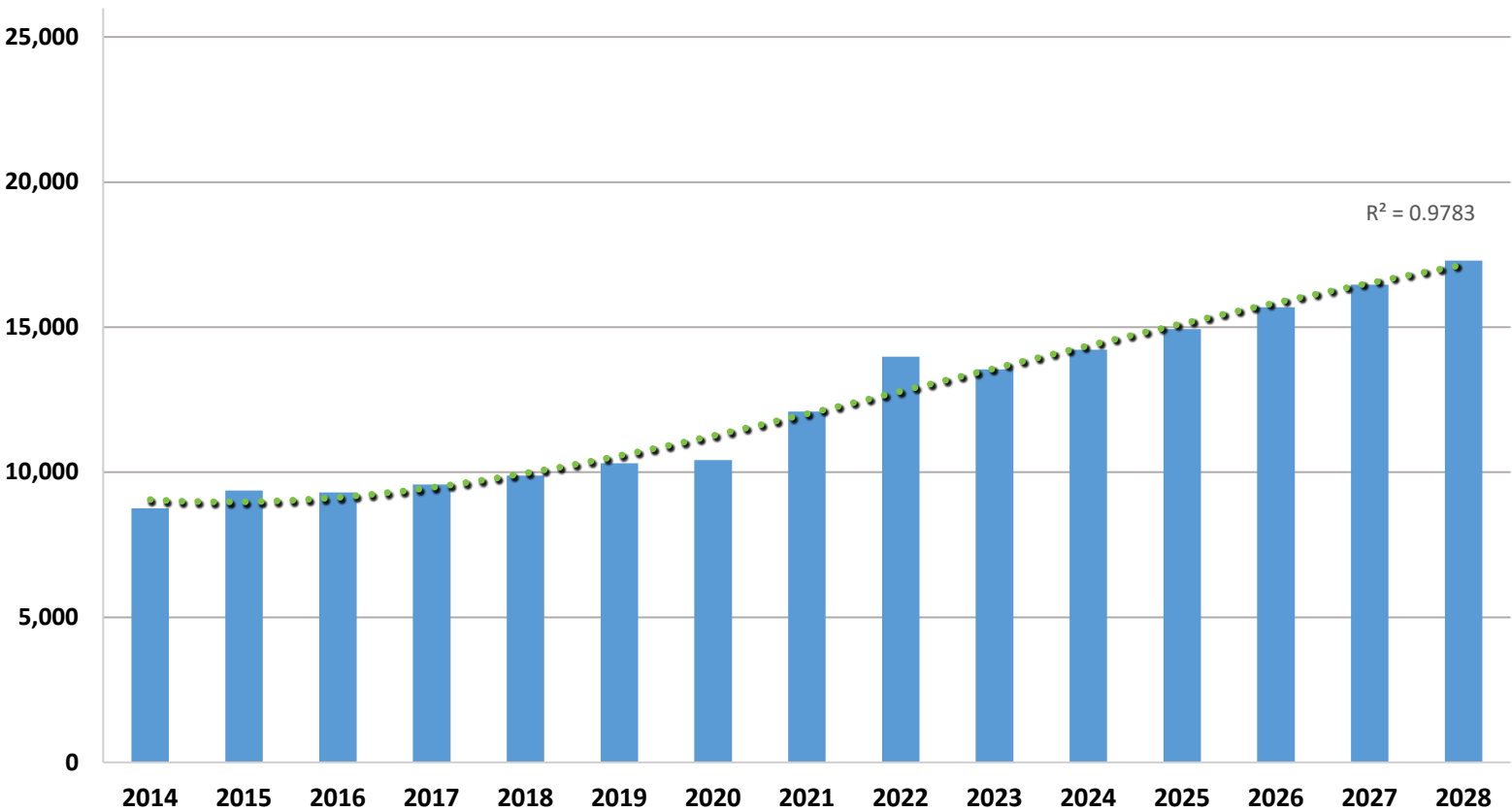
- Kennewick continues to grow rapidly; we need to address current and future needs
- Tangible trigger points needed to be established for determining necessary system enhancements
- The fire and EMS system must be efficient and effective, as well as affordable and sustainable
- The system must be performance-based and agile; focused on outcomes, rather than speed for all incidents
- Alignment with our key regional partners is paramount





Projected Incident Growth – All Calls

Yearly Call Volume with Outyear Projection



2023	2022	2021	2020	2019	2018	2017
13,549	13,980	12,094	10,418	10,309	9,889	9,574
-3.1%	15.6%	16.1%	1.1%	4.2%	3.3%	2.9%
-431	1,886	1,676	109	420	315	266
37.0%	41.4%	22.3%				

Overall % call volume increase since 2018

Call volume from 2018-2023 shows an overall increase of approx. 37% in spite of 3.1% decrease in 2023.



KFD's Immediate Needs

In order to provide services at a level consistent with the needs and expectations of our community:

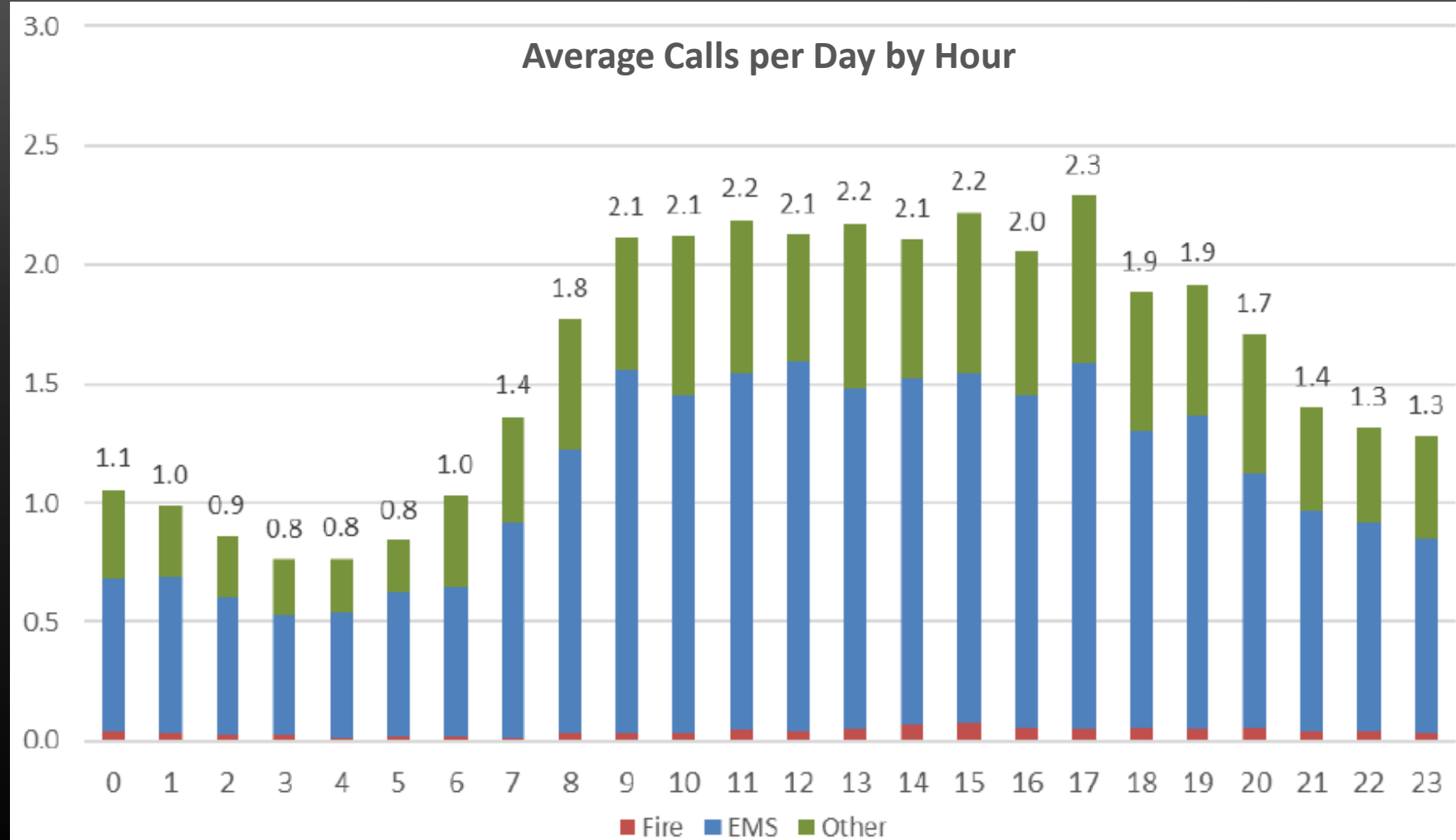
1. Initiate a peak hour Basic Life Support (BLS) unit
2. Construct and staff Station 6
3. Maintain dedicated medic units at Stations 1 & 2
4. Ensure Effective Response Force alignment with municipal partners
5. Adopt recommended response times





Peak Demand Times

1. What calls could potentially be reduced and/or eliminated?
2. Are the right resources being dispatched? Is incident response based on outcomes?
3. What are the trigger-points for adding more resources?





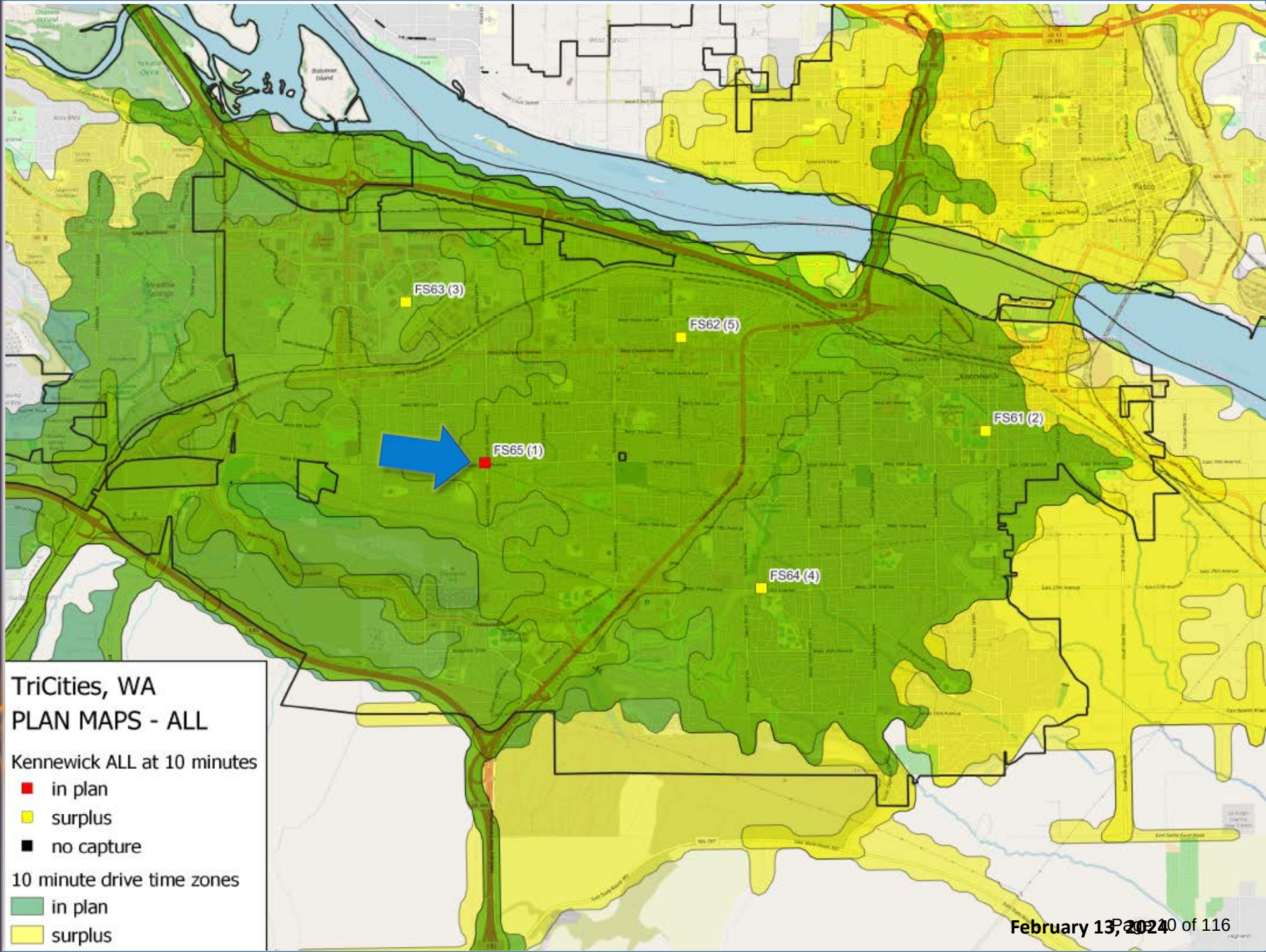
Incident Severity Counts

Medical Level	Transport		Non-Transport		Transport Rate
	Duration	Number of Calls	Duration	Number of Calls	
Med 1	0:53:02	359	0:25:49	184	66.1%
Med 2	0:53:46	3,478	0:25:55	1,433	70.8%
Med 3	0:52:10	1,464	0:26:24	400	78.5%
Med 4	1:05:31	124	0:52:10	124	50.0%
MVA	0:54:01	155	0:24:50	93	62.5%
MVAE	1:09:15	16	0:41:43	5	76.2%
Other	1:04:48	27	0:20:17	1,538	1.7%
EMS Total	0:53:40	5,623	0:24:31	3,777	59.8%

New BLS Unit

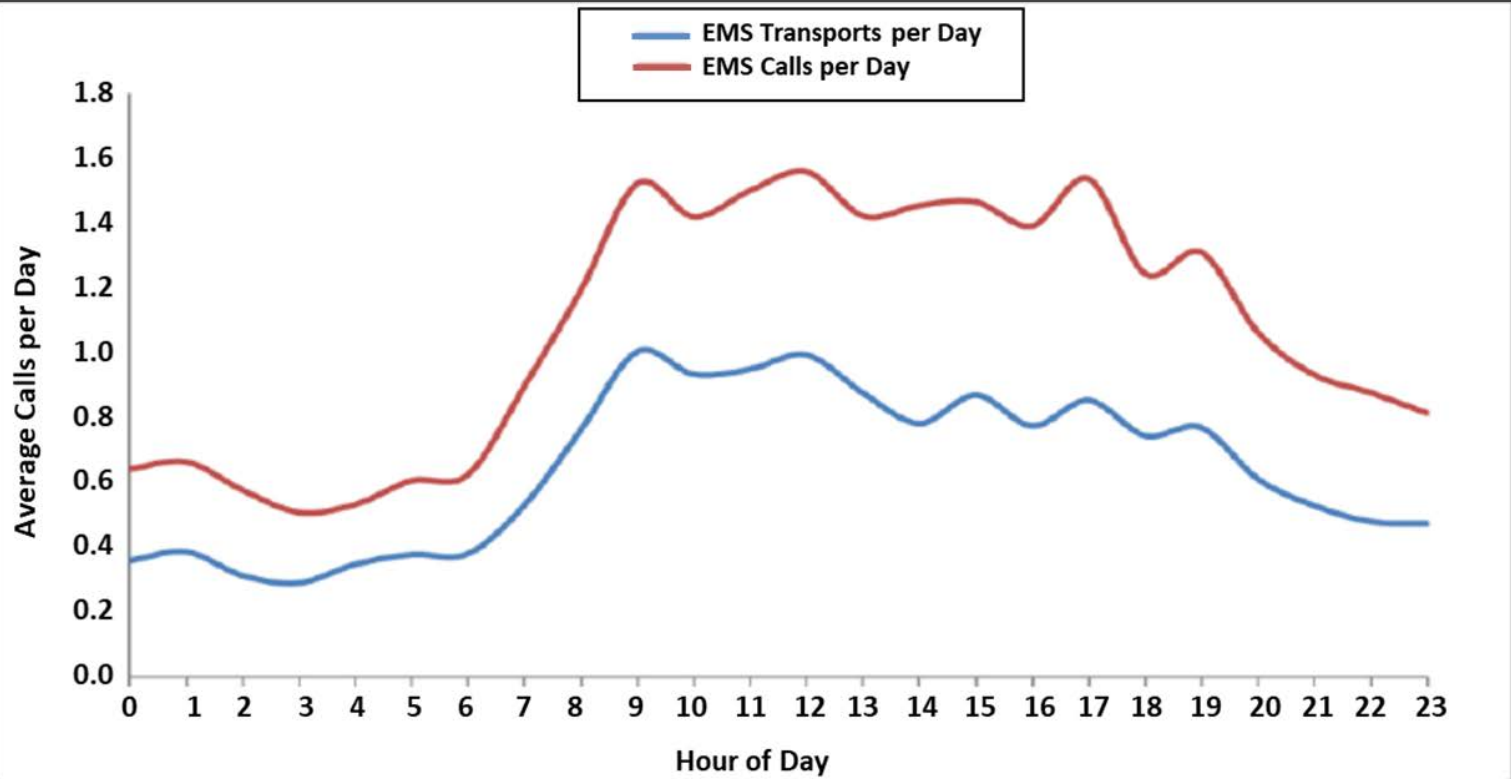


- Strategic coverage
- Approx. **98.7%** at **10 min.** response time
- Requires one additional BLS unit
- Located at Fire Station #5





EMS Calls vs. Transports

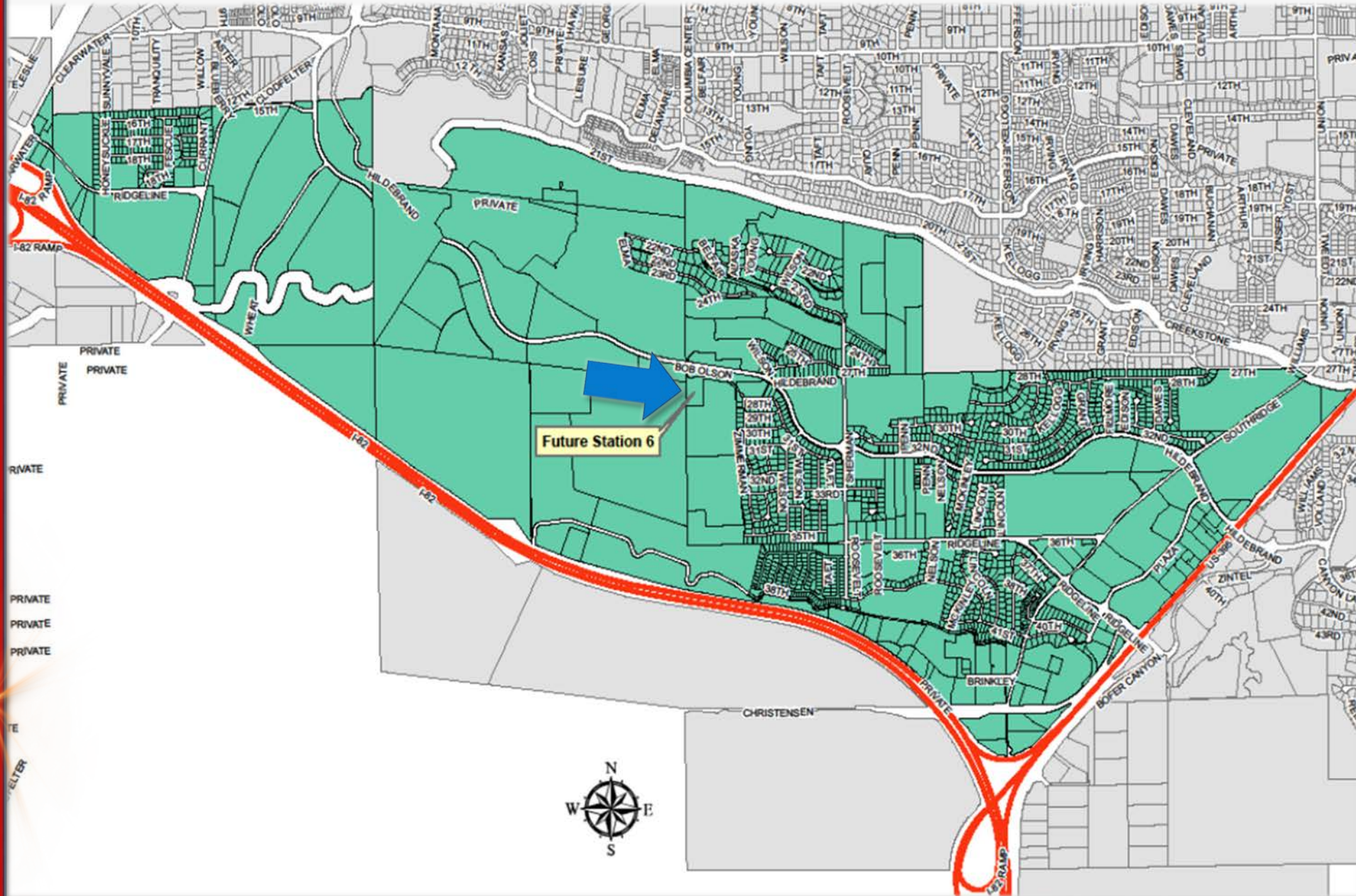


Hour	Number of EMS Transports	Number of EMS Calls	EMS Transports per Day and per Hour	EMS Calls per Day and per Hour	Transport Rate
0	131	234	0.4	0.6	56.0
1	141	242	0.4	0.7	58.3
2	114	210	0.3	0.6	54.3
3	106	185	0.3	0.5	57.3
4	127	194	0.3	0.5	65.5
5	138	221	0.4	0.6	62.4
6	139	228	0.4	0.6	61.0
7	194	328	0.5	0.9	59.1
8	279	436	0.8	1.2	64.0
9	367	556	1.0	1.5	66.0
10	341	518	0.9	1.4	65.8
11	347	548	1.0	1.5	63.3
12	363	569	1.0	1.6	63.8
13	320	519	0.9	1.4	61.7
14	286	531	0.8	1.5	53.9
15	318	535	0.9	1.5	59.4
16	283	508	0.8	1.4	55.7
17	312	561	0.9	1.5	55.6
18	272	454	0.7	1.2	59.9
19	281	478	0.8	1.3	58.8
20	223	388	0.6	1.1	57.5
21	193	340	0.5	0.9	56.8
22	175	320	0.5	0.9	54.7
23	173	297	0.5	0.8	58.2

Fire Station 6

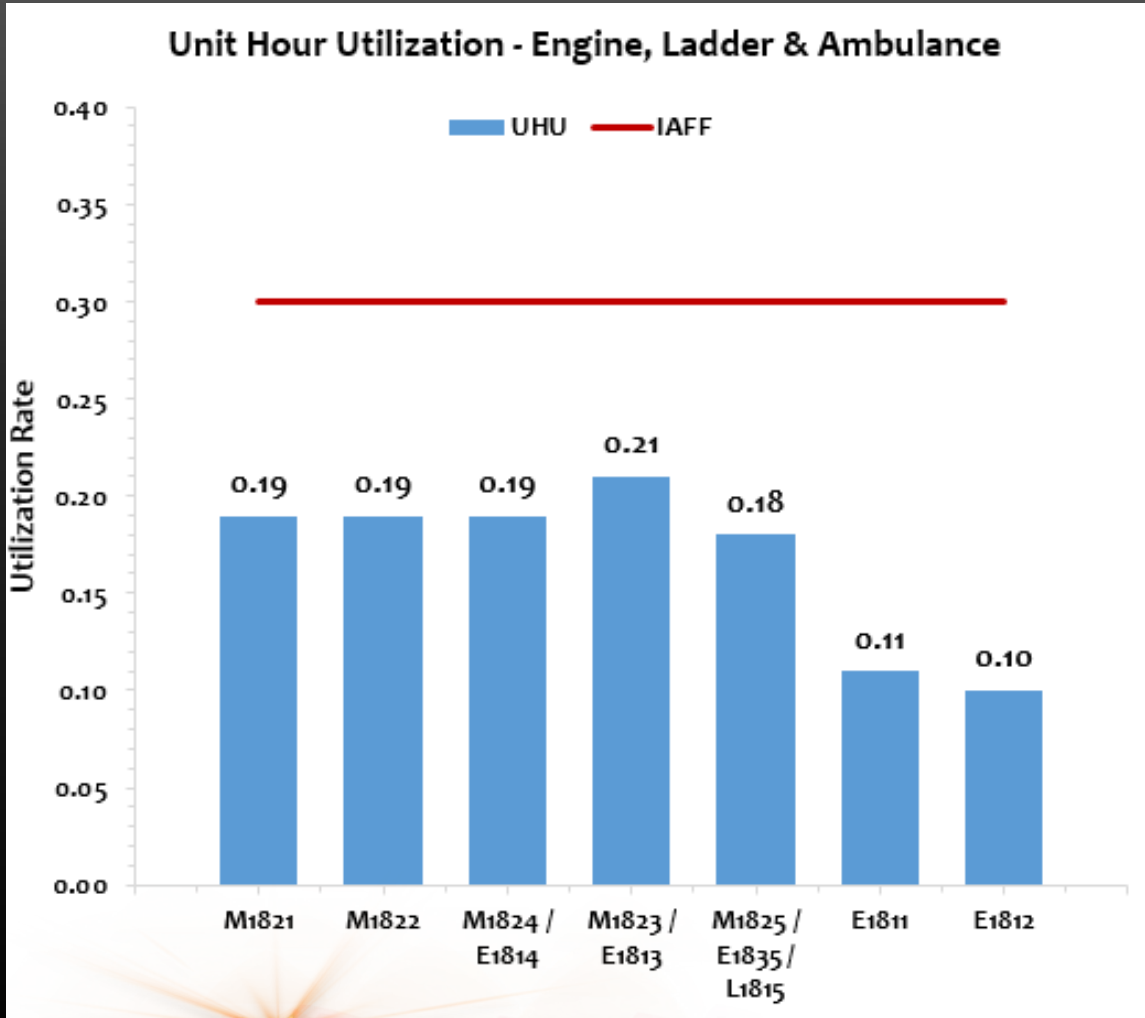


- Increasing call volume
- Significant growth is coming in Station 6 area
- Residential vs. commercial development
- Relieve the system





Value of Station 1 & 2 Dedicated Medic Units



Unit	Unit Description	Station	Busy Hours	UHU	IAFF
M1821	Ambulance	61	1,695	0.19	0.30
M1822	Ambulance	62	1,626	0.19	0.30
M1824 / E1814	Ambulance / Engine	64	1,635	0.19	0.30
M1823 / E1813	Ambulance / Engine	63	1,798	0.21	0.30
M1825 / E1835 / L1815	Ambulance / Engine / Ladder	65	1,574	0.18	0.30
E1811	Engine	61	964	0.11	0.30
E1812	Engine	62	844	0.10	0.30



Effective Response Force

Minimum amount of resources (*people and apparatus*) required to stop the escalation of an emergency

- Sending the appropriate number and type of emergency response units is important
- Regional alignment is equally important
- Municipal fire departments met in September 2023
- Changes will be implemented in late spring of 2024





Mid and Long-Term Needs

Mid and long-term needs go beyond what we are discussing this evening

- A phased-in approach has been, and should continue to be, our practice
- Monitor unit hour utilization and concurrent calls for needed system modifications
- KFD is currently over-threshold on cross-staffed units for maximum reliability



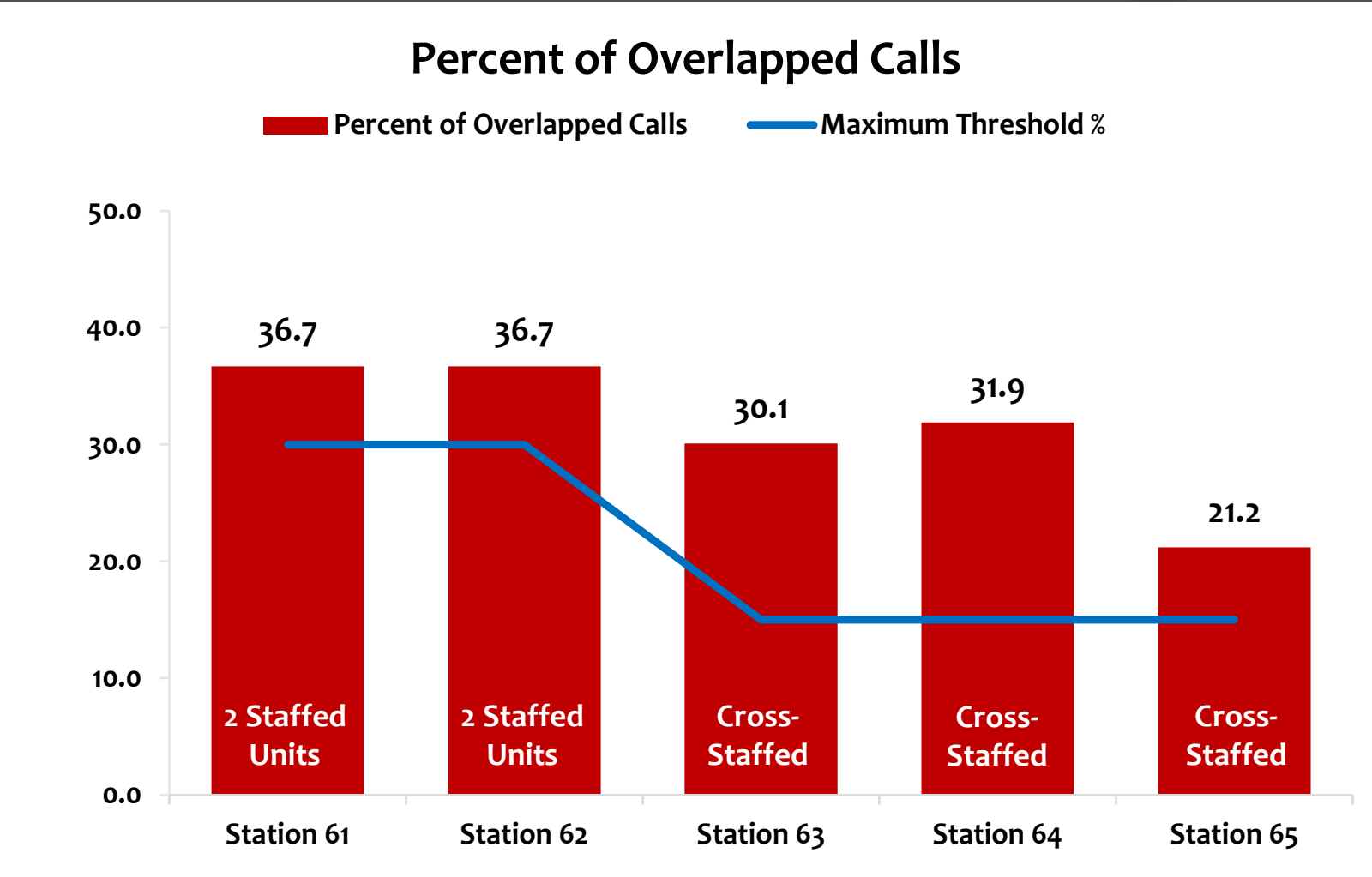


Mid and Long-Term Needs (cont.)

Threshold to separate cross-staffed units = call concurrency of:

- 15%
- 1500 calls

Response Area	Total Calls	Percent of Overlapped Calls	Dedicated Units or Cross-Staffed?
Station 61	2,989	36.7%	2 Dedicated Units
Station 62	3,607	36.7%	2 Dedicated Units
Station 63	2,299	30.1%	Cross-Staffed
Station 64	2,617	31.9%	Cross-Staffed
Station 65	1,630	21.2%	Cross-Staffed





Mid and Long-Term Needs (cont.)

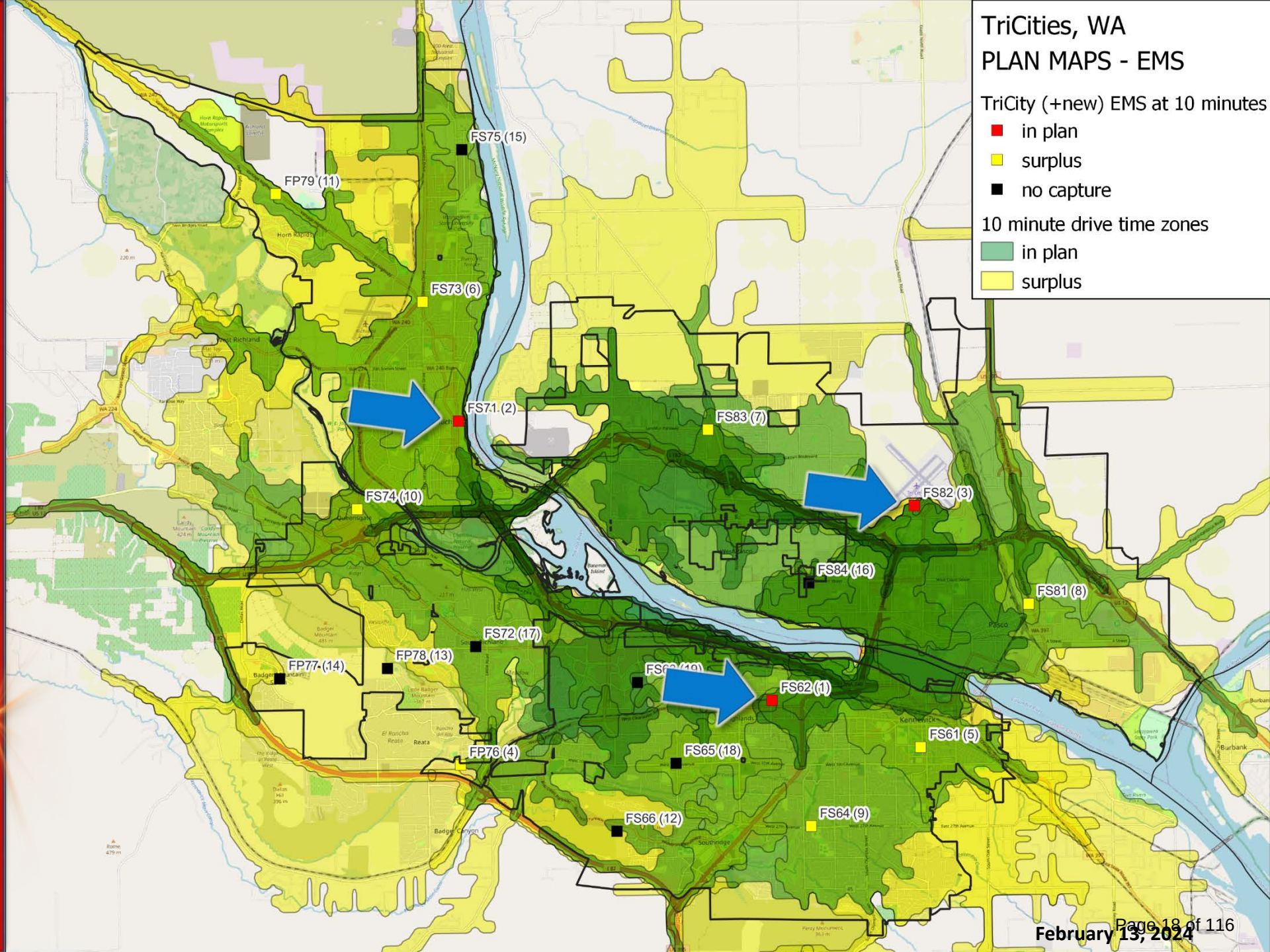
- Ensure continued alignment of effective response forces
- Key areas of focus should include:
 1. Developing regional basic life support response capabilities
 2. Improving depth in support areas (i.e. Training/EMS, and the Fire Prevention Division with additional assistance



Regional Alignment



- Phased approach to additional peak-hour coverage throughout the three municipalities





Our Needs

Our needs go beyond what we are going to discuss this evening.

We recognize:

- The need to be strategic
- The system we create must be sustainable
- Our focus is a three-pronged approach:
 1. Reduce/eliminate incidents
 2. Send the right number of units at the right time for each call nature
 3. Add additional resources





Year Over Year Growth by Call Type

- KFD's demand for service is projected to continue to rise
- Compounded annual growth rate (CAGR) over the past 5 years = **9.1%**
- In 2021 and 2022, growth demand increased by **16.3%** and **15.7%**

Program	Number of Calls				
	2018	2019	2020	2021	2022
EMS	7,115	7,459	7,333	8,582	9,400
Fire	308	262	276	355	346
Rescue	21	22	24	26	36
Hazardous Condition	92	117	108	107	113
Service	873	906	1,203	1,200	1,654
Good Intent	1,007	1,013	961	1,285	1,852
False Alarm and False Call	449	504	493	507	560
Other	21	29	20	19	21
Total	9,886	10,312	10,418	12,081	13,982
Calls per Day	27.1	28.3	28.5	33.1	38.3
Total Calls YoY Growth		4.3%	0.8%	16.3%	15.7%
EMS Calls Percentage	72%	72%	70%	71%	67%
EMS Calls per Day	19.5	20.4	20.0	23.5	25.8
EMS Calls YoY Growth		4.8%	-2.0%	17.4%	9.5%



2022 Incidents by Category

- EMS incidents continue to comprise the majority of KFD's call volume
- Good Intent incidents are second in demand by very a wide margin
- Service calls rank third

Call Category	Number of Calls	Calls per Day	Call Percentage
EMS	9,400	25.8	67.2%
Fire	346	0.9	2.5%
Rescue	36	0.1	0.3%
Hazardous Condition	113	0.3	0.8%
Service	1,654	4.5	11.8%
Good Intent	1,852	5.1	13.2%
False Alarm and False Call	560	1.5	4.0%
Other	21	0.1	0.2%
Total	13,982	38.3	100.0%



Establishment of Performance Standards

KFD's *current* incident performance measurements were adopted by Kennewick City Council in **2008** to be in compliance with Washington State **RCW 35.103**.

Intent of RCW 35.103:

- Set standards for addressing reporting & accountability
- Specify performance measures relative to the organization & deployment of fire suppression, EMS and special operations

RCW Final Sentence:

“This chapter does not, and is not intended to, in any way modify or limit the authority of cities and towns to set levels of service.”



CURRENT KFD Performance Standards

- First arriving unit vs. effective response force
- Time/life critical vs. non-time/life critical

1st Arriving Unit on Scene	KFD Goals (90% of the time)			
Incident Type	Minimum # People	Turnout Time	Travel Time	Total Response Time
Emergency Medical - Advanced Life Support (ALS, Med 3 & 4)	2	0:01:00	0:04:00	0:05:00
Emergency Medical - Basic Life Support (BLS, Med 1 & 2)	2	0:01:00	0:06:00	0:07:00
Fire Suppression (All Types)	3	0:01:45	0:05:00	0:06:45
Technical Rescue	3	0:01:45	0:05:00	0:06:45
Hazardous Materials	3	0:01:45	0:05:00	0:06:45
Service Calls (All Types)	2-3	0:03:00	0:06:00	0:09:00

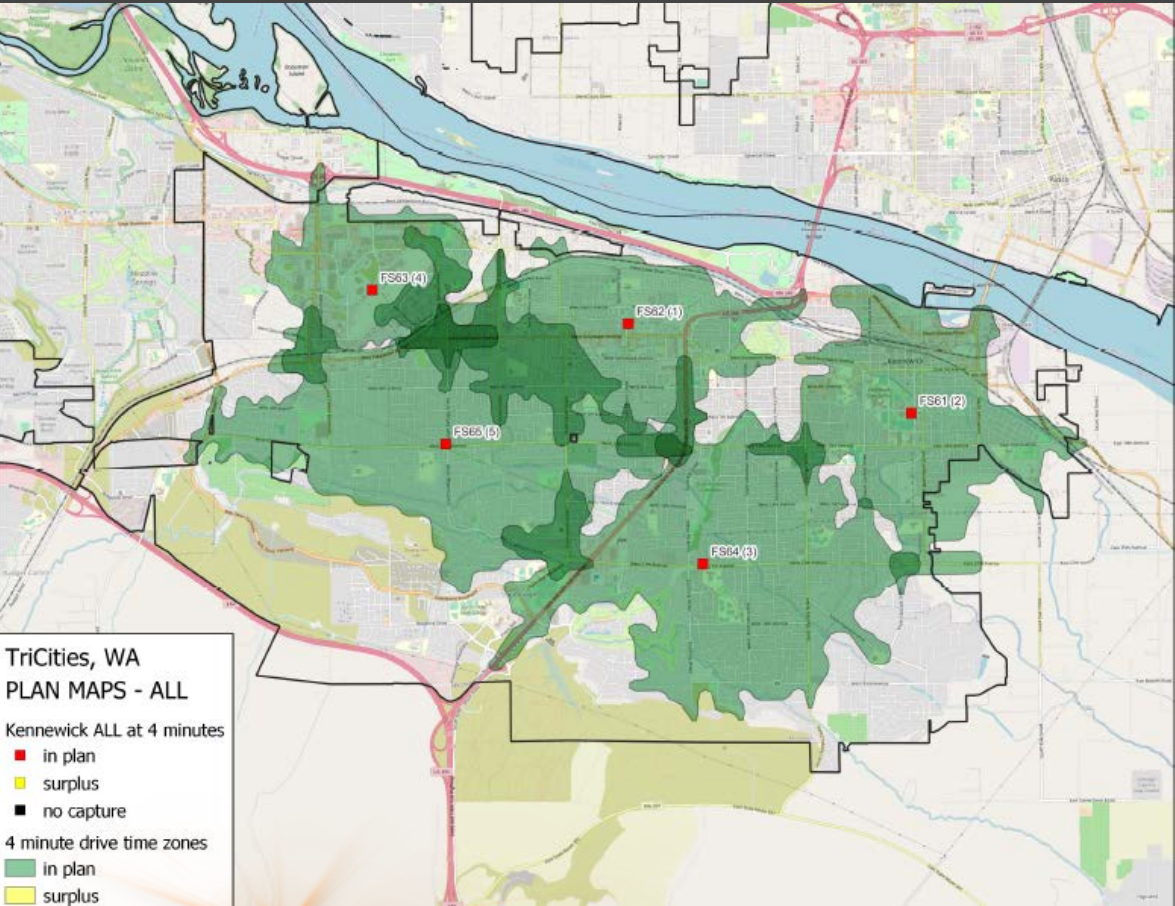
Effective Response Force	KFD Goals (90% of the time)			
Incident Type	Minimum # People	Turnout Time	Travel Time	Total Response Time
Emergency Medical (ALS, Med 4) - Cardiac Arrest	7	0:01:00	0:08:00	0:09:00
Fire Suppression - Residential Structure	12	0:01:45	0:08:00	0:09:45
Fire Suppression - Commercial Structure	15	0:01:45	0:08:00	0:09:45
Technical Rescue <i>(requires recall of off-duty personnel)</i>	**	0:01:45	1:00:00	1:01:45
Hazardous Materials <i>(requires recall of off-duty personnel)</i>	**	0:01:45	1:00:00	1:01:45

***KFD participates in regional Technical Rescue & Hazardous Materials Special Operations groups & staffs personnel trained within each specialty. Effective Response Force personnel for incidents come from KFD and neighboring agencies who also participate in regional specialty teams.*

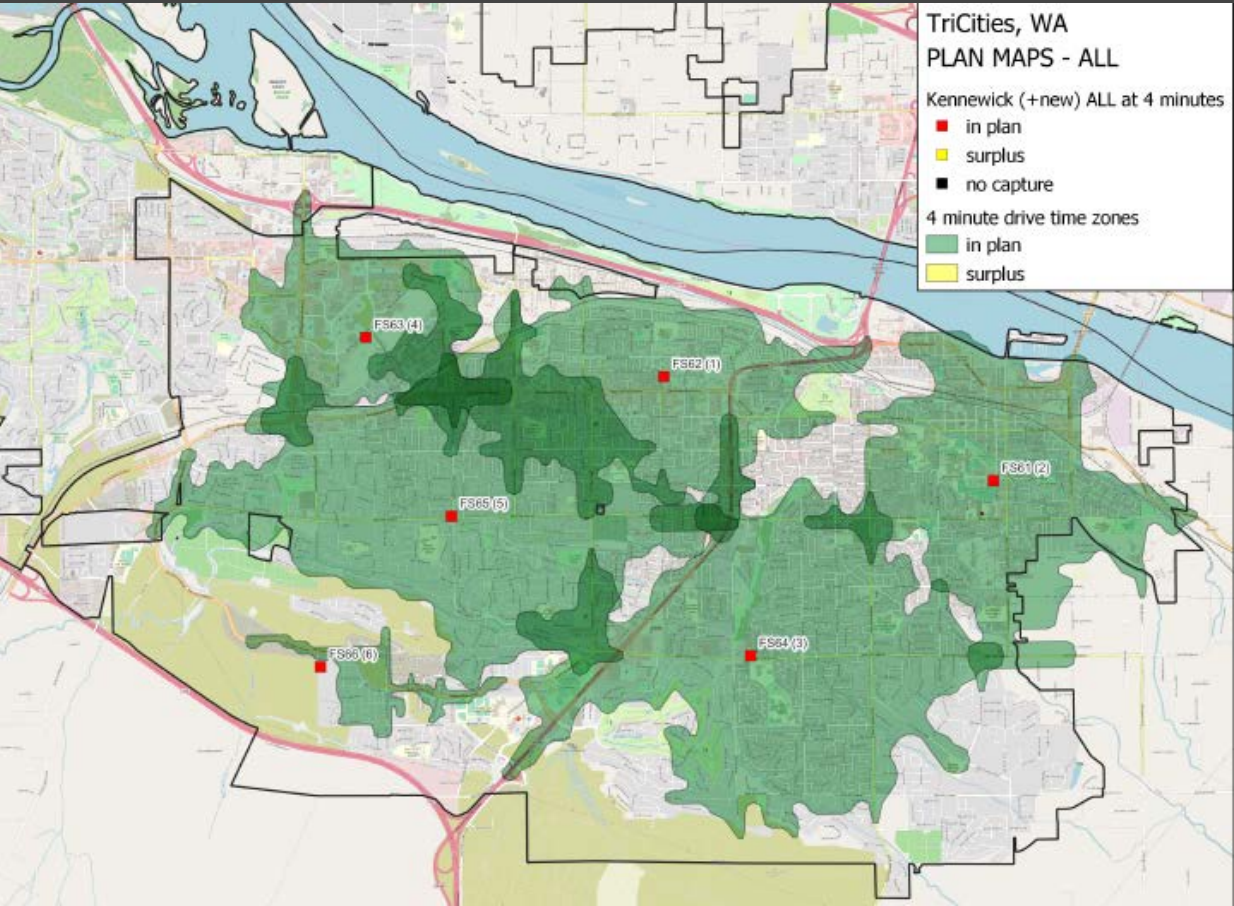


4-Minute Travel Time – All Calls

CURRENT: 5 Stations



FUTURE: 6 Stations





4-Minute Travel Time – All Calls (cont.)

Cumulative percent of coverage for the City of Kennewick within a:

4-Minute Travel Time

ranked in order by number of calls per fire station.

CURRENT: 5 Stations

			(# Calls/Station)	(Cumulative # Calls)	(Cumulative Percent of City Covered)
Rank	Station	Travel Time	Station Capture	Total Capture	Percent Capture
1	FS62	4	3,336	3,336	23.87%
2	FS61	4	2,356	5,692	40.72%
3	FS64	4	2,101	7,793	55.76%
4	FS63	4	1,438	9,231	66.04%
5	FS65	4	1,098	10,329	73.90%

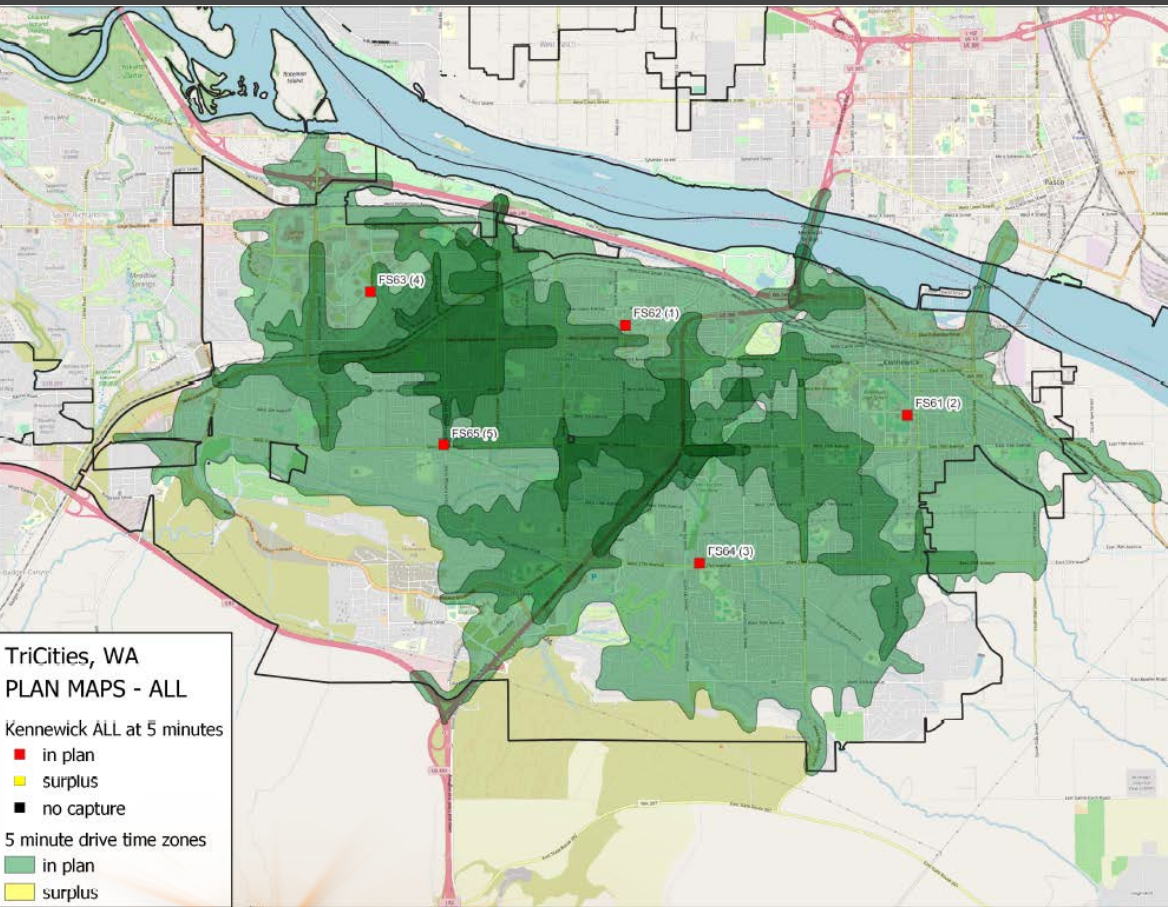
FUTURE: 6 Stations

Rank	Station	Travel Time	Station Capture	Total Capture	Percent Capture
1	FS62	4	3,336	3,336	23.87%
2	FS61	4	2,356	5,692	40.72%
3	FS64	4	2,101	7,793	55.76%
4	FS63	4	1,438	9,231	66.04%
5	FS65	4	1,098	10,329	73.90%
6	FS66	4	27	10,356	74.09%

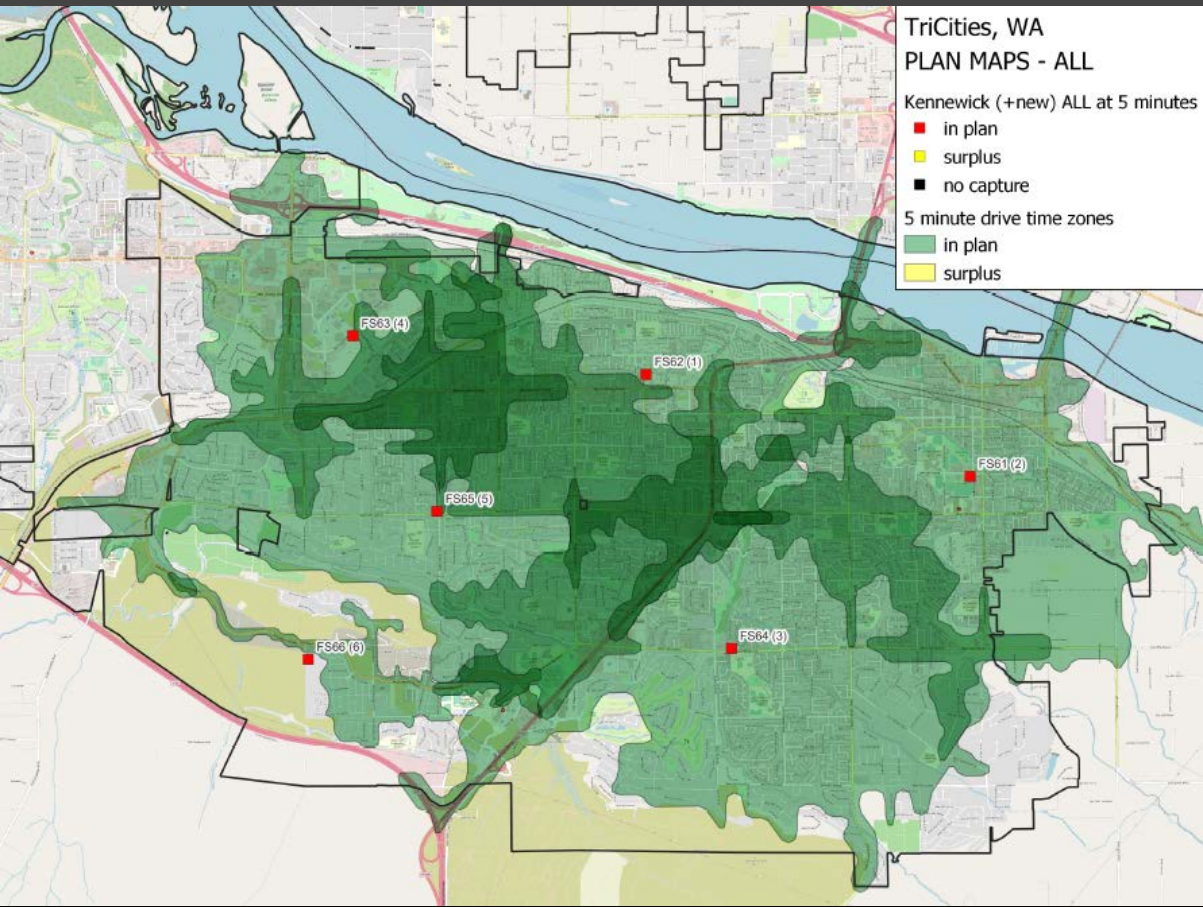


5-Minute Travel Time – All Calls

CURRENT: 5 Stations



FUTURE: 6 Stations





5-Minute Travel Time – All Calls (cont.)

Cumulative percent of coverage for the City of Kennewick within a:

5-Minute Travel Time

ranked in order by number of calls per fire station.

CURRENT: 5 Stations

			(# Calls/Station)	(Cumulative # Calls)	(Cumulative Percent of City Covered)
Rank	Station	Travel Time	Station Capture	Total Capture	Percent Capture
1	FS62	5	4,914	4,914	35.16%
2	FS61	5	2,910	7,824	55.98%
3	FS64	5	1,982	9,806	70.16%
4	FS63	5	1,796	11,602	83.01%
5	FS65	5	762	12,364	88.46%

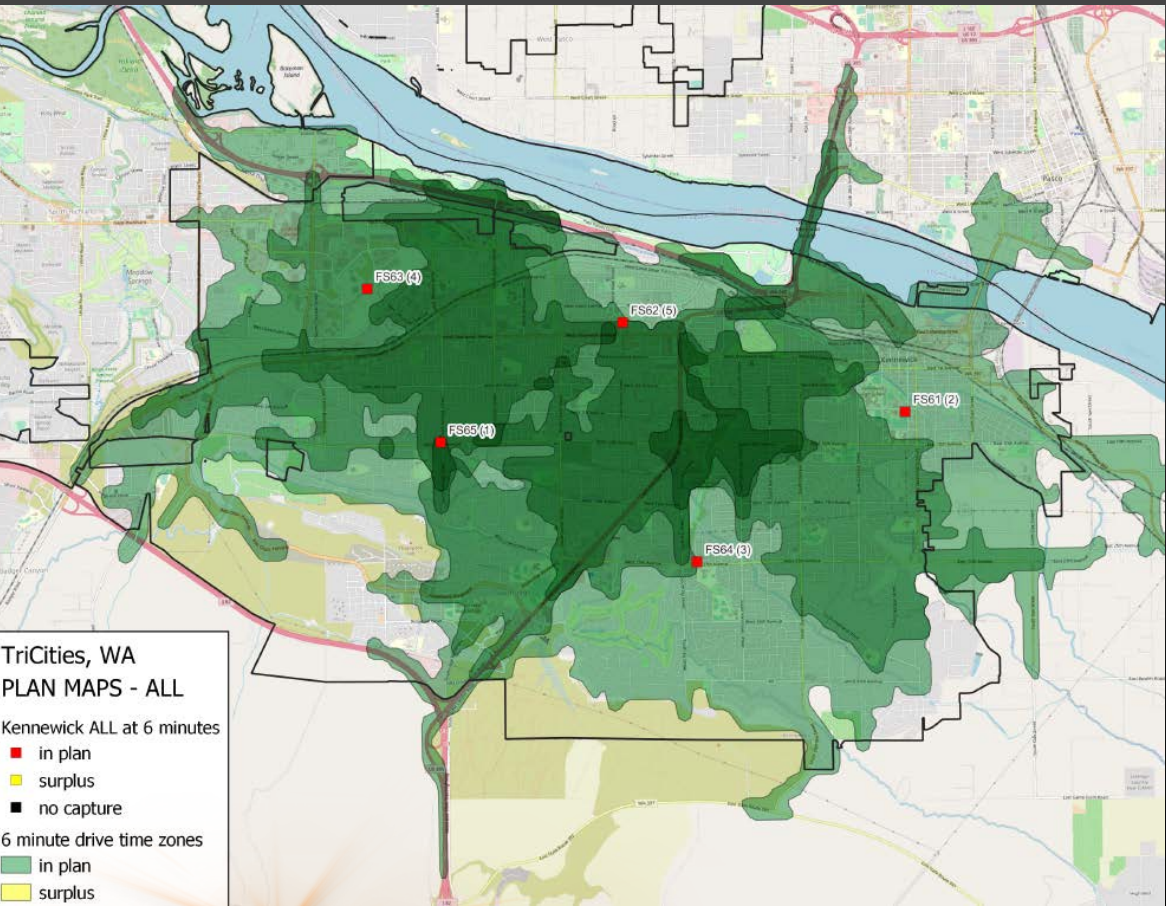
FUTURE: 6 Stations

Rank	Station	Travel Time	Station Capture	Total Capture	Percent Capture
1	FS62	5	4,914	4,914	35.16%
2	FS61	5	2,910	7,824	55.98%
3	FS64	5	1,982	9,806	70.16%
4	FS63	5	1,832	11,638	83.27%
5	FS65	5	762	12,400	88.72%
6	FS66	5	60	12,460	89.15%

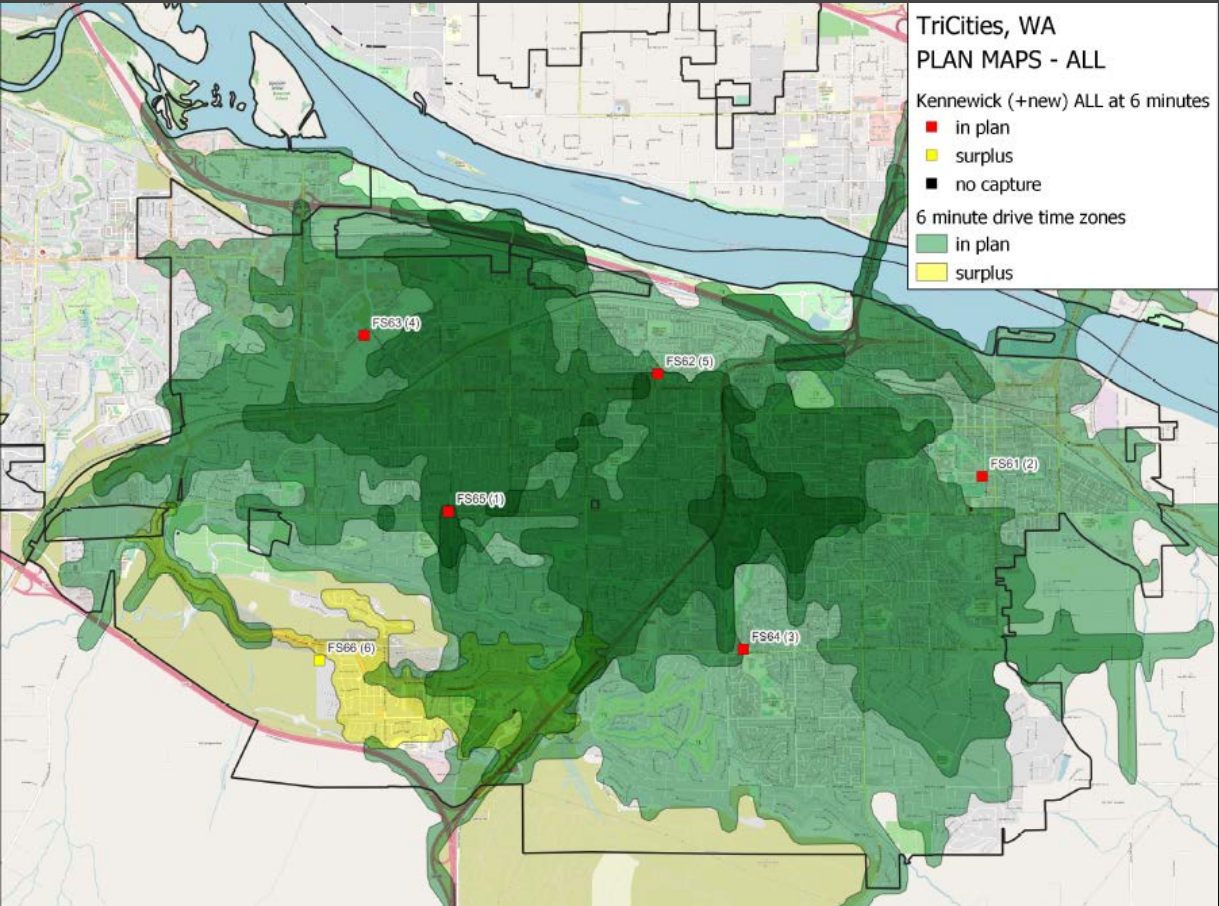
6-Minute Travel Time – All Calls



CURRENT: 5 Stations



FUTURE: 6 Stations





6-Minute Travel Time – All Calls (cont.)

Cumulative percent of coverage for the City of Kennewick within a:

6-Minute Travel Time

ranked in order by number of calls per fire station.

CURRENT: 5 Stations

			(# Calls/Station)	(Cumulative # Calls)	(Cumulative Percent of City Covered)
Rank	Station	Travel Time	Station Capture	Total Capture	Percent Capture
1	FS65	6	6,840	6,840	48.94%
2	FS61	6	3,798	10,638	76.11%
3	FS64	6	1,134	11,772	84.22%
4	FS63	6	621	12,393	88.67%
5	FS62	6	520	12,913	92.39%

FUTURE: 6 Stations

Rank	Station	Travel Time	Station Capture	Total Capture	Percent Capture
1	FS65	6	6,840	6,840	48.94%
2	FS61	6	3,798	10,638	76.11%
3	FS64	6	1,134	11,772	84.22%
4	FS63	6	622	12,394	88.67%
5	FS62	6	520	12,914	92.39%
6	FS66	6	50	12,964	92.75%



Historical Response Performance (2018-2022)

** Times shown below reflect Total Response Time (Turnout Time + Travel Time)*

Response: 1st Arriving Unit on Scene		Overall Response Times by Year (90 th Percentile)				
Incident Type	Minimum # People	2018	2019	2020	2021	2022
Emergency Medical - Advanced Life Support (ALS, Med 3 & 4)	2	0:07:13	0:07:19	0:07:04	0:07:05	0:07:09
Emergency Medical - Basic Life Support (BLS, Med 1 & 2)	2	0:08:33	0:08:42	0:08:44	0:08:52	0:09:26
Fire Suppression (All Types)	3	0:09:28	0:08:01	0:08:18	0:08:06	0:08:43
Technical Rescue	3	0:09:27	0:08:40	0:08:16	0:07:37	0:10:01
Hazardous Materials	3	0:08:43	0:09:14	0:09:08	0:09:58	0:10:07

Response: Effective Response Force		Overall Response Times by Year (90 th Percentile)				
Incident Type	Minimum # People	2018	2019	2020	2021	2022
Emergency Medical (ALS, Med 4) - Cardiac Arrest	7	0:23:02	0:20:11	0:14:13	0:09:36	0:11:09
Fire Suppression - Residential Structure	12	0:16:17	0:13:51	0:11:43	0:14:15	0:13:43
Fire Suppression - Commercial Structure	15	0:13:11	0:13:37	0:13:53	0:22:03	0:15:31

***KFD participates in regional Technical Rescue & Hazardous Materials Special Operations groups & staffs personnel trained within each specialty. Because most incidents requiring an effective response force within these categories are responded to by one of the regional special operations teams, KFD has not previously included the regional effective response force assembly times within our department-specific performance data.*



NFPA & NFPA 1710

Who/What is the NFPA?

- The National Fire Protection Association (NFPA)
- Non-profit organization that develops fire, electrical and life-safety standards



Standard: NFPA 1710

- Designed for communities with paid, career fire departments
- Focuses on personnel deployment and response times to fires and medical emergencies
- Designed to enable local leaders to make decisions based on data
- Is a benchmark - NOT a law or federally mandated regulation



Current NFPA 1710 Benchmarks

** Information below is based on the current adopted 2020 NFPA Standard.*

NFPA 1710: CURRENT KEY BENCHMARKS & RESPONSE OBJECTIVES

Benchmarks	Min. # People	Response Time Objectives
Alarm Answer	1	15 sec 95% of the time or 40 sec 99% of the time
Alarm Processing	1	64 sec 95% of the time or 106 sec 99% of the time
Turnout - Fire	4	80 sec
Turnout - EMS	2	60 sec
Travel - First-due engine	4	240 sec (4 min) 90% of the time
Travel - Second-due engine	4	360 sec (6 min) 90% of the time
Travel - Initial full alarm: Low/medium hazard	17	480 sec (8 min) 90% of the time
Travel - Initial full alarm: High hazard	28	610 sec (10 min 10 sec) 90% of the time



Kennewick Response Goals vs. NFPA 1710

1st Arriving Unit on Scene	KFD Goals (90% of the time)				NFPA 1710 (90% of the time)			
Incident Type	Minimum # People	Turnout Time	Travel Time	Total Response Time	Minimum # People	Turnout Time	Travel Time	Total Response Time
Emergency Medical - Advanced Life Support (ALS, Med 3 & 4)	2	0:01:00	0:04:00	0:05:00	2	0:01:00	0:04:00	0:05:00
Emergency Medical - Basic Life Support (BLS, Med 1 & 2)	2	0:01:00	0:06:00	0:07:00	2	0:01:00	0:04:00	0:05:00
Fire Suppression (All Types)	3	0:01:45	0:05:00	0:06:45	4	0:01:20	0:04:00	0:05:20
Technical Rescue	3	0:01:45	0:05:00	0:06:45	5-6	0:01:20	Per AHJ	Per AHJ
Hazardous Materials	3	0:01:45	0:05:00	0:06:45	5-6	0:01:20	Per AHJ	Per AHJ
Service Calls (All Types)	2-3	0:03:00	0:06:00	0:09:00	Per AHJ*	Per AHJ	Per AHJ	Per AHJ

**AHJ = Authority Having Jurisdiction. NFPA 1710 stipulates Special Operations & other service objectives to be "defined by the AHJ."*

Effective Response Force	KFD Goals (90% of the time)				NFPA 1710 (90% of the time)			
Incident Type	Minimum # People	Turnout Time	Travel Time	Total Response Time	Minimum # People	Turnout Time	Travel Time	Total Response Time
Emergency Medical (ALS, Med 4) - Cardiac Arrest	7	0:01:00	0:08:00	0:09:00	4	0:01:00	0:08:00	0:09:00
Fire Suppression - Residential Structure	12	0:01:45	0:08:00	0:09:45	17	0:01:20	0:08:00	0:09:20
Fire Suppression - Commercial Structure	15	0:01:45	0:08:00	0:09:45	28	0:01:20	0:10:10	0:11:30
Technical Rescue (requires recall of off-duty personnel)	**	0:01:45	1:00:00	1:01:45	Per AHJ	0:01:20	Per AHJ	Per AHJ
Hazardous Materials (requires recall of off-duty personnel)	**	0:01:45	1:00:00	1:01:45	Per AHJ	0:01:20	Per AHJ	Per AHJ

***KFD participates in regional Technical Rescue & Hazardous Materials Special Operations groups & staffs personnel trained within each specialty. Effective Response Force personnel for incidents come from KFD and neighboring agencies who also participate in regional specialty teams.*



Response Goals – Other Departments

* *Total Response Time = Turnout Time + Travel Time*

90th Percentile Performance Measurements (i.e., 90% of the time)

1st Arriving Unit on Scene	Richland Fire & Emergency Svcs.			Spokane Valley Fire Dept.			Spokane Fire Dept.			Tualatin Valley Fire & Rescue		
Incident Type	Minimum # People	Turnout Time	Total Response Time	Minimum # People	Turnout Time	Total Response Time	Minimum # People	Turnout Time	Total Response Time	Minimum # People	Turnout Time	Total Response Time
Emergency Medical - Advanced Life Support	2	0:01:00	0:05:00	2	Not Published	0:06:31	4	0:01:00	0:09:00	2	0:01:00	0:05:00
Emergency Medical - Basic Life Support	2	0:01:00	0:07:00	2	Not Published	0:06:31	2	0:01:00	0:05:00	2	0:01:00	0:05:00
Fire Suppression (All Types)	3	0:01:45	0:06:45	3	Not Published	0:07:43	6	0:01:20	0:05:20	2+	0:01:20	0:05:20
Technical Rescue	3	0:01:45	0:06:45	3	Not Published	0:07:31	3	0:01:20	0:08:30	2+	0:01:20	0:05:20
Hazardous Materials	3	0:01:45	0:06:45	3	Not Published	0:08:01	3	0:01:20	0:09:00	2+	0:01:20	0:05:20
Service Calls (All Types)	2-3	0:03:00	0:09:00	--	--	--	--	--	--	--	--	--

Adopted 2009; to be reviewed with current SOC.

*Updated 2020 using historical performance * 0.95.*

Adopted 2017; current performance not meeting goals.

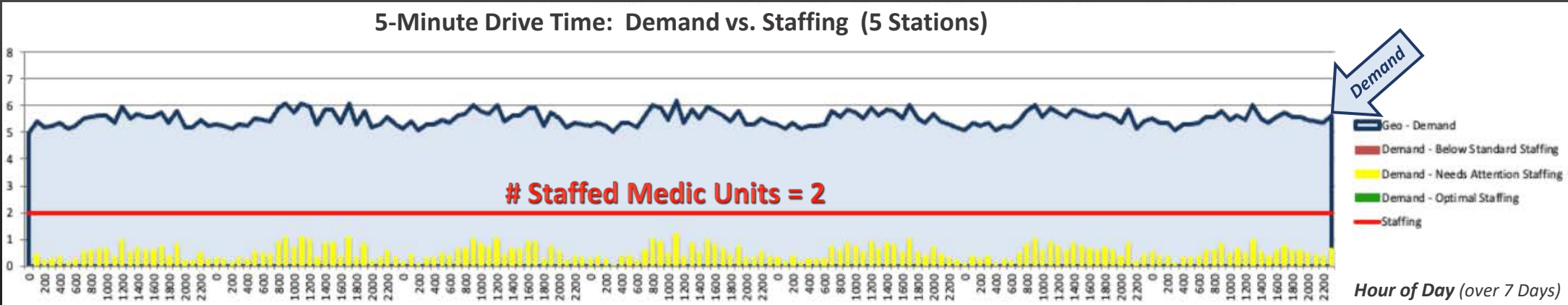
Reviewed 2023; current performance not meeting goals.

Effective Response Force	Richland Fire & Emergency Svcs.			Spokane Valley Fire Dept.			Spokane Fire Dept.			Tualatin Valley Fire & Rescue		
Incident Type	Minimum # People	Turnout Time	Total Response Time	Minimum # People	Turnout Time	Total Response Time	Minimum # People	Turnout Time	Total Response Time	Minimum # People	Turnout Time	Total Response Time
Emergency Medical - Cardiac Arrest	7	0:01:00	0:09:00	8	Not Published	0:13:29	12	0:01:00	Not Published	6	0:01:00	0:09:00
Fire Suppression - Residential Structure	12	0:01:45	0:09:45	18	Not Published	0:13:29	14	0:01:20	0:09:20	15	0:01:20	0:09:20
Fire Suppression - Commercial Structure	15	0:01:45	0:09:45	27	Not Published	0:18:32	25	0:01:20	0:09:20	15	0:01:20	0:09:20
Technical Rescue <i>(requires off-duty personnel)</i>	**	0:01:45	1:01:45	28	Not Published	0:32:51	15	0:01:20	Not Published	14-25	0:01:20	Not Published
Hazardous Materials <i>(requires off-duty personnel)</i>	**	0:01:45	1:01:45	22	Not Published	0:21:23	39	0:01:20	Not Published	8	0:01:20	Not Published

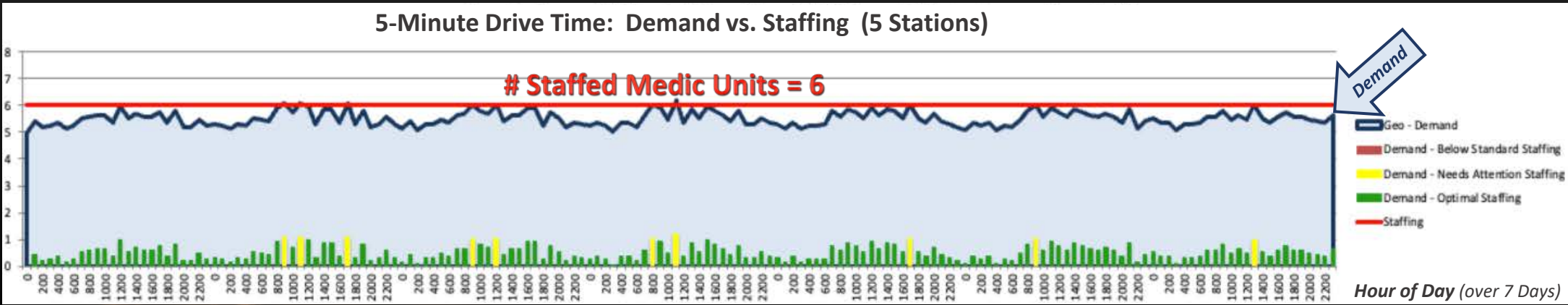


Potential Attainment of 5-Minute Travel Time

5-Minute travel time can only be achieved with the addition of resources.



Current **demand** far **exceeds** KFD's current **staffing**.



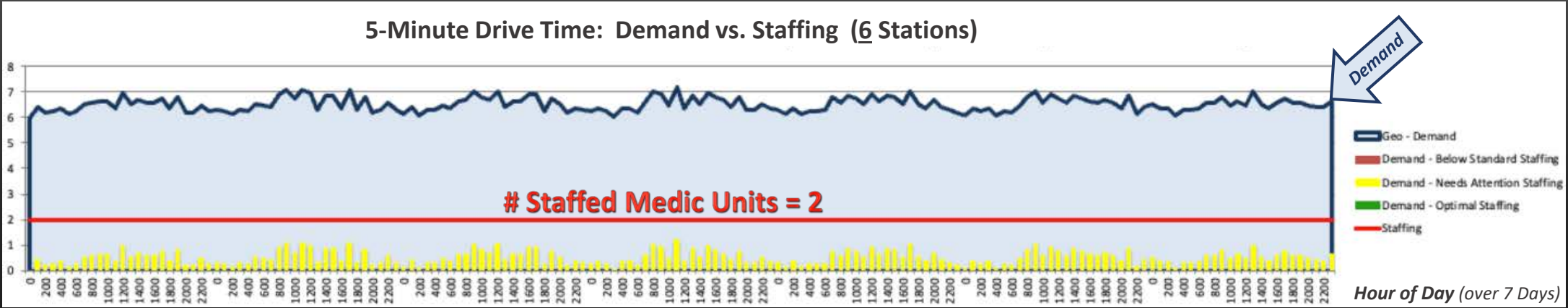
Total Resources Required?

6 staffed ambulances
+
5 fire engines

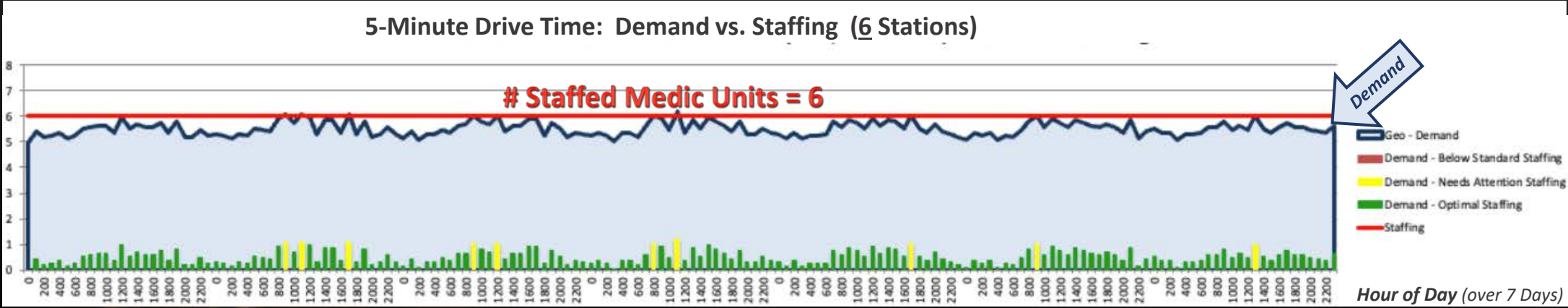


Future Attainment of 5-Minute Travel Time

With Fire Station #6, additional resources will still be required to achieve a 5-Minute travel time.



Projected future demand far exceeds KFD's current deployment model.



Total Resources Required?

6 staffed ambulances + 6 fire engines



Performance Measurement Options

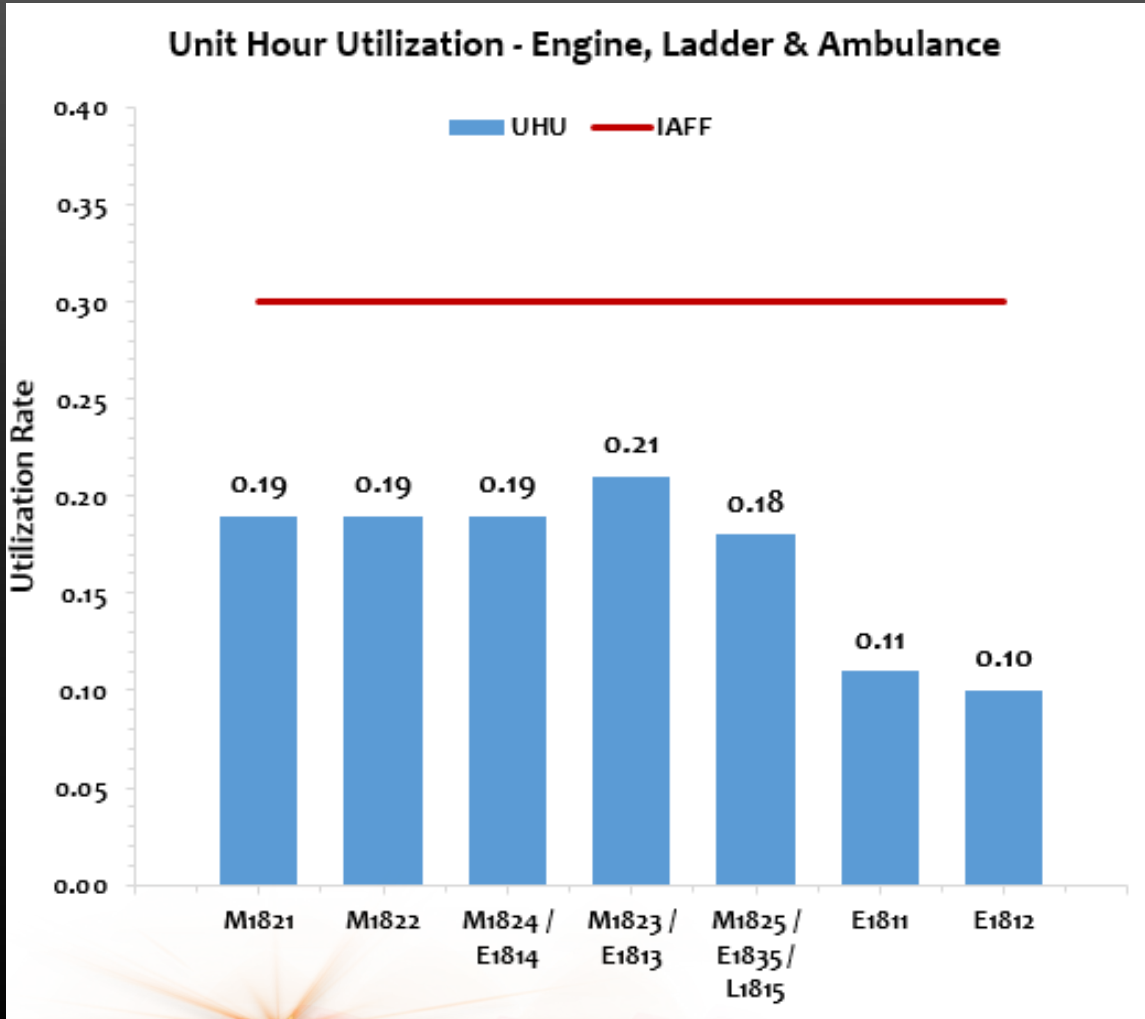
Response: 1st Arriving Unit on Scene		OPTION 1: 2008 Performance Goals			OPTION 2: GIS Basis		OPTION 3: Other
Incident Type	Minimum # People	Turnout Time	Travel Time	Total Response Time	Travel Time	Total Response Time	Determination of new response goals based on historical data, objective calculations or other methodology.
Emergency Medical - Advanced Life Support (ALS, Med 3 & 4)	2	0:01:00	0:04:00	0:05:00	0:05:00	0:06:00	
Emergency Medical - Basic Life Support (BLS, Med 1 & 2)	2	0:01:00	0:06:00	0:07:00	0:10:00	0:11:00	
Fire Suppression (All Types)	3	0:01:45	0:05:00	0:06:45	0:05:00	0:06:45	
Technical Rescue	3	0:01:45	0:05:00	0:06:45	0:05:00	0:06:45	
Hazardous Materials	3	0:01:45	0:05:00	0:06:45	0:05:00	0:06:45	
Service Calls (All Types)	2-3	0:03:00	0:06:00	0:09:00	0:10:00	0:11:45	

Response: Effective Response Force		OPTION 1	OPTION 2	OPTION 3
Incident Type	Minimum # People	Total Response Time	Total Response Time	Determination of new response goals based on historical data, objective calculations or other methodology.
Emergency Medical (ALS, Med 4) - Cardiac Arrest	7	0:09:00	0:09:00	
Fire Suppression - Residential Structure (1-2 Family Dwelling)	12	0:09:45	0:09:45	
Fire Suppression - Commercial / Apartment Structure	17	0:09:45	0:12:00	
Technical Rescue <i>(requires recall of off-duty personnel)</i>	11**	1:01:45	1:01:45	
Hazardous Materials <i>(requires recall of off-duty personnel)</i>	9**	1:01:45	1:01:45	

***Effective Response Force assembly for significant Technical Rescue & Hazardous Materials incidents requires recall of off-duty regional special teams personnel from KFD and other neighboring agencies.*



UHU Will Continue to Increase



Unit	Unit Description	Station	Busy Hours	UHU	IAFF
M1821	Ambulance	61	1,695	0.19	0.30
M1822	Ambulance	62	1,626	0.19	0.30
M1824 / E1814	Ambulance / Engine	64	1,635	0.19	0.30
M1823 / E1813	Ambulance / Engine	63	1,798	0.21	0.30
M1825 / E1835 / L1815	Ambulance / Engine / Ladder	65	1,574	0.18	0.30
E1811	Engine	61	964	0.11	0.30
E1812	Engine	62	844	0.1	0.30

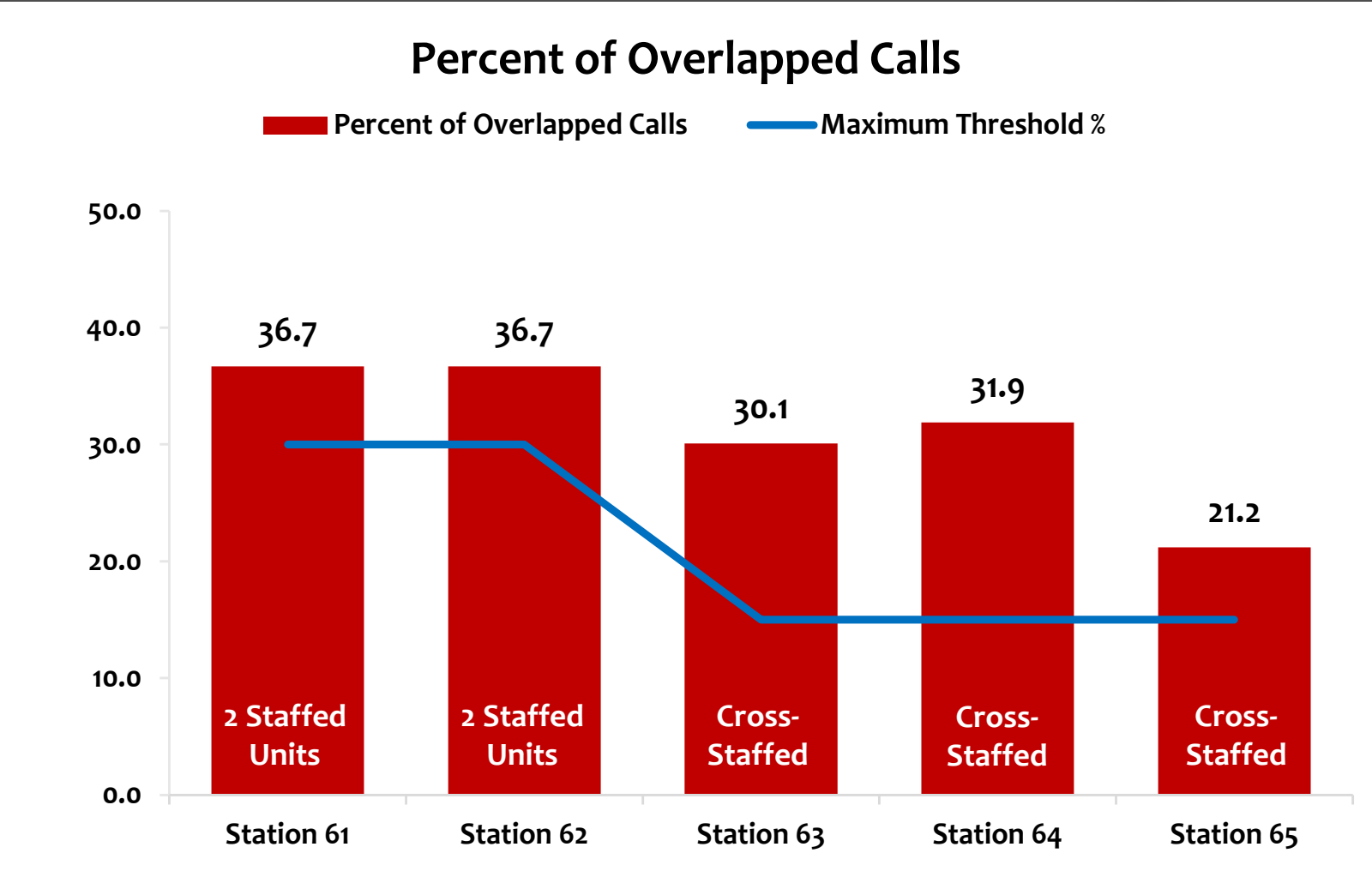


Concurrent Calls Will Continue to Increase

Threshold to separate cross-staffed units = call concurrency of:

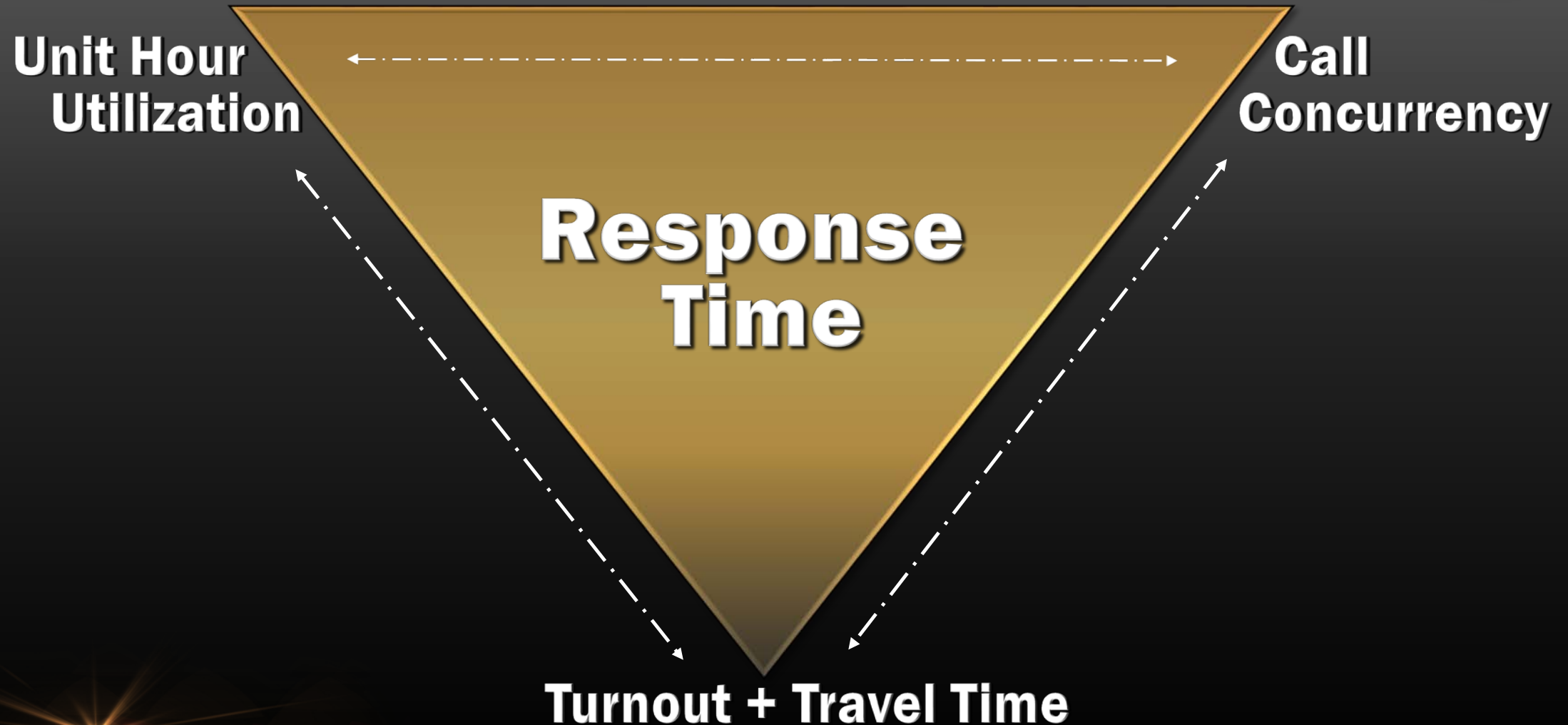
- 15%
- 1500 calls

Response Area	Total Calls	Percent of Overlapped Calls	Dedicated Units or Cross-Staffed?
Station 61	2,989	36.7%	2 Dedicated Units
Station 62	3,607	36.7%	2 Dedicated Units
Station 63	2,299	30.1%	Cross-Staffed
Station 64	2,617	31.9%	Cross-Staffed
Station 65	1,630	21.2%	Cross-Staffed





Factors Effecting Response Time





Resolution to Adopt Revised Standards

Previous standards were adopted in **2008** by Kennewick City Council via Resolution 08-06.

- Updated standards need to be determined
- Clear and measurable
- New resolution to be adopted by Kennewick City Council with revised performance standards



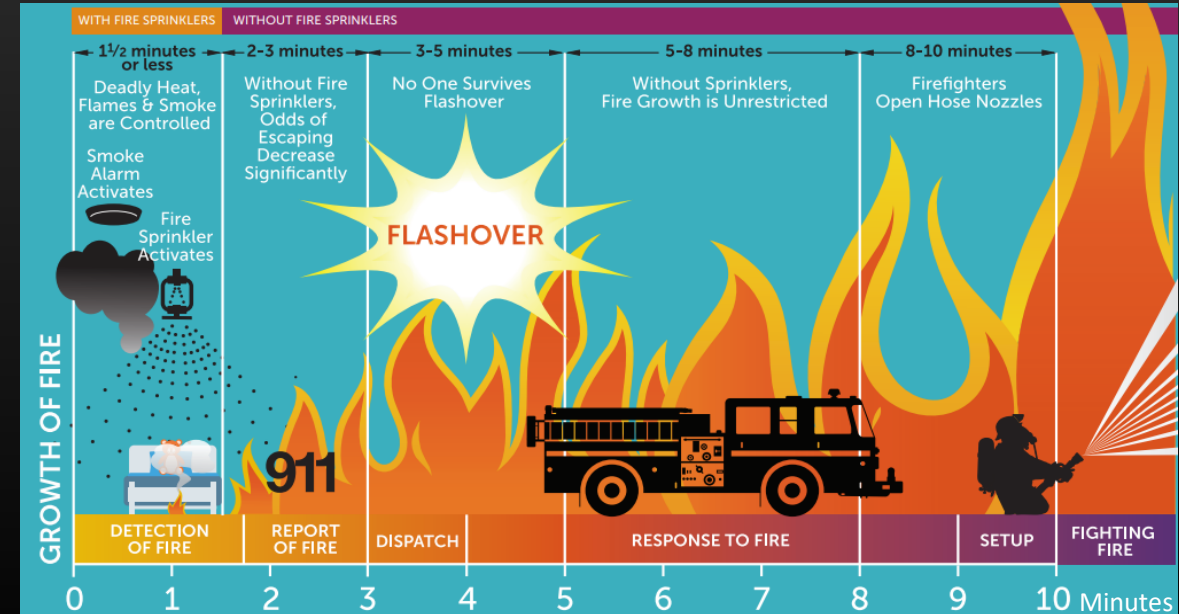


Hands-Only CPR, AEDs & Fire Sprinklers

Three things that play a vital role in positive outcomes include:

1. Citizens trained to administer hands-only CPR
2. Public access Automatic External Defibrillators (AEDs)
3. Fire sprinklers

These should be priorities in our community.





What Is Needed Tonight?

1. Feedback: KFD's Immediate Needs

- Fire Station #6 Construction
- Peak Hour BLS Unit

2. Feedback: Updated Response Times

- In preparation for adoption of revised resolution





Next Steps

- Council determine and adopt response times
- Complete the Cost of Service Study
- Evaluate funding options for immediate needs and provide to Council for consideration and approval
- Address labor issues associated with implementing a BLS Peak Hour unit
- Develop Fire Station #6 construction timeline
- Begin the process of selecting and hiring approved personnel





Any Questions?





Executive Summary

The City of Kennewick Fire Department performed a Community Risk Assessment and Standards of Cover (SOC) study in 2023. The SOC included a department review evaluating response time data, GIS mapping, and a community risk assessment, as well as the development of deployment options to carry the department into the future.

This comprehensive assessment of risks and demand was completed to provide department leadership with the information necessary to make informed decisions now and in the future.

The Executive Summary is intended to highlight the most substantive options and alternatives for the department.

Overall, six main areas of focus were identified for system and performance improvement (see *Focus Areas*, on the right). Implementation of needed changes will be done based on the desired outcome and the probability of goal achievement.

The Department will benefit by closely observing development in less populated areas to determine when more resources and/or personnel are required. Also, the Department should continually monitor performance and the need for system modifications.

Additionally, introducing outcome measures to complement performance management strategies will provide a more holistic management of performance.

Furthermore, Benton and Franklin Counties merged dispatch centers in 2018, leading to a reduction in the time required to transfer calls between dispatch centers. The Department needs to continue working with the Southeast Communications Center (SECOMM) to develop a means of monitoring call dispatch processing times to ensure they meet community expectations.

Finally, to effectively reduce future impacts on the EMS system, the department should consider different deployment models including a regional solution, options for Basic Life Support (BLS), and/or regional shared services.

Focus Areas:

1. Continue planning for additional resources and personnel to meet the demands of a growing community.
2. Consider deployment alternatives to ensure sustainable services that reduce workload.
3. Consider deployment of BLS ambulance(s) to reduce workload on the EMS system.
4. Consider a Tri-City regional collaboration for the delivery of EMS.
5. Monitor outcome measures to complement performance management strategies.
6. Adopt a system of measures for future action planning and decision-making.

Documentation of Area Characteristics

The Kennewick Fire Department (KFD) provides a range of services including fire suppression, EMS, fire prevention, hazardous materials, and technical rescue for the growing community of more than 86,000.

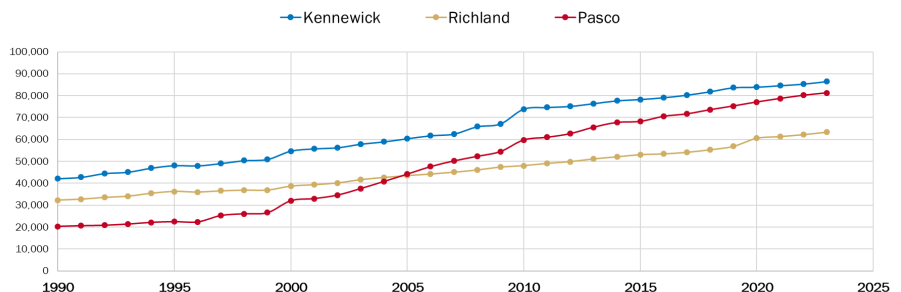
The City of Kennewick is in Benton County in the southeastern part of Washington State. It is the most populous of the three cities collectively referred to as the Tri-Cities. Kennewick is located along the southwest bank of the Columbia River and just south of the confluence of the Columbia and Yakima rivers.

The City of Richland is adjoining and just upstream of Kennewick on the same side of the river, while the City of Pasco is across the river. The elevation within Kennewick rises from the river to a line of ridges on the south side of the city. The Tri-Cities Airport in Pasco is the nearest regional commercial/private airport. According to 2023 Washington State Office of Financial Management data, the City of Kennewick population is approximately 86,470 people covering a total area of 29.8 square miles.

Observation

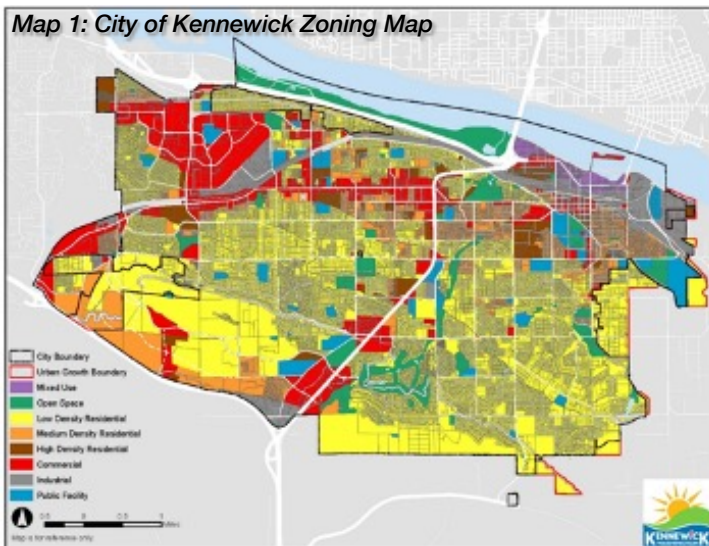
Kennewick Fire Department provides high-quality fire suppression, EMS, fire prevention, hazardous materials and technical rescue services.

TRI-CITIES ANNUAL POPULATION GROWTH (1990 - PRESENT)



The City of Kennewick is presently the Tri-Cities' largest community with light industrial companies located in various areas within the city, as well as retail and services such as lodging, restaurants and the region's only shopping mall. A few of the major employers located within the city include Trios Health, Kennewick School District, the City of Kennewick, and Apollo Mechanical Contractors. Kennewick's economy is closely tied to the rest of the Tri-Cities and is heavily influenced by the Hanford Site and the Energy Department's Pacific Northwest National Laboratory.

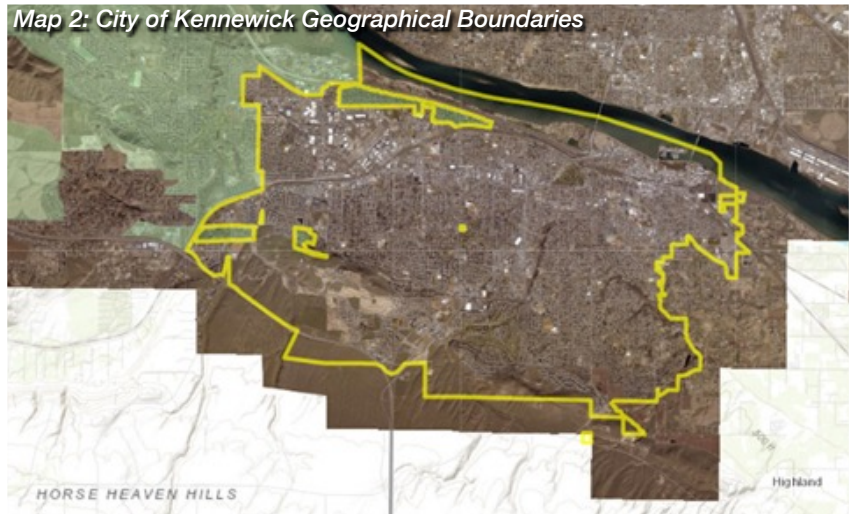
Map 1: City of Kennewick Zoning Map



Additionally, the City of Kennewick has placed a substantial focus on attracting a number of different events and sports tournaments to the region. Annually, the city hosts a variety of major events, such as the Tri-City Water Follies Columbia Cup Hydroplane Races and Air Show, the River of Fire Festival, and the Benton/Franklin County Fair and Rodeo. Kennewick also takes pride in the parks and recreational facilities available for its residents and visitors. There are currently 34 maintained public parks and facilities throughout the city covering over 855 total acres.

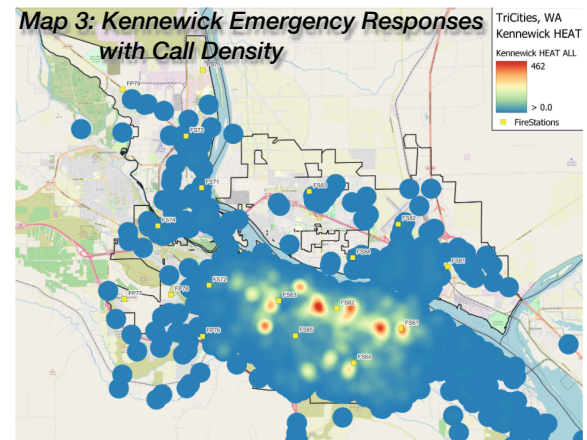
Legal Basis

The City of Kennewick was officially incorporated on February 5, 1904. Kennewick has a council-manager form of government. The city manager is appointed by the city council as the chief executive officer of the city and is responsible to the council for the proper administration of all city business. The council is comprised of seven members, one of whom is appointed by its members to serve as mayor for two years. Though chair of the council and the presiding member at weekly council meetings, the mayor has an equal vote with other council members. Council members are elected by the citizens of Kennewick to serve a four-year term. Council members are part-time elected officials who exercise the legislative power of the city and determine matters of policy. Pursuant to the provisions of the Revised Code of Washington (RCW), Chapters 35.21.500-570, the city adopted the Kennewick Municipal Code (KMC), designating the responsibility of appointing the fire chief to the city manager (Chapters 2.12.030-040). The fire chief is responsible for the administrative and operational functions of the fire department.



Automatic/Mutual Aid

There is an inter-local agreement for automatic and mutual-aid response dating back to 1990 that is still in place today. Participating parties have agreed it is in the best interests of the citizens of the respective jurisdictions and of mutual benefit to the delivery of emergency services if, in some circumstances, the services of one agency be extended outside the corporate limits of that city or district into another. Therefore, this response agreement allows, when necessary, a partnering agency to be dispatched to an emergency incident within the corporate limits of another department for the mutual benefit of their citizens. Although the agreement is between several agencies, Kennewick most often provides assistance to Richland's Station 72 and Benton County's Station 120 response zones.



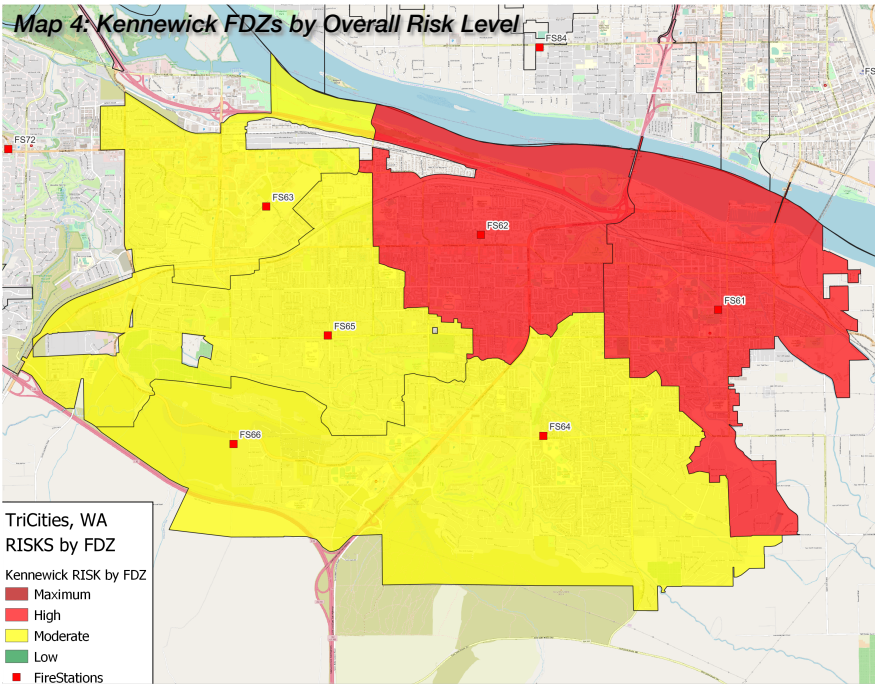
Community Risk Assessment

To study the unique features of Kennewick's jurisdictional area, a comprehensive, two-part, documented and adopted methodology was utilized that organizes response areas into geographical planning zones. First, the department's entire response area was examined. Second, a more gradual assessment of fire demand zones (FDZ) was performed. FDZs have specific resource allocation strategies based on calculated risks. From an emergency response standpoint, the jurisdiction is presently divided into five FDZs, each with a dedicated fire station. The FDZs are not divided equally in terms of demographics and population density.

Variables of Risk

All variables measured at the FDZ level:

- Population density
- Square mileage of each FDZ
- Median age of residents
- Median household income
- Unemployment rate
- Percentage of homes more than 50 years old
- Number of moderate-, high- and maximum-risk structures
- Community demand
- Call concurrency



FDZs were utilized to assess each planning zone for risks that inform response time performance objectives. The risk assessment process utilized socioeconomic variables, such as median household income and unemployment, as well as demographic variables, such as population density and median age. Other variables considered included square mileage, the number of moderate-, high-, and maximum-risk occupancies, and the percentage of homes older than 50 years.

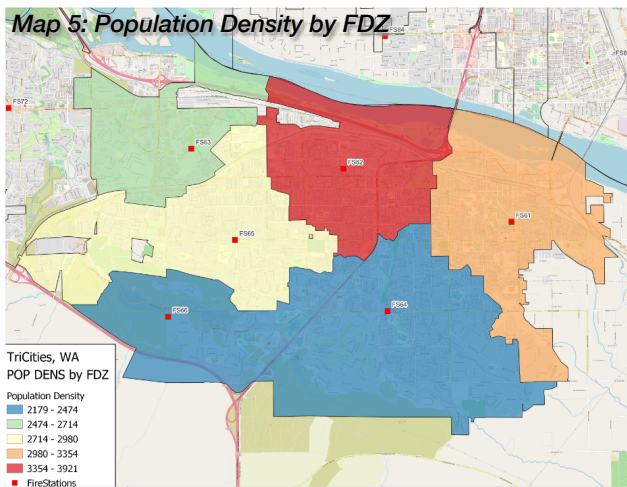
Economic and Demographic Assessment by FDZ

Population density by FDZ was evaluated. Station 62 has the highest population density within the city. Overall, the northern areas of the city have the greatest population density. FDZ 64 and proposed 66 (presently covered by Stations 64 and 65) had the lowest population density.

Recommendation

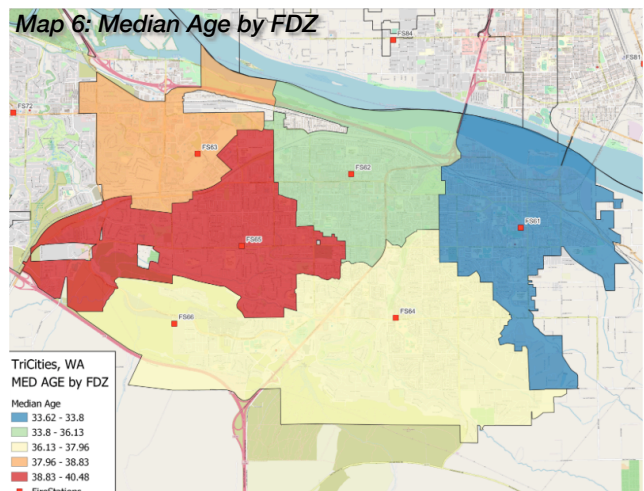
The department should continue to monitor socioeconomic and demographic variables correlated with changes in risk.

Map 5: Population Density by FDZ



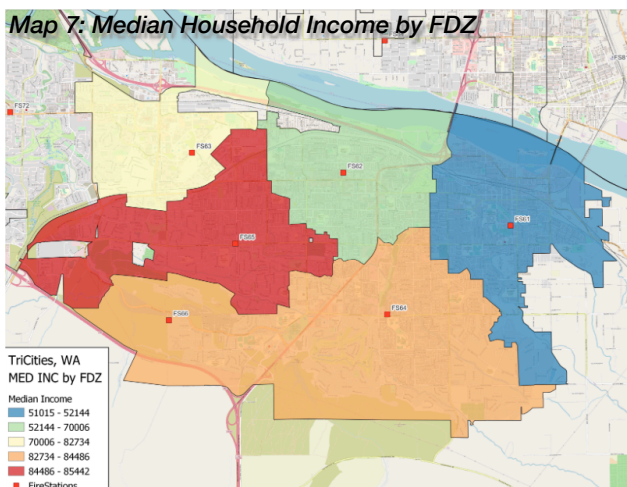
Research has demonstrated a relationship between age and the use of EMS and fire services or the events leading to the need for EMS and fire services. Both the use and need of services tend to be highest among older adults, as compared to those in younger age groups.

Map 6: Median Age by FDZ



Population is not the sole variable that influences demand for services, as socioeconomic and demographic factors can ultimately have a greater influence over demand.

Map 7: Median Household Income by FDZ



Median household income was evaluated to determine the degree to which the community has underprivileged populations. According to the U.S. Census Bureau, the national median household income is about \$69,021. However, the median household income for the City of Kennewick is \$64,053, with approximately 14.1% of inhabitants being at or below poverty levels. *Map 7: Median Household Income by FDZ* (to the left), provides a perspective of where economic disparities may exist within the jurisdiction.

Critical Tasking and Staffing to Risk

Fire, EMS, Hazardous Materials, and Technical Rescue-related critical tasking was completed for both risk classification and risk categorization by low, moderate, high, and maximum risks. The associated critical tasks were validated to ensure the staffing strategy would accomplish the critical needs of each risk level, as well as confirm the process of classifying and categorizing these risks supports the appropriate resource allocation at the moment of dispatch.

All ERF strategies were established through the critical tasking exercises and validated by ongoing assessment of real time events.

The Effective Response Force (ERF) is the concentration or quantity of emergency personnel required to mitigate each class and category of risk.

Fire Incidents

Effective Response Force for Fire Incidents				
Task	Maximum	High	Moderate	Low
Command	1	1	1	1
Fire Suppression	6	3	3	2
Water Supply	1	1	1	0
Back up Line	3	3	0	0
2-Out-RIT	3	3	2	0
Ventilation	3	3	2	0
Search	3	3	2	0
Safety Officer	1	1	1	0
ERF Personnel	21	17	12	3
Unit Count	8-11	6-10	5-8	1

EMS Incidents

Effective Response Force for EMS Incidents				
Task	Maximum	High	Moderate	Low
Patient Assist	1	6	4	2*
Command	1	1	1	0
Medical Branch Director	1	0	0	0
Triage Unit	3	0	0	0
Treatment Unit	6	0	0	0
Safety Officer	1	0	0	0
ERF Personnel	13	7	5	2-3*
Unit Count	5	4	1-2	1

*Total personnel arriving on low-risk EMS incidents is contingent upon the responding station and staffed apparatus.

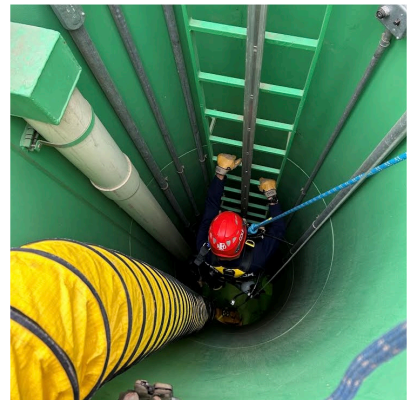
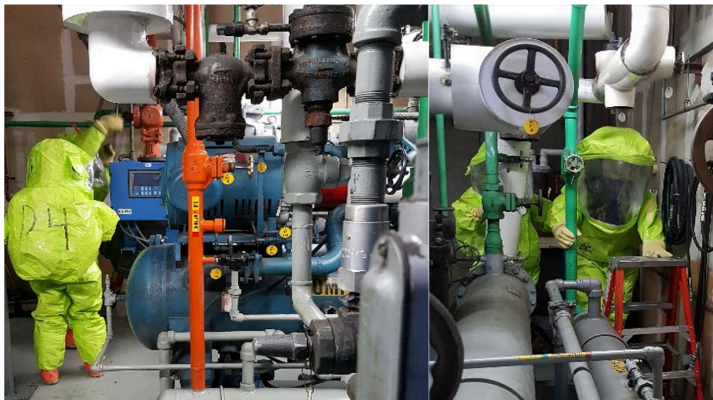
Critical Tasking and Staffing to Risk (cont.)

Hazardous Materials Incidents

Effective Response Force for HAZMAT Incidents				
Task	Maximum	High	Moderate	Low
Hazard Mitigation	3	3	3	2
Command	0	0	0	1
Incident Command	1	1	1	0
Safety Officer	1	1	1	0
Entry Team*	2	2	0	0
Back up Team*	2	2	0	0
Decontamination*	*	*	0	0
State/Federal Resources	**	0	0	0
ERF Personnel	9	9	5	3
Unit Count	3-4*	3-4	3	1-2

*Additional personnel will be responding as a result of the regional hazardous materials team response

**Additional personnel will be responding through State and Federal Resource requests



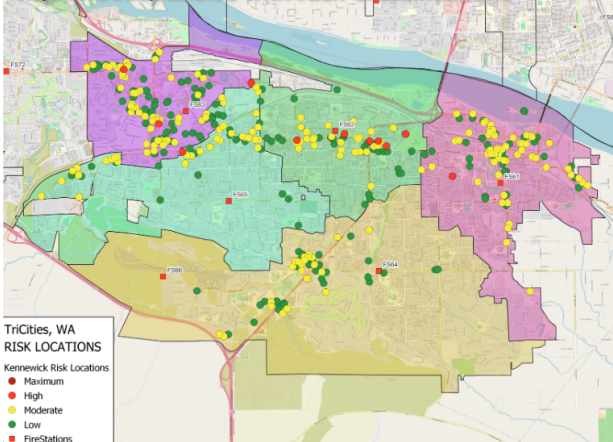
Technical Rescue Incidents

Effective Response Force for TECHNICAL RESCUE Incidents				
Task	Maximum	High	Moderate	Low
Rescue Team	6	6	6	2-3
Medical	4	4	2	0
Command	1	1	1	1
ERF Personnel	11	11	9	3
Unit Count	5-6	5-6	4	1-2
Regional Team	21-24	15-17	7-9	3-4

Occupancy-Level Risk

Occupancy-level data was utilized to measure the relative risk of buildings within each of the FDZ areas. A total of 508 occupancies were measured and classified based on number of stories above grade, required fire flow, and presence of sprinkler systems. The scoring process resulted in 260 occupancies classified as low-risk, 237 occupancies classified as moderate-risk, and 11 occupancies classified as high-risk within the City of Kennewick. Occupancies were also classified by first due station, where available. Scoring was based on the number of moderate-, high-, and maximum-risk structures.

Map 8: Occupancies with Risk Classifications

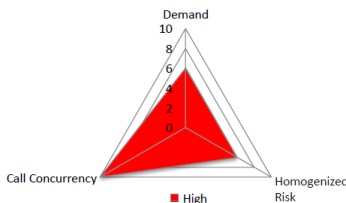


Recommendation

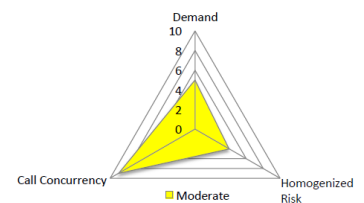
The department should develop a more robust data collection process to support a more granular assessment of building and occupancy risks.

Three-dimensional models were created to evaluate each FDZ's unique risk profile. The three-axis method used evaluated the average number of incidents occurring over a five-year period ("Demand"), the percentage of overlapping calls ("Call Concurrence"), and a combined average for demographic and occupancy risk ("Homogenized Risk"). Together, these three parameters form a triangular pyramid, or tetrahedron, as shown below.

First Due Station 61



First Due Station 64

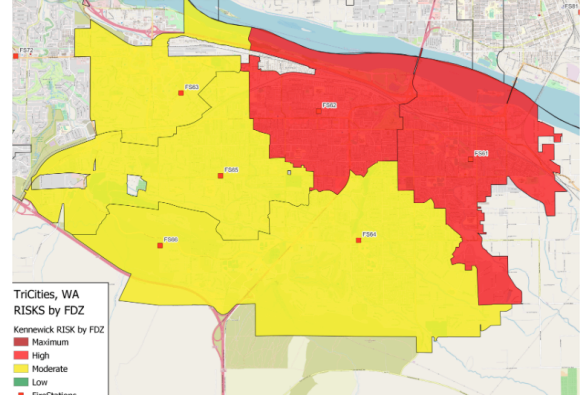


FDZ Level Risk

FDZs were assigned overall risk level classifications of low, moderate, high, or maximum based on the resulting value of the risk matrices.

Ultimately, Stations 63, 64, and 65, were classified as moderate-risk stations (yellow). Stations 61 and 62 were classified as high-risk stations (red).

Map 9: Kennewick FDZs by Overall Risk Level





Categorizing and Classifying Risk

Files were provided by the City of Kennewick Fire Department spanning January 1, 2018 through December 31, 2022. For the purposes of this report, five full calendar years of data were utilized for analysis to reflect the most recent reporting periods of 2018 through 2022.

Call Description	Risk Classification
100 - Fire, other	Moderate
111 - Building fire	Maximum
1111 - Building fire - House	High
1112 - Building fire - Apartment	Maximum
1113 - Building fire - Commercial	Maximum
1114 - Building fire - Trailer	High
112 - Fires in structure other than in a building	Moderate
113 - Cooking fire, confined to container	Low
114 - Chimney or flue fire, confined to chimney or flue	Low
115 - Incinerator overload or malfunction, fire confined	Low
116 - Fuel burner/boiler malfunction, fire confined	Low
117 - Commercial Compactor fire, confined to rubbish	Moderate
118 - Trash or rubbish fire, (Contained within a structure)	Low
118 - Trash or rubbish fire, contained	Low
121 - Fire in mobile home used as fixed residence	High
122 - Fire in motor home, camper, recreational vehicle	Moderate
123 - Fire in portable building, fixed location	Moderate
130 - Mobile property (vehicle) fire, other	Moderate
131 - Passenger vehicle fire	Moderate
132 - Road freight or transport vehicle fire	Moderate
133 - Rail vehicle fire	Moderate
134 - Water vehicle fire	Moderate
136 - Self-propelled motor home or recreational vehicle	Moderate
137 - Camper or recreational vehicle (RV) fire	Moderate
138 - Off-road vehicle or heavy equipment fire	Moderate
140 - Natural vegetation fire, other	Moderate
141 - Forest, woods or wildland fire	Moderate
142 - Brush or brush-and-grass mixture fire	Moderate
143 - Grass fire	Moderate

Call Description	Risk Classification
210 - Overpressure rupture from steam, other	Moderate
211 - Overpressure rupture of steam pipe or pipeline	Moderate
221 - Overpressure rupture of air or gas pipe/pipeline	Moderate
223 - Air or gas rupture of pressure or process vessel	Moderate
231 - Chemical reaction rupture of process vessel	High
243 - Fireworks explosion (no fire)	Low
251 - Excessive heat, scorch burns with no ignition	Low
300 - Rescue, EMS incident, other	High
311 - Medical assist, assist EMS crew	Low
320 - Emergency medical service, other	Low
321 - EMS call, excluding vehicle accident with injury	Low
3211 - EMS call, Medical Alert Accidental Activation	Low
322 - Motor vehicle accident with injuries	Moderate
3222 - MVA - Watercraft with Injuries	Moderate
323 - Motor vehicle/pedestrian accident (MV Ped)	High
324 - Motor vehicle accident with no injuries.	Moderate
3242 - MVA - Watercraft NO Injuries	Low
331 - Lock-in (if lock out , use 511)	Low
340 - Search for lost person, other	Low
341 - Search for person on land	Low
342 - Search for person in water	Moderate
350 - Extrication, rescue, other	Moderate
351 - Extrication of victim(s) from building/structure	Moderate
352 - Extrication of victim(s) from vehicle	Moderate
353 - Removal of victim(s) from stalled elevator	Low
356 - High-angle rescue	High
357 - Extrication of victim(s) from machinery	High
360 - Water & ice-related rescue, other	Moderate
361 - Swimming/recreational water areas rescue	Moderate
363 - Swift water rescue	High

Demand zones or first due station areas (FDZs) throughout this report reflect future planned configurations, such as adding Station 66 and the re-configuration of existing demand zones for Stations 61 through 65. Data was mapped to first due station area using latitude and longitude coordinates, as available, in conjunction with Graphic Information Systems (GIS) files.

“Call Type” variable entries in the data file were classified into the program areas of EMS, fire, hazmat, and rescue based on departmental leadership decisions. Data records were assigned a risk classification based on departmental leadership criteria. Risk classifications were assigned based on determinant (type of call), when available, and based on call type when determinant was not available.

Correlated Risks

Risks may be divided into correlated and uncorrelated risks. All previous risk analyses have been primarily based on uncorrelated risks such as single unique events for EMS or a single property structure fire. Risks were calculated based on socioeconomic and demographic factors that may contribute to unique events. All previous analyses utilized a robust quantitative approach using a three-axis mathematical risk calculation using the Heron formula.

However, correlated risks occur with much less frequency and were assessed using a two-dimensional probability and consequence model. An example of correlated risks would include more regional or system wide events such as natural hazards and pandemics. These risks were provided by the Benton County Hazard Mitigation Plan (2019).

Benton County, Washington Natural Hazard Mitigation Plan 2019 Revision



Benton County Emergency Management
651 Truman Avenue
Richland, WA 99352
(509) 628-2600



Prepared By
Northwest Management, Inc.

Observation

KFD utilizes its adopted planning zone methodology to identify response area characteristics such as population, transportation systems, area land use, topography, geography, geology, physiography, climate, hazards and risks, and service provision capability demands.



Low Risk	Moderate Risk	High Risk	Max/Special Risk
Political Boundaries & Population Growth	Wildland & Wildland Urban Interface	Earthquakes	Critical Infrastructure
Construction Limitations	Flood Events	Contagious & Chronic Diseases	Hazardous Materials
	Severe Weather	Fire Suppression	Technical Rescue
	Transportation Network		
	Emergency Medical Services		

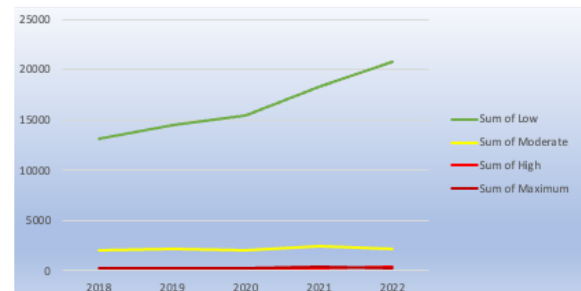
Historical Service Demands

Historical service demands were classified by risk and distributed across the risk categories of low-, moderate-, high-, and maximum-risk.

Reporting Period ¹	Program	Number of Unit Responses Risk Rating					Percentage of Unit Responses ¹ Risk Rating				
		Low	Moderate	High	Maximum	Total	Low	Moderate	High	Maximum	Total
2018	EMS	2,858	4,348	3,591	0	10,797	26.5	40.3	33.3	0	100
	Fire	177	389	182	186	934	19	41.6	19.5	19.9	100
	Rescue	16	20	1	0	37	43.2	54.1	2.7	0	100
	Hazardous Cor	117	55	11	11	194	60.3	28.4	5.7	5.7	100
	Service	1,065	0	0	0	1,065	100	0	0	0	100
	Good Intent	1,520	22	0	0	1,542	98.6	1.4	0	0	100
	False Alarm an	90	935	0	0	1,025	8.8	91.2	0	0	100
	Other	24	4	0	0	28	85.7	14.3	0	0	100
	Total	5,867	5,773	3,785	197	15,622	84	13.5	1.2	1.3	100
2019	EMS	1,753	5,588	4,575	0	11,916	14.7	46.9	38.4	0	100
	Fire	226	276	183	301	986	22.9	28	18.6	30.5	100
	Rescue	17	25	10	0	52	32.7	48.1	19.2	0	100
	Hazardous Cor	182	69	2	23	276	65.9	25	0.7	8.3	100
	Service	1,136	0	0	0	1,136	100	0	0	0	100
	Good Intent	1,553	29	0	0	1,582	98.2	1.8	0	0	100
	False Alarm an	111	1076	0	0	1,187	9.4	90.6	0	0	100
	Other	45	6	1	0	52	86.5	11.5	1.9	0	100
	Total	5,023	7,069	4,771	324	17,187	84.5	12.5	1.1	1.9	100
2020	EMS	1,862	5,321	5,131	0	12,314	15.1	43.2	41.7	0	100
	Fire	254	284	191	315	1,044	24.4	27.3	18.3	30	100
	Rescue	29	46	7	0	82	35.4	56.1	8.5	0	100
	Hazardous Cor	161	78	0	2	241	66.8	32.4	0	0.8	100
	Service	1,570	0	0	0	1,570	100	0	0	0	100
	Good Intent	1,546	15	0	0	1,561	99	1	0	0	100
	False Alarm an	105	1036	0	0	1,141	9.2	90.8	0	0	100
	Other	29	4	0	0	33	87.9	12.1	0	0	100
	Total	5,556	6,784	5,329	315	17,984	86.1	11.1	1.1	1.8	100
2021	EMS	2,439	6,842	5,209	0	14,490	16.8	47.2	35.9	0	100
	Fire	421	365	281	456	1,523	27.6	24	18.5	29.9	100
	Rescue	38	29	16	0	83	45.8	34.9	19.3	0	100
	Hazardous Cor	197	51	0	1	249	79.1	20.5	0	0.4	100
	Service	1,646	0	0	0	1,646	100	0	0	0	100
	Good Intent	2,147	11	0	0	2,158	99.5	0.5	0	0	100
	False Alarm an	124	1200	0	0	1,324	9.4	90.6	0	0	100
	Other	38	3	0	0	41	92.7	7.3	0	0	100
	Total	7,050	8,501	5,506	21,057	21,514	85	11.5	1.4	2.1	100
2022	EMS	3,394	7,079	5,373	0	15,846	21.4	44.7	33.9	0	100
	Fire	374	420	388	248	1,430	26.2	29.4	27.1	17.3	100
	Rescue	55	46	4	0	105	52.4	43.8	3.8	0	100
	Hazardous Cor	172	66	0	0	238	72.3	27.7	0	0	100
	Service	2,303	0	0	0	2,303	100	0	0	0	100
	Good Intent	2,846	28	0	0	2,874	99	1	0	0	100
	False Alarm an	99	704	0	0	803	12.3	87.7	0	0	100
	Other	43	6	0	0	49	87.8	12.2	0	0	100
	Total	9,286	8,349	5,765	248	23,648	88	9.2	1.7	1	100
All	EMS	12,306	29,178	23,879	0	65,363	18.8	44.6	36.5	0	100
	Fire	1,452	1,734	1,225	1,504	5,915	24.5	29.3	20.7	25.4	100
	Rescue	155	166	38	0	359	43.2	46.2	10.6	0	100
	Hazardous Cor	829	319	13	37	1,198	69.2	26.6	1.1	3.1	100
	Service	7,720	0	0	0	7,720	100	0	0	0	100
	Good Intent	9,612	105	0	0	9,717	98.9	1.1	0	0	100
	False Alarm an	529	4951	0	0	5,480	9.7	90.3	0	0	100
	Other	179	23	1	0	203	88.2	11.3	0.5	0	100
	Total	32,782	36,476	25,156	1,541	95,955	85.7	11.4	1.3	1.6	100

During the five year reporting period, the most significant increase was seen in low-risk risk incidents, primarily due to an overall rise in service demand. The percentage of moderate-, high-, and maximum-risk incidents remained relatively level.

Overall, an average of 85.7% of calls were low-risk. Approximately 11.4% of calls were moderate-risk incidents. The remaining 2.9% of incidents were classified high- (1.3%) and maximum-risk (1.6%).



Historical Performance

The department recognizes the relative opportunity to improve the citizens' experience by maximizing the efficiency of the dispatch interval and turnout time. Dispatch time is measured from the point 911 receives a request for service to the point when the fire department is notified of an emergency. Turnout time is measured from the point the fire department is notified of an emergency to the point when emergency personnel leave the station.

The National Fire Protection Association (NFPA) 1710 and 1225, recommends a 1:04 (minutes:seconds) and 1:00 dispatch time, respectively. Dispatch time was not available for this analysis. However, most agencies have found that meeting the consensus standard for dispatch has proven challenging.

Additionally, the NFPA and the Commission on Fire Accreditation International (CFAI), recommend turnout times of 1:00 for EMS incidents and between 1:20 and 1:30 for non-EMS incidents, respectively. Currently, Kennewick's performance is 2:18 for EMS calls and 2:54 for fire related-incidents; both exceed recommended times.

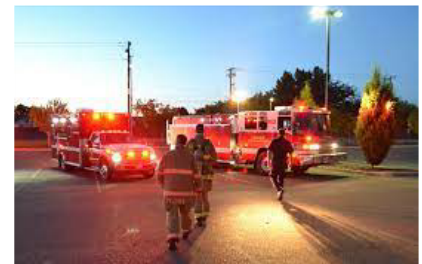
Travel time is measured from the point emergency personnel leave the station to the point they arrive on scene. NFPA 1710 recommends a 4:00 travel time at the 90th percentile for the first arriving unit and CFAI suggests a 5:12 travel time at the 90th percentile. Overall, Kennewick's travel time was 7:55 or less for 90% of the incidents within the city. Travel time for EMS-related incidents measured 7:48, while fire-related travel time performance was 6:42 or less for 90% of the incidents. Nationally, urban/suburban departments typically report travel times between 5:00 and 9:00 minutes at the 90th percentile.

Response Time equals the total time from dispatch to arrival on scene.

Recommendation

The department should continue to evaluate the integrity of dispatch and turnout time data to ensure accuracy.

The city and department should develop and adopt updated performance objectives for all segments of total response time.



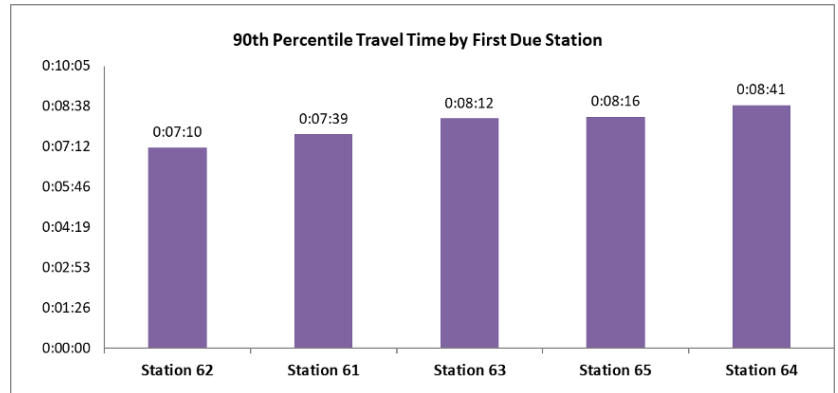
2022 90th Percentile Response Performance

Program	Turnout Time	Travel Time	Turnout and Travel Time	Sample Size
EMS	2:18	7:48	9:06	8,818
Fire	2:54	6:42	8:42	267
Rescue	3:06	10:06	11:24	32
Hazardous Condition	3:24	8:17	10:48	106
Service	2:24	9:12	10:30	1,470
Good Intent	2:30	7:48	9:24	798
False Alarm and False Call	3:12	7:48	9:54	534
Other	2:00	6:42	7:24	15
Total	2:24	7:56	9:24	12,040

Distribution Study

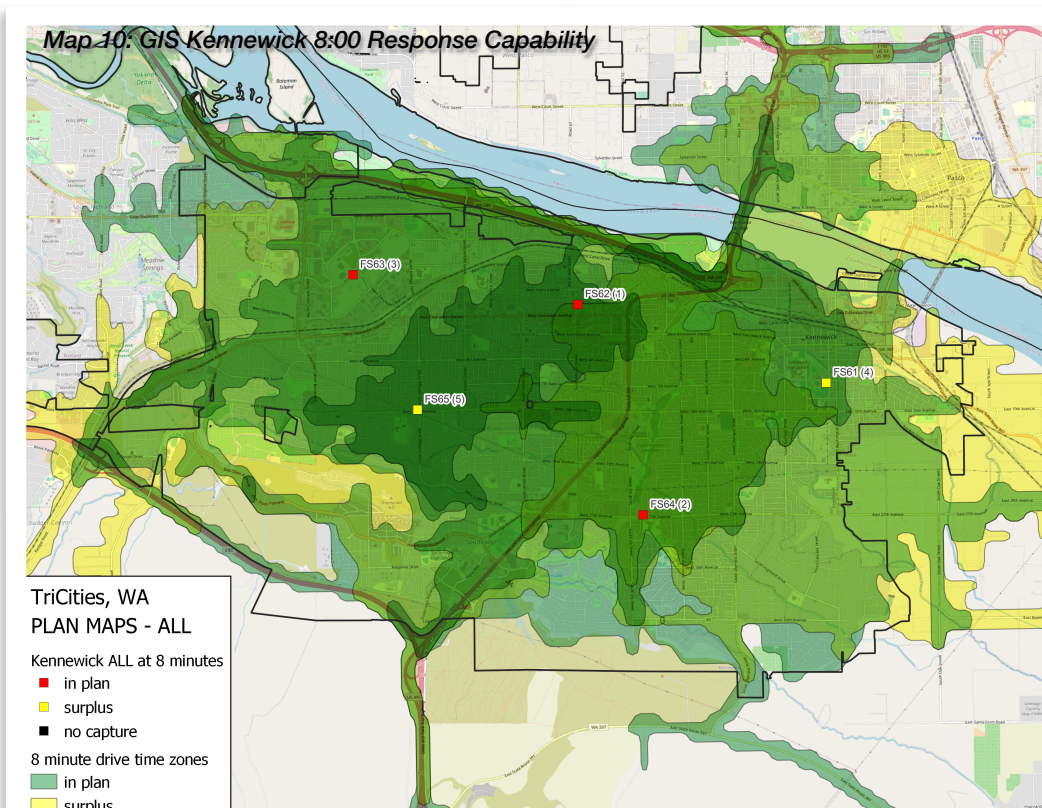
Response time elements were evaluated by FDZ. Consistent with other city fire departments, all FDZs provided a travel time between approximately 7:10 and 8:41 at the 90th percentile.

Kennewick's 2022 performance demonstrated an overall 7:55 travel time at the 90th percentile. This is consistent with the geographic information system (GIS) planning assessment estimate of 97.32% risk coverage for all five stations within an 8:00 travel time.



Because the planning assessment utilizes average road speeds and impedance, it is, not uncommon for a fire department to outperform the more conservative GIS modeling. Nonetheless, there is an overall high degree of agreement between Kennewick's historical performance and the current GIS modeling.

GIS analyses validated that approximately 97% of incidents could be responded to within 8:00 travel time using the city's current station configuration.



To the left:
Green shaded areas indicate a 95% response capability within 8:00.

Successively darker shades of green indicate more than one station can service that area within 8:00.

Yellow shaded areas show additional coverage within 8:00, with a response capability between 95% and 97%.

Concentration Study

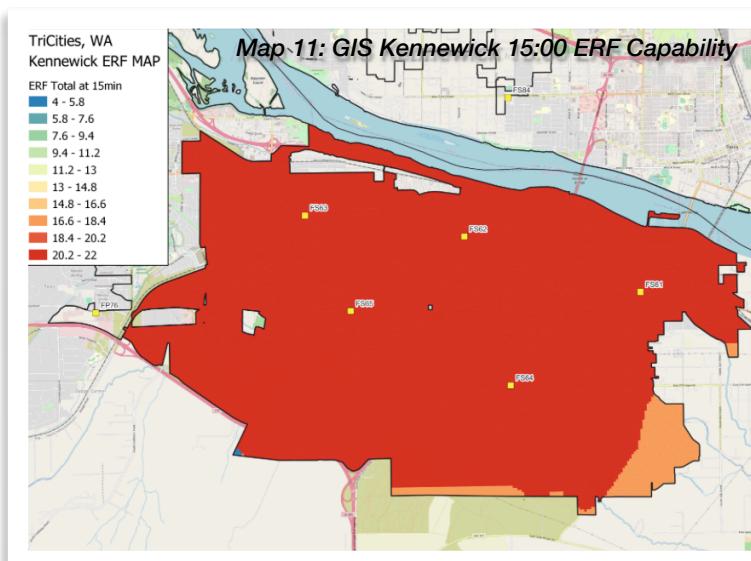
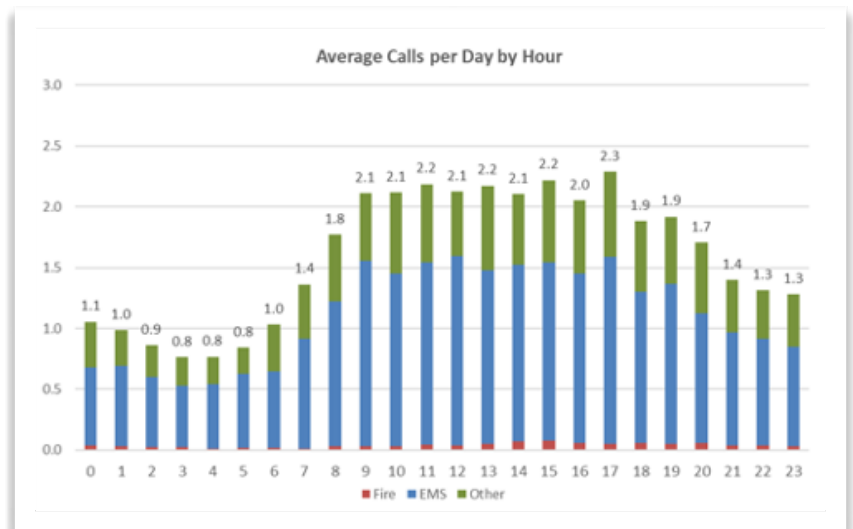
The number of fire and EMS units needed to sufficiently respond to the frequency and duration of incidents within the community is utilized to evaluate the efficacy of the deployment strategy for identified risks. Analyses reveal the department has an average hourly demand for services of approximately 1.6 EMS calls per hour during peak periods. KFD made a total of 739 unit responses to fire-related calls, averaging 2.0 unit responses per day. The on-duty Battalion Chief (BC181) made the most fire responses.

Considering KFD's current performance of approximately 8:00 travel time for first arriving unit(s), the minimum deployment required to meet community demands and maintain sufficient capacity for the desired performance is 12 apparatus at all times.

The required ERF was established during the risk-based critical tasking and risk categorization/classification process for each incident type group. NFPA 1710 suggests the ERF should arrive in 8:00 travel time or less.

Observation

The department works with regional partners to establish critical tasking and ERF standards.



Alternately, the CFAI provides a baseline travel time performance objective of 10:24 minutes 90% of the time or less in urban areas, and a 13:00 travel time ERF for suburban areas.

Under the current model configuration, with five stations, approximately 96% of the community geography can be served with a 17-person ERF within 12:00 travel time with the current staffing strategy.

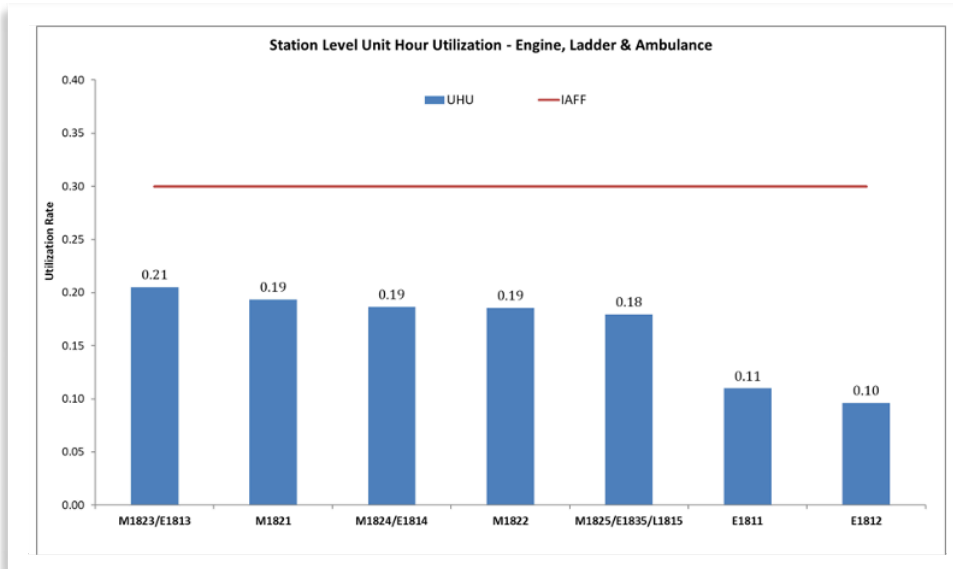
Current minimum staffing is 20 personnel, therefore, a significant incident would deplete department resources. KFD frequently relies on mutual aid resources to ensure an ERF arrives on the scene.

Unit Hour Utilization

Station 61 and 62's response areas had the highest percentage of overlapped calls at 36.7%. Station 64 followed with 31.9% of overlapping calls, Station 63 had 30.1%, and Station 65 at 21.2%.

Response Area	Overlapped Calls	Total Calls	Percentage of Overlapped Calls
Station 61	1,097	2,989	36.7
Station 62	1,325	3,607	36.7
Station 63	691	2,299	30.1
Station 64	835	2,617	31.9
Station 65	346	1,630	21.2

Unit Hour Utilization (UHU) is an objective measure of time on task for deployed resources. KFD is as busy as other similarly sized departments that provide first response EMS, fire suppression, hazardous materials and technical rescue responses.



All units had UHU values less than 0.30. The total busy hours for KFD's engine/truck and ambulance units in 2022 was 10,203, resulting in an overall utilization of all engines/trucks and ambulance units of 16.6%. M1821 and M1822 were utilized the most with the UHU at 19%. E1811 was the most utilized fire suppression apparatus at 11%. The overall utilization of 24-hour staffed units was 9.3%.

Unit Hour Utilization (UHU) Table

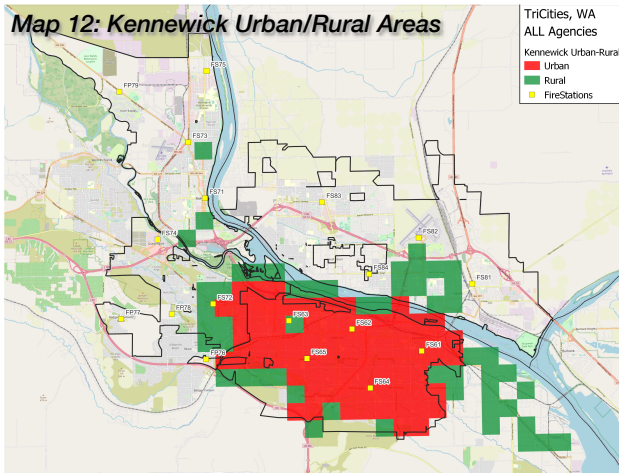
Unit	Unit Description	Station	Busy Hours	UHU	*IAFF
M1821	Ambulance	61	1,695	0.19	0.30
M1822	Ambulance	62	1,626	0.19	0.30
M1824/E1814	Ambulance/Engine	64	1,635	0.19	0.30
M1823/E1813	Ambulance/Engine	63	1,798	0.21	0.30
M1825/E1835/L1815	Ambulance/Engine/Ladder	65	1,574	0.18	0.30
E1811	Engine	61	964	0.11	0.30
E1812	Engine	62	844	0.10	0.30

*International Association of Firefighters (IAFF)

Commensurate Risk Model and Projected Growth

The call density analysis calculates the relative concentration of incidents based on approximately 0.5 mile geographic areas and at least half of the adjacent 0.5 mile grid. The assessment is based on call density and not population. The red areas are designated as urban level service areas and green areas are designated as rural.

Map 12: Kennewick Urban/Rural Areas

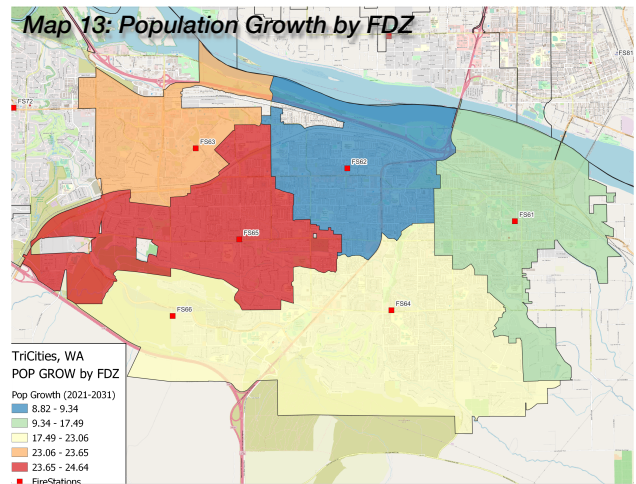


Recommendation

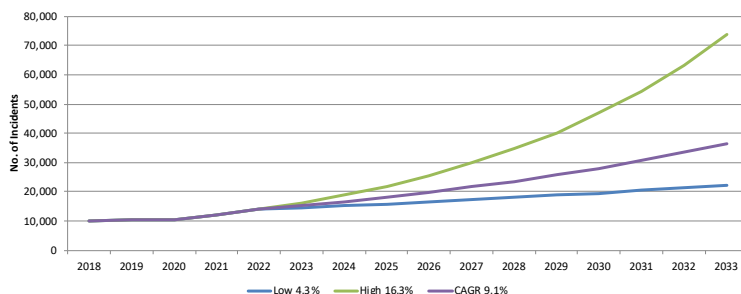
The department should continue to monitor changes in the environment related to population growth and increased community demand.

Population growth projections through 2031 were evaluated by FDZ. Station 65's area is projected to grow by approximately 23.65-24.64% and Station 63's area is projected to have positive growth up to 23.06-23.65%. Overall, the north and northeast parts of the city have the least projected growth at an anticipated rate between 8.82% and 17.49%. The southwest portion of the city is expected to have the highest amount of growth within the next few years. Therefore, the department's planning efforts for Station 66 are well-aligned with projected growth.

Map 13: Population Growth by FDZ



Projected Incident Growth - All Calls



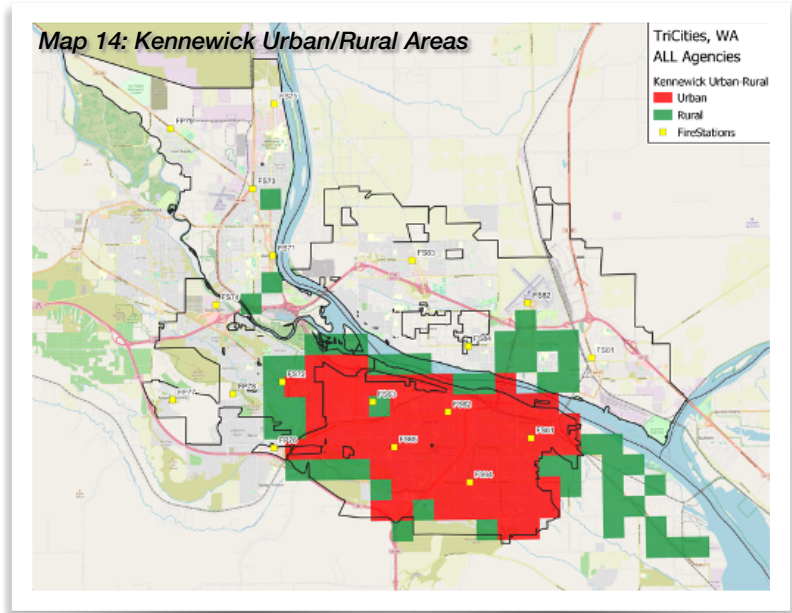
From FY 2018 to FY 2022, calls for KFD services increased from 9,886 to 13,982 with an Annual Growth Rate of 9.1% per year. It is notable that during the Covid-19 pandemic, there was one year of negative growth, so the 9.1% average growth over the reporting period may be understated, **especially if the more recent growth of greater than 15.7% continues.**

Fire Station Location Study

Comprehensive analyses were completed regarding fire station locations for various travel time alternatives. These strategies provided the department with the greatest flexibility to transparently establish desired service levels and plan for the investment to accomplish operational initiatives.

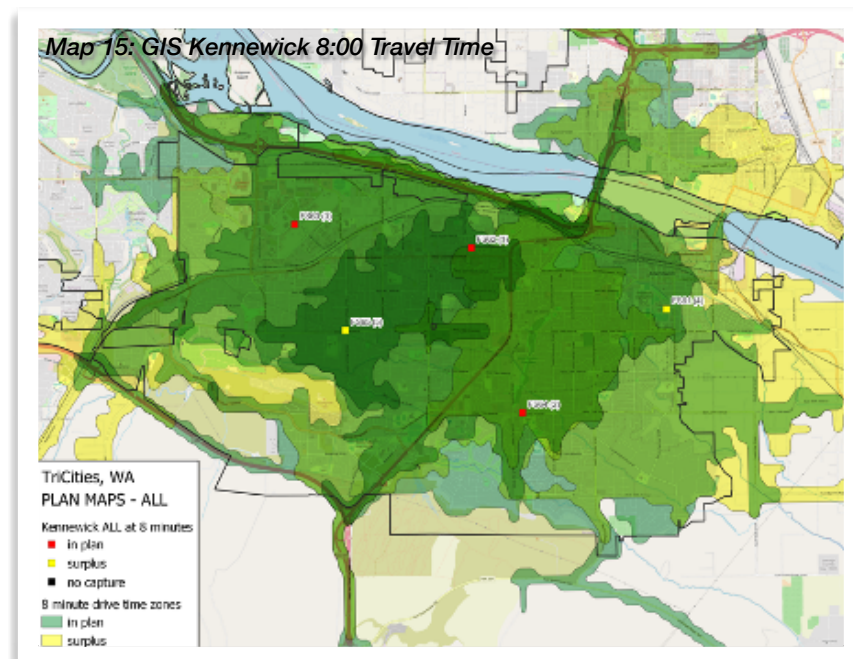
Analyses within this study have validated the locations that are reasonably well-aligned with risks.

The GIS report provided fire station location analyses compared to best practices that included configurations for all calls and isolated EMS calls for the following travel times: 4:00 (NFPA 1710), 5:00 (CFAI), 6:00, 7:00, 8:00, and 10:00.



8-Minute Travel Time

GIS analyses confirms that the current five station configuration deployed by KFD should be able to cover 97.32% of all calls within an 8:00 of travel time. However, there is an area of the City's jurisdiction that exists outside of the 8:00 travel time capability. Currently, there is little call volume in this area, but the city and department are well justified in providing the geographic coverage to the area of need, due to the planned growth.

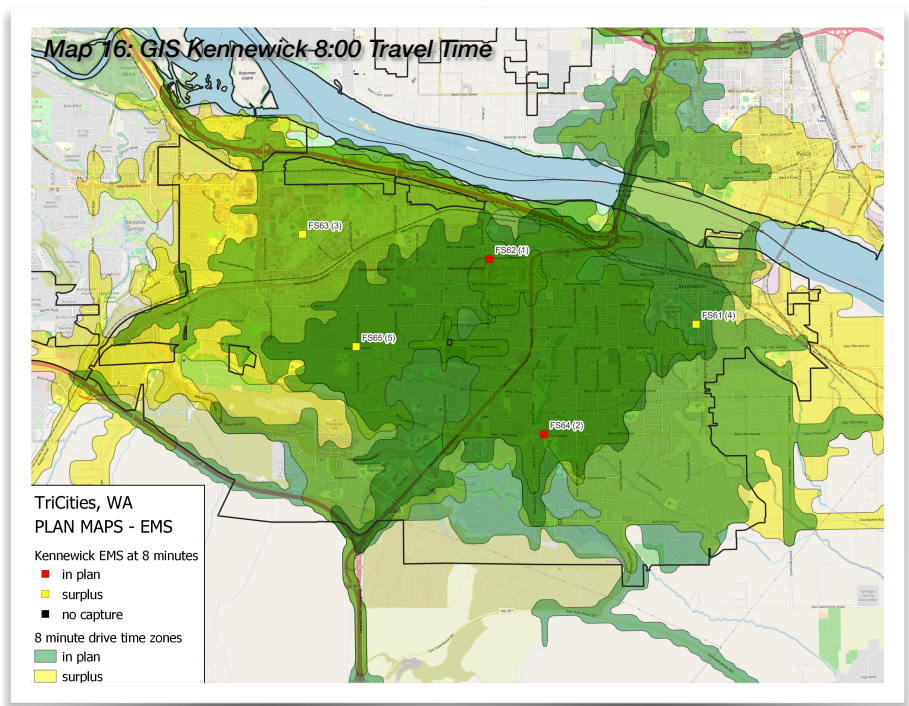


As previously discussed, these analyses utilized 2022 historical performance, a baseline from which to determine desired performance and evaluate potential alternatives. Various configurations of 4:00 to 10:00 travel times were completed to consider alternatives compared to the current performance.

Assessment of EMS Deployment

Community demand for emergency medical services accounts for the majority of the total requests for service. Analyses were completed to ensure an optimized deployment strategy for EMS while accounting for the unique conditions within the City. The current travel time for EMS incidents is 7:45 at the 90th percentile. Therefore, alternatives were created that would either optimize current performance or improve response time.

In all of the alternative response time configurations, workload is the limiting factor. In other words, the majority of costs would be associated with purchasing additional resources to reduce workload.

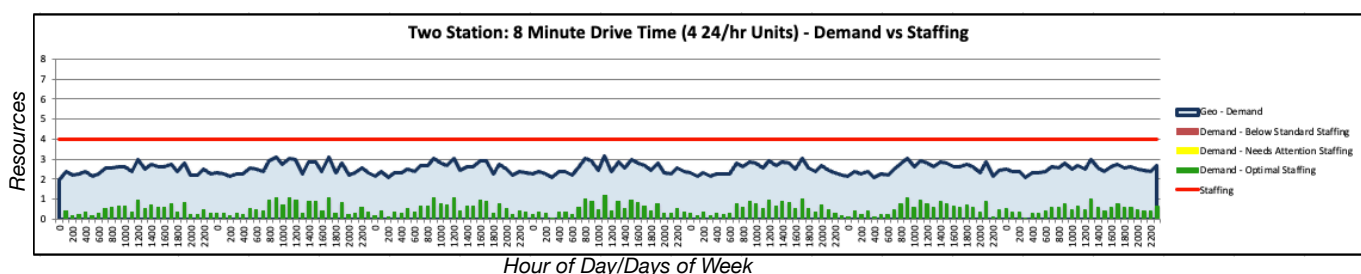


Current Performance

8-Minute Travel Time to Current EMS Workload

The current practice of deploying five 24-hour patient transport units will cover 98.63% of the current EMS incidents within an 8:00 travel time. However, since KFD deploys three of the units through a cross-staffing approach; if community demand, the rate of call concurrency, and/or the call duration increases, the system would require a total of four dedicated ambulance resources similar to Stations 61 and 62.

The figure below evaluates the demand by day of week, beginning with Sunday and ending on Saturday (green and yellow bar graphs), the geographic requirement to meet the desired response time of 8:00 (light blue), and finally, the current staffing level (red line). Anytime the staffing line (red) is below the required demand (blue), the system is under resourced.



Evaluation of Cross-Staffed Resources

The cross-staffing of apparatus at Stations 63, 64, and 65 was evaluated. Historically, the department has benefited from the lean and efficient use of a single crew at each station to staff multiple apparatus types, such as a fire engine and an ambulance.

With a sufficiently low call volume and call concurrency, this was an effective operational decision that had served the organization well. However, in *FITCH's* experience, when call volume exceeds 1,500 per year and call concurrency is greater than 15%, a higher probability of overlap is introduced for the need of an EMS transport unit while on a fire-related call, or the need for a fire suppression apparatus while on an EMS incident.

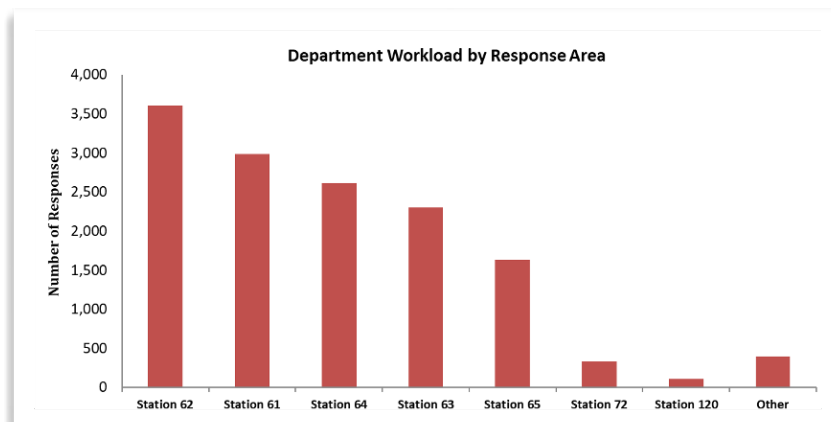
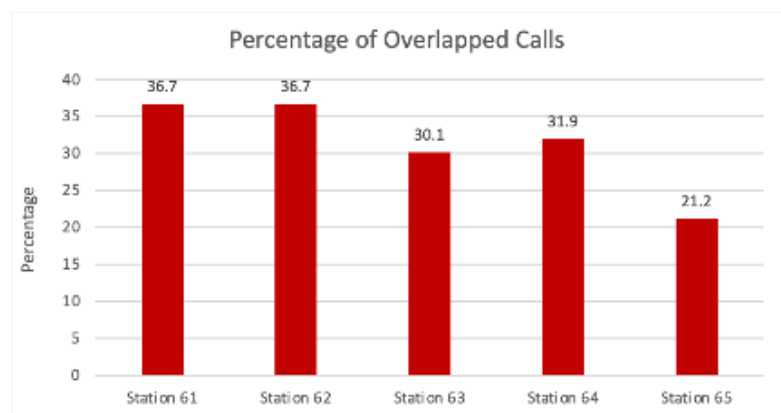
Recommendation

The department should consider deployment alternatives such as additional resources that reduce call volume and/or discontinuing cross-staffing primary resources.

Call Concurrency

Nearly 37% of the time, when a unit responded to an incident, a second or greater incident occurred at the same time before that unit could mitigate their first incident and return to available status.

Due to historical higher call volumes, Stations 61 and 62 have fully staffed fire apparatus and EMS transport units. However, Stations 63 and 64 are also over 30% call concurrency with single crews cross-staffing multiple resources. Finally, with Station 65 over 20%, Stations 63, 64, and 65 all exceed the recommended threshold of 15% call concurrency for a cross-staffed resource.



Call Volume

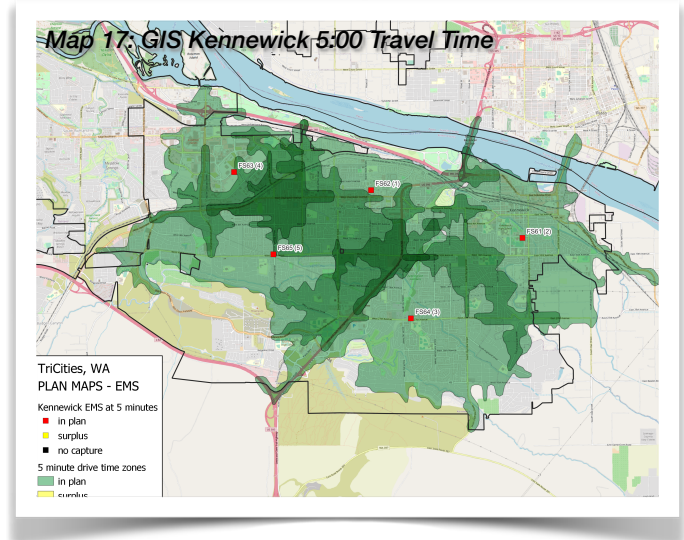
Stations 61 and 62 had the highest call volumes, each with approximately 3,000 incidents or more. Additionally, Stations 63, 64, and 65 also had call volumes at or above the recommended planning threshold of 1,500 calls per year.

Assessment of Current Resource Allocation

As previously discussed within the station location study, the current number and location of fire stations should be able to deliver a 5:00 travel time to approximately 90% of the incidents, if workload was not an issue.

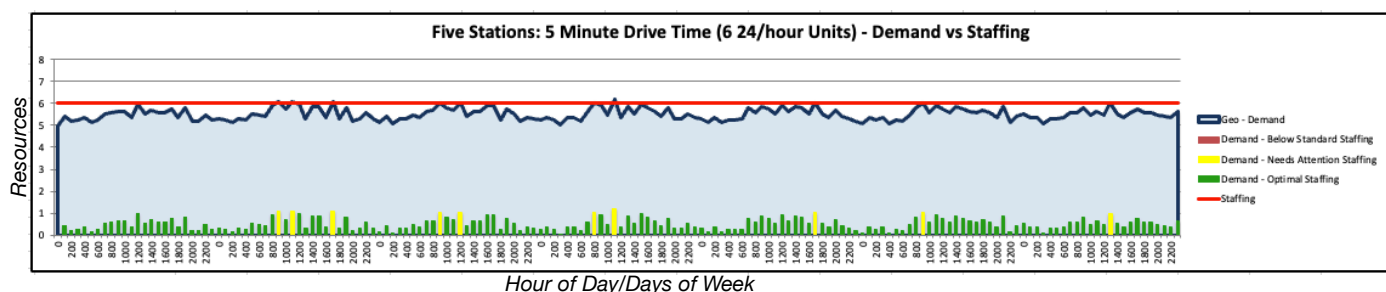
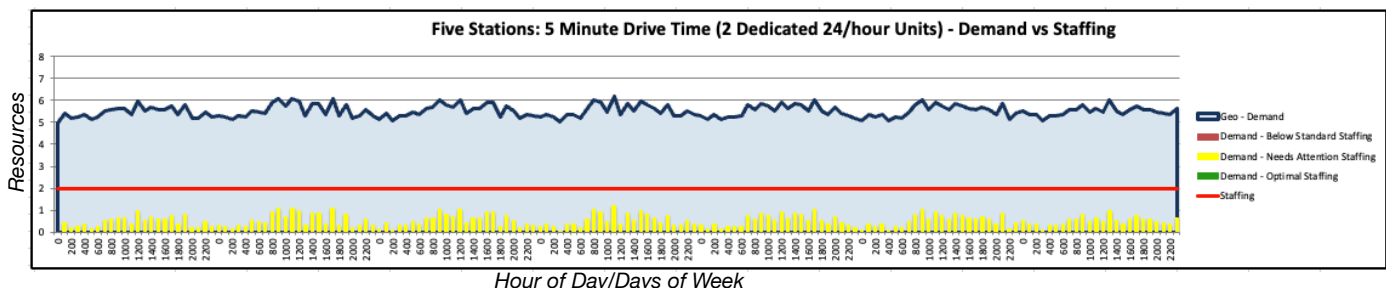
5-Minute Travel Time to Current EMS Workload

The depth of resources is currently insufficient to have the availability to meet a 5:00 travel time. In other words, the stations are in good locations, but must have resources ready and available to respond. This would require the introduction of additional resources and/or the discontinuation of cross-staffing resources at Stations 63, 64, and 65 in order to meet the demand for services and receive the full return on investment from strategically located stations. In total, the ability to meet this deployment strategy would require six dedicated EMS transport units and five fire suppression units.



The optimized staffing to demand strategy is provided below with a minimum of six medic units. This would improve travel time by approximately 3:00 and reduce workload on the medic units.

The figure below evaluates the demand by day of week, beginning with Sunday and ending on Saturday (green and yellow bar graphs), the geographic requirement to meet the desired response time of 5:00 (light blue), and finally, the current staffing level (red line). Anytime the staffing line (red) is below the required demand (blue), the system is under resourced. In this analysis, it shows that the department is



Assessment of Resource Allocation with Station 66

As previously discussed within the station location study, the current number and locations of the fire stations should be able to deliver a 5:00 travel time to approximately 90% of the incidents, if workload was not an issue.

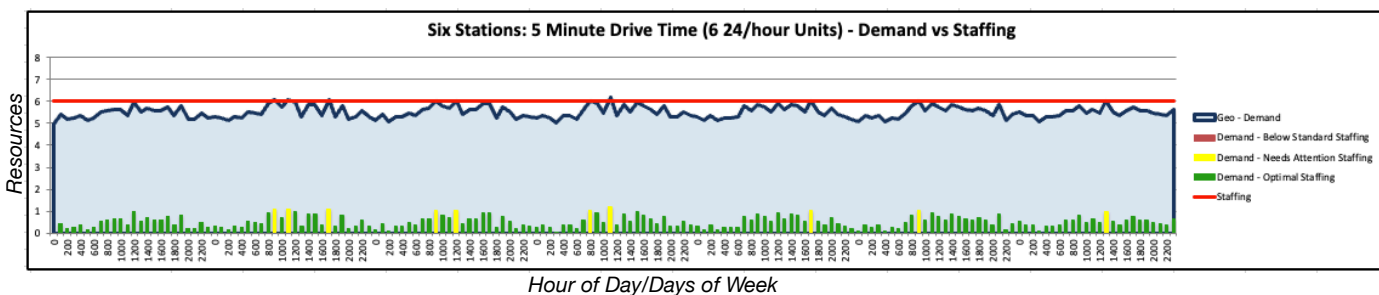
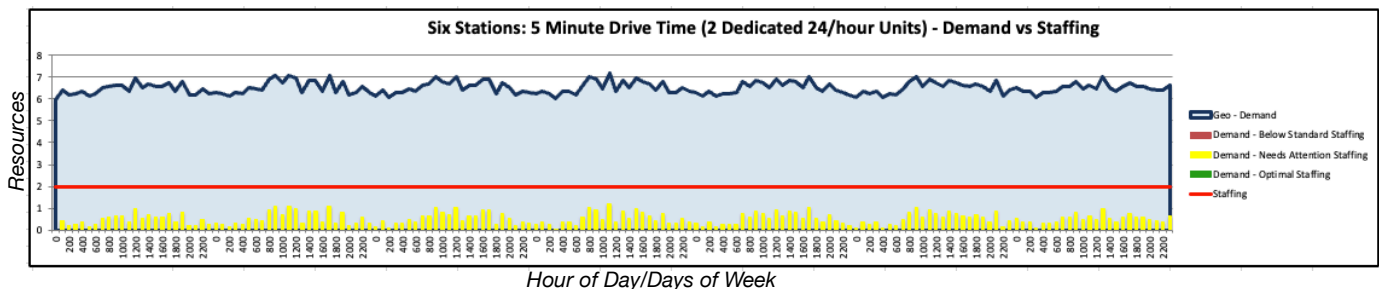
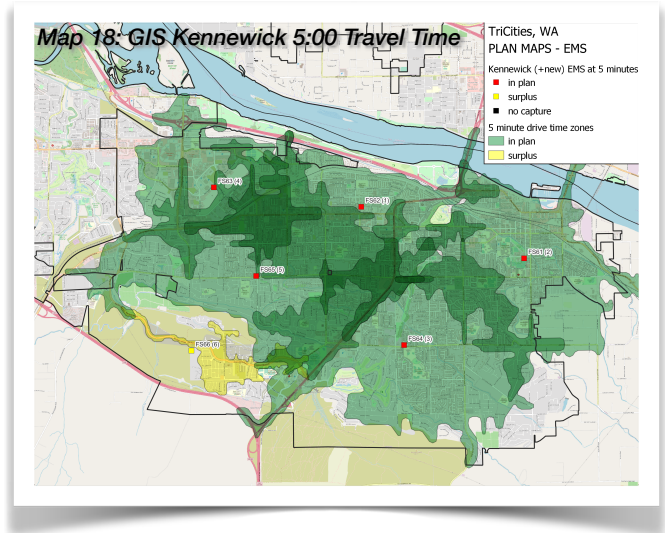
5-Minute Travel Time to Current EMS Workload

However, there is an area of the city jurisdiction that exists outside of the 5:00 travel time capability. Currently, there is little call volume in this area, but the city and department are well justified in providing the geographic coverage to the area of need.

Opening Station 66 will require additional staffed resources that will also assist in addressing resource allocation needs to meet a 5:00 travel time. In other words, the stations are in good locations, but must have resources ready and available to respond. This would require the introduction of additional resources and/or the discontinuation of cross-staffing resources in Stations 63, 64, and 65 in order to meet the demand for services and overcome the geographic limitations. In total, the ability to meet this deployment strategy would require six dedicated EMS transport units and six fire suppression units.

The optimized staffing to demand strategy is provided below with a minimum of six medic units. This would improve travel time by approximately 3:00 and reduce workload on the medic units.

In this analysis, it shows that the department would continue to be under resourced throughout the busiest period of the day, if the desired outcome is a 5:00 travel time.

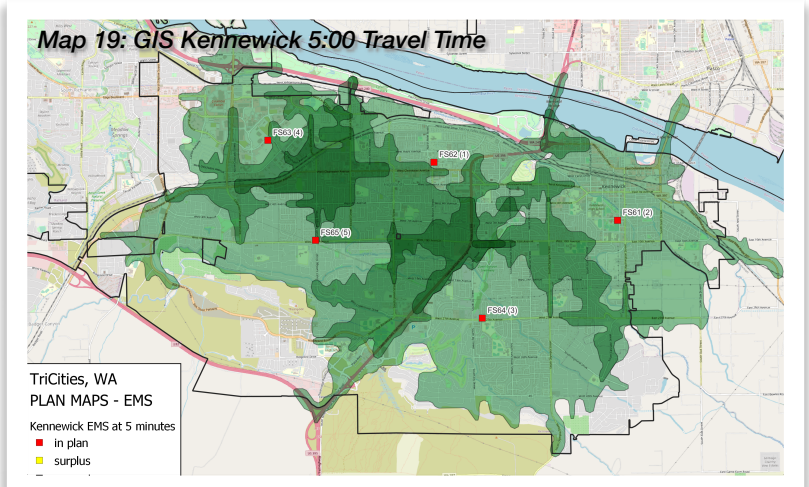


Consideration of an EMS Move-Up Plan

Analyses suggest if the department's deployment strategy for EMS incidents is with five stations and six medic units, it should be able to meet a 5:00 travel time to 90% of the incidents.

The staffing to demand analyses presented previously, and replicated here, demonstrates an efficient capacity to meet a 5:00 travel time while additional staffing improves workload challenges.

A key component to the success of the deployment model is to judiciously follow a pre-planned and formalized move-up plan for EMS resources. When referring to the marginal utility analyses below, each station location's relative contribution to accomplishing a 5:00 travel time is outlined in the last column and labeled, "Percent Capture." This cumulative value demonstrates that Stations 61 and 62, if properly resourced, could capture nearly 57% of all of the city's EMS calls within 5:00. The department recognizes this, since they have already deployed staffed medic units at each of these stations. As additional resources are introduced into the deployment model, the department should follow the recommended move-up plan. In other words, if only two resources are left in the city, they should be placed at Stations 61 and 62.

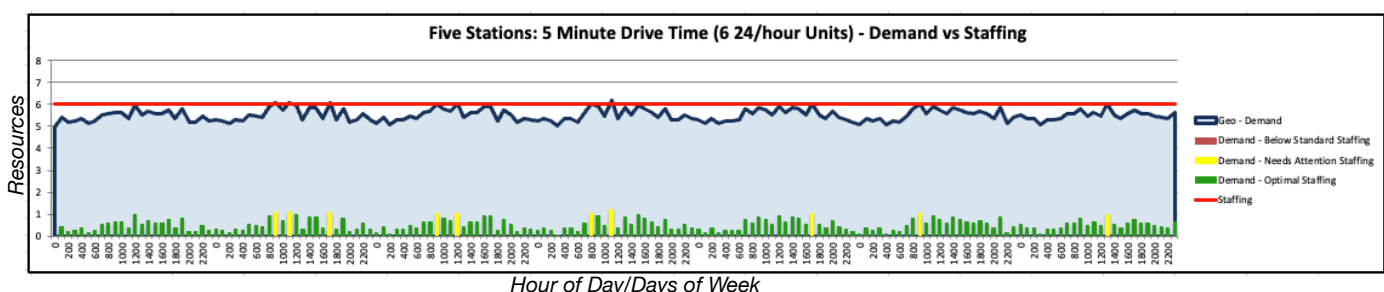


Recommendation

The department is encouraged to consider a formal move-up plan to maximize the efficient use of limited resources while meeting the desired response time performance.

Cumulative Geographic Coverage by Number of Stations

Rank	Station	Travel Time	Station Capture	Total Capture	Percent Capture
1	FS62	5	3,335	3,335	35.49%
2	FS61	5	2,019	5,354	56.97%
3	FS64	5	1,379	6,733	71.64%
4	FS63	5	1,245	7,978	84.89%
5	FS65	5	558	8,536	90.83%



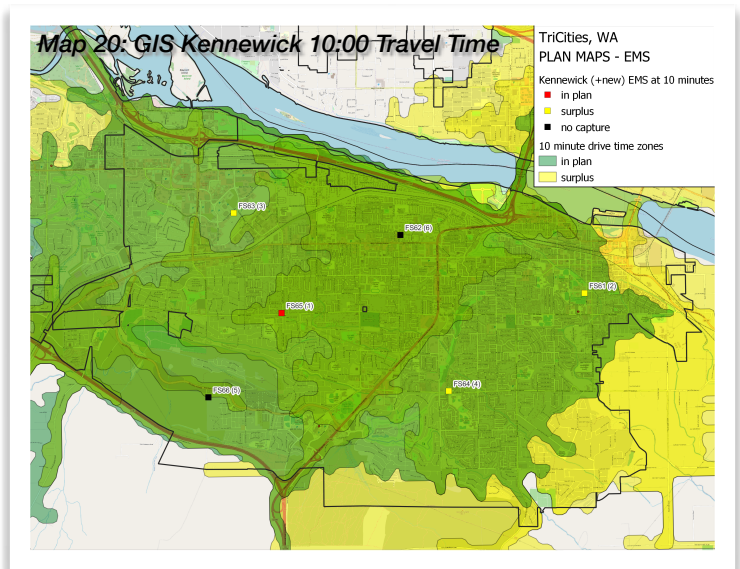
BLS Tiered Response Model Consideration

Evidenced-based research has found that there is considerable efficacy in providing high-quality Basic Life Support (BLS) services within the EMS deployment modeling. Various studies have found that BLS services can provide appropriate levels of care in urban environments when there is a robust access to hospitals. The conversation typically resonates on the community expectations for service, the confidence in medical call triage capabilities, and the fiscal reality of a tiered response model with differentiated response time objectives.

10-Minute Travel Time to Current EMS Workload

In the case of KFD, an opportunity exists to deploy BLS resources that better align resource capability and response time expectations based on the lower-clinical severity associated with BLS incidents. Simple examples may include chronic back-pain or other non-emergent needs for care that may not require a lights and siren response. Specifically, the BLS unit(s) could be deployed during the peak period of the day (12-hours) with the intent of responding to all BLS incidents that the unit is available. The intent being, insulating ALS capacity within the system for higher-acuity calls and for reducing workload on all 24-hour resources.

Following the marginal utility analysis completed below, a single resource could be assigned to Station 65 and could cover nearly 95% of all incidents within a 10:00 travel time, if the number of emergency calls was not a limiting factor. The transparency of the policy decision should include the understanding that a BLS call may traverse multiple station



Recommendation

The department is encouraged to consider introducing BLS resources to respond to lower acuity incidents and to reduce workload.

Cumulative Geographic Coverage by Number of Stations

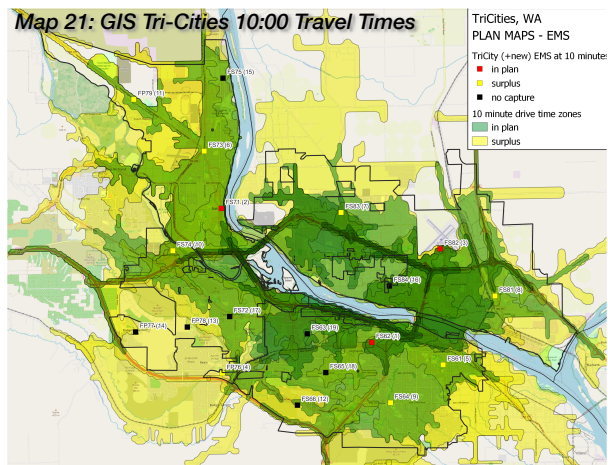
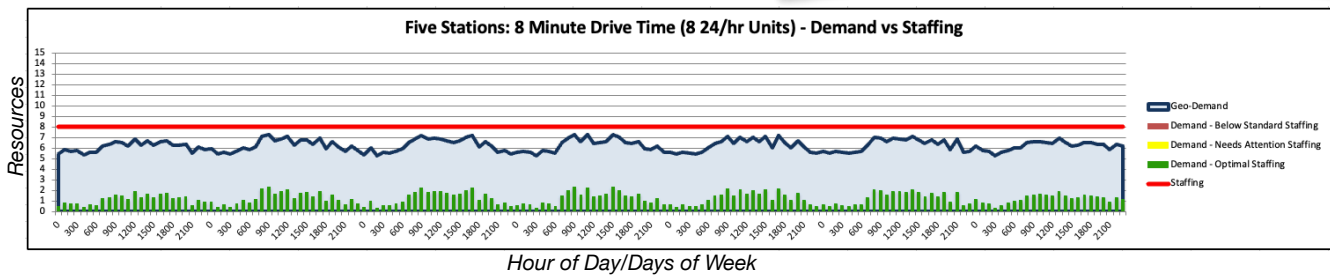
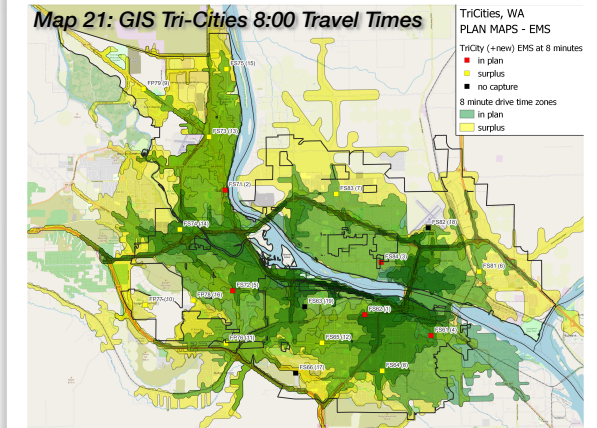
Rank	Station	Travel Time	Station Capture	Total Capture	Percent Capture
1	FS65	10	8,925	8,925	94.97%
2	FS61	10	393	9,318	99.15%
3	FS63	10	19	9,337	99.35%
4	FS64	10	6	9,343	99.41%
5	FS66	10	0	9,343	99.41%
6	FS62	10	0	9,343	99.41%

Consideration for a Regional EMS Solution

The Tri-Cities area has an opportunity to realize considerable performance capacity with the provision of EMS delivery. The map to the right validates that significant efficiencies could be achieved should the local municipalities determine to deploy EMS units using a borderless delivery model.

8-Minute Travel Time to Current EMS Workload

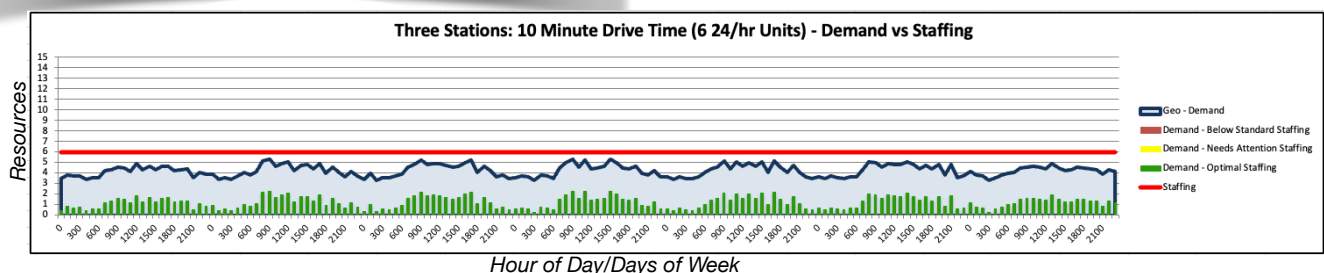
A regional EMS deployment of eight 24-hour patient transport units has capacity to cover 92% of the current EMS incidents within an 8:00 travel time. The system UHU would be approximately 16% with deployment from only five out of 20 potential stations.



10-Minute Travel Time to Current EMS Workload

A regional EMS deployment of six 24-hour patient transport units has capacity to cover 98% of the current EMS incidents within a 10:00 travel time. The system UHU would be approximately 21% and only deploy from three of the proposed 20 stations.

Consistent with previous recommendations, the departments could continue to cross-staff resources and/or provide first responder services for higher acuity calls when needed.

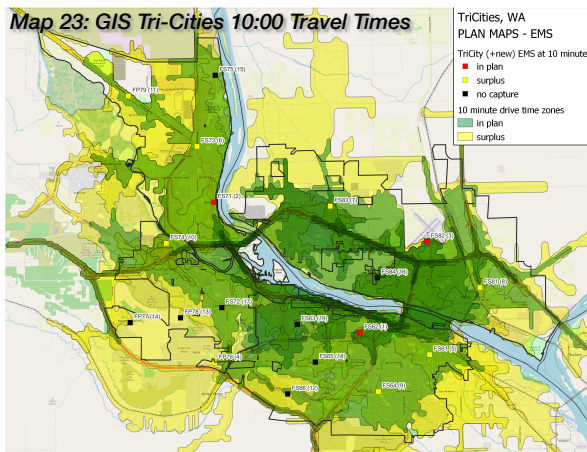
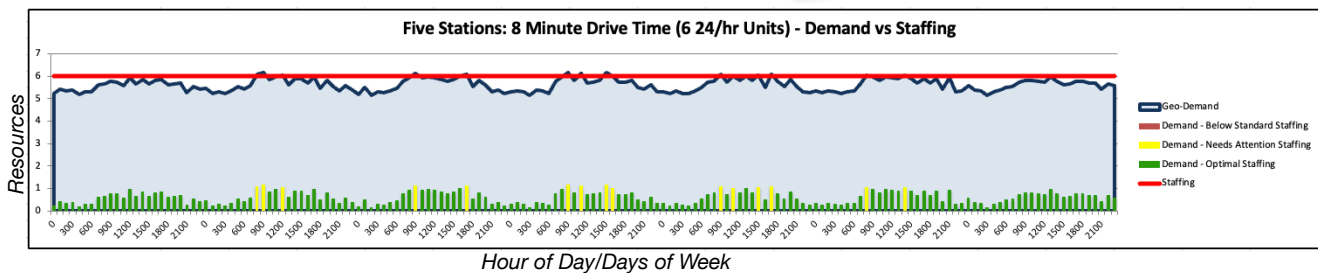
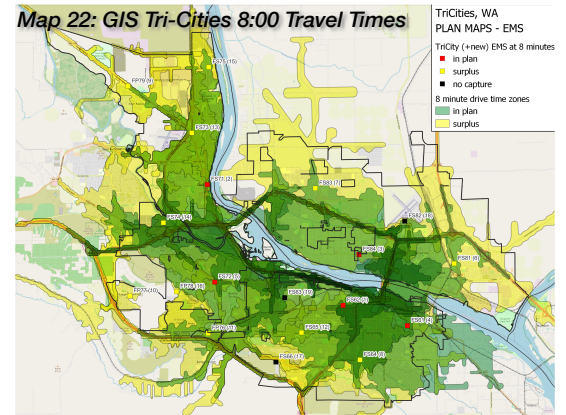


Regional BLS Solution (~50%) Consideration

The Tri-Cities have an opportunity to realize considerable efficiencies with the provision of BLS services. The mapping to the right validates if the agencies were to provide BLS services as a seamless, or borderless, service delivery model, significant efficiencies may be realized.

8-Minute Travel Time to Current EMS Workload

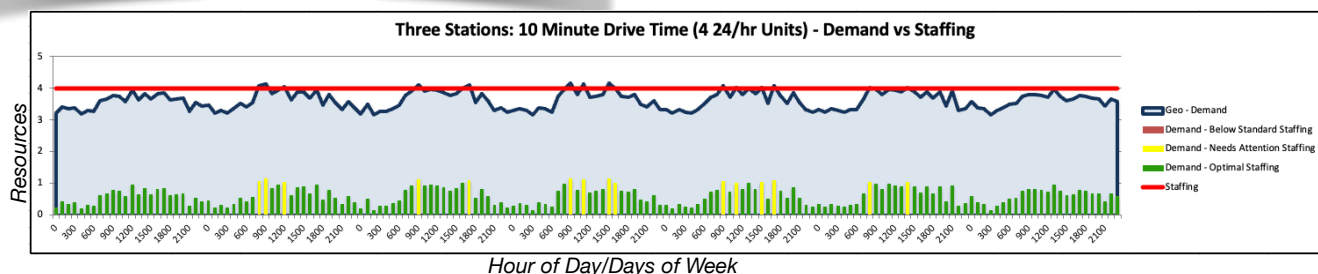
A regional EMS deployment of six 24-hour patient transport units has capacity to cover 92% of the current BLS incidents within an 8:00 travel time. The BLS system UHU would be approximately 10% and only deploy from five of the proposed 20 stations.



10-Minute Travel Time to Current EMS Workload

A regional EMS deployment of four 24-hour patient transport units has capacity to cover 98% of the BLS incidents within a 10:00 travel time. The system UHU would be approximately 16% and only deploy from three of the proposed 20 stations.

Since the BLS delivery model only accounts for 50% of the incidents, the individual cities would still need to account for the other 50% for ALS services.



EMS Revenue Assessment

The billing, collections, and revenues were assessed for the City of Kennewick for billable transports by Level of Service (LOS) from 2021 and 2022. Areas of analysis are detailed below.

Payor Mix by LOS (Transport Volume)

Payor	2022 Volume	2021 Volume
Administrative	1%	0%
Commercial Insurance	26%	25%
Contract	1%	1%
Government	2%	2%
Medicaid	22%	24%
Medicare	44%	46%
Self-Pay	4%	3%

Payor Mix by LOS (Net Collections)

Payor	2022 Collections	2021 Collections
Administrative	1%	0%
Commercial Insurance	16%	17%
Contract	0%	1%
Government	1%	2%
Medicaid	53%	51%
Medicare	26%	30%
Self-Pay	3%	1%

Nationwide vs. Kennewick Payor Mix by LOS (Net Collections)

Payor	2022 Collections	2021 Collections
Medicare	38%	27%
Medicaid	26%	52%
Commercial	12%	16%
Other	2%	1%
Self/Private Pay	22%	4%

Ultimately, all of the analyses are aligned with *FITCH*'s observations from similarly sized EMS systems and the nationwide average service mix data provide by CMS.

Observations

- This service mix is within what *FITCH* has observed in similarly-sized EMS systems and nationwide average service mix data provided by CMS.
- ALS and special care transports accounts for 53.7% of the charges.
- BLS services accounted for the 46.3% of the services.
- 99.7% of the transports were classified as emergent.

EMS Rate Assessment

An industry best practice is to examine and compare the rates of similar-sized EMS services throughout the state to current rates annually. This ensures rates are sufficiently above Medicare to collect the maximum amount commercial payors allow. Most Washington fire departments that provide ambulance services offer a resident vs. non-resident rate. This stems from the financing mechanism of property taxes/levies placed on both commercial and residential properties. The City of Kennewick uses a contracted billing provider, Systems Design West (SDW). The fees charged are within the market average for outsourced revenue cycle management (RCM) services. SDW reported average rates across their client base, many of which are Washington services.

The average rates charged are significantly above Kennewick's rates, with ALS rates averaging \$617 below SDW's client average. Based on this information, we recommend Kennewick increase their rates to a level commensurate with the increases that were implemented by the cities of Pasco and Richland.

FITCH analyzed what the potential impact to net collections would be, if the City of Kennewick increased their rates to the rates charged by the City of Richland.

This is based on the following:

- 335 transports from Commercial Insurance payers
- The City of Richland's average payment from Commercial Insurance of \$710.37
- The City of Kennewick's average payment from Commercial Insurance of \$435.08
- Average difference in payment from Commercial Insurance compared to City of Richland of \$275.28
- A combined average payment from Commercial Insurance, using these previously described averages of \$710.37

Using the transport volume for Commercial Insurance, and Richland's average amount charged per transport for Commercial Insurance, resulted in an increase of \$195,551 in potential net collections from Commercial Insurance.

Regular monthly analysis of aging, account activity, denial, and write-off reports, average reimbursement per trip, combined with an annual contract review, is recommended to maintain high performing revenue cycle management. Analysis of these key performance indicators reveals the City of Kennewick is receiving good value from its billing operations; however, with the recommendations made in this report, improvements can be made that should result in slightly higher collections.

Recommendations

- It is recommended that the City of Kennewick adjust their rates to a commensurate rate with the City of Richland.
- This change will provide the potential for an additional \$195,551 in net collections.
- If the Tri-Cities agencies are interested in a regional EMS solution, it is recommended the Tri-city agencies normalize their EMS transport rates.

Adopting Outcome Measures

In addition to setting goals or benchmarks related to impact or outcome measures, organizations typically set goals or benchmarks related to outputs or process measures due to the presumed or evidence-based relationship between the two measures. For example, it is assumed that a faster response time would be beneficial for structure fires.

Outputs or process measures are typically more easily evaluated, as the organization exerts direct influence over their outputs and processes, and can oversee related data collection and management. Impact or outcome measures become more difficult to evaluate when data collection and management are outside the purview of the organization and interpretation of data must account for other intervening factors.

Recommendation

The department should adopt a system of measures based on desired outcomes.

Beginning to consider outcome measures allows the agency to better evaluate some of the assumed output and process measures. For example, if structure fires are held to the room of origin at the desired percentage of time, then the department may not have to act immediately if the response time increased by 30 seconds over the previous year. It provides greater flexibility for the policy group to attempt to understand which variables are contributing and their root causes.

Modern emergency response systems are encouraged to move beyond goal setting or benchmarking and evaluation related to outputs or process measures, and consider ways that impact or outcome measures can be evaluated (*see examples below*).

Fire Suppression		
Measure	Benchmark Performance	Current Performance
Fire Spread – Degree of Confinement – All Building Fires with Fire Spread		
Fire Confined to Building of Origin	95%	%
Fire Confined to Floor of Origin	75%	%
Fire Confined to Room of Origin	50%	%
Time to Fire Confined (from FD arrival)	10:00	mm:ss
Fire Spread – Degree of Confinement – Residential Structures with Fire Spread		
Fire Confined to Room of Origin		
Fires Controlled by Fire Suppression Systems		
Percentage of Fires Extinguished by Fire Suppression Systems in Protected Buildings	90%	%
Preventable Fire Incidents		
Percentage of Fires Unpreventable	%	%
Building Fires in Commercial Occupancies		
Confined to Room of Origin	%	%
Fire Loss as a Percentage of Total Protected Property Value <u>with</u> Fire Protection System	%	%
Fire Loss as a Percentage of Total Protected Property Value <u>without</u> Fire Protection System	%	%
Property Saved in Buildings with Fires		
Value of Property Saved in Dollars	\$	\$
Fire Loss as a Percentage of Total Protected Property Value	0.05%	%
Emergency Medical Services		
7. Cardiac Arrest Patient Management		
7.3 Percent of patients (in cardiac arrest before EMS arrival) with a witnessed collapse and found in an initially "shockable" rhythm, with survival to discharge from the acute care hospital	≥ 50%	%
7.4 Percent of overall cardiac arrest patients with survival to discharge from hospital	≥ 10%	%

Adopting a System of Measures

It is important to measure and manage the efficiencies of a well-run operation using a system of measures as presented in the table below. In this manner, the daily management continues in place, but the strict adherence to system design performance is secondary to the outcome measures. For example, if response time increases and there is no change in outcomes then it would be purely a policy choice to act. Conversely, if the outcomes change, then the department leadership will turn to the system of measures and attempt to discern which of the variables or combination of variables may be contributing to the change in outcomes.

The summary of measures provided below includes all aspects of time, apparatus staffing by type, relative risk ratings, and system resiliency measures such as reliability, call concurrency, workload, and unit hour utilization. To illustrate, reliability should be at least 70% for each station and only if the reliability drops below the 70% threshold before considering a mitigation reaction. Similarly, call concurrency is credible until the call concurrency reaches 70%. In other words, only 30% of the calls are overlapping. Call concurrency is suggested as a per unit threshold unless the majority of calls are multi-unit responses. For example, if there are two units assigned to a station, the station level call concurrency can perform well at 60% or less for single unit responses.

The system of measures provided below is ***not intended to be overly prescriptive for the department.*** The department should adopt their own system performance objectives internally and update as needed (***see examples below***).

Type of Measure	Performance Metric	Recommended Performance	Priority	Review Period
Station/Unit Performance	Turnout Time - EMS	≤ 1.0 Min at 90%	Emergent	Quarterly
	Turnout Time - All Other	≤ 1.5 Min at 90%	Emergent	Quarterly
	Travel Time (EMS Priority)	≤ 5 Min at 90%	Emergent	Quarterly
	Travel Time (EMS-BLS)	≤ 10 Min at 90%	BLS / Non-Emergent	Quarterly
	Travel Time (Fire)	≤ 8 Min at 90%	Emergent	Quarterly
	Minimum Engine/ Quint Staffing	≥ 3 Firefighters	All Responses	Daily
	Minimum Medic Staffing	≥ 1 FF/PM ≥ 1 FF/EMT	All Responses	Daily
	Minimum Aid Staffing	≥ 2 FF/EMT	All Responses	Daily
	Station Risk Rating	Increases in Risk		Annually
System Design and Performance	Reliability	≥ 70%		Quarterly
	Call Concurrency	≤ 30% Per Unit		Quarterly
	Call Volume	3,000 -initial 1,000 - Ongoing		Annually
	Unit Hour Utilization	≤ 0.25 on 24-hour on EMS units		Quarterly
		≤ 0.15 on 24-hour on Engines and Aerials		
		≤ 0.50 on 12-hour units		
	Cross-Staffing at Unit Level	< 1,500 annual calls and 15% Call Concurrency		Annually

Continuous Improvement and Annual Review

This SOC document is designed to guide the department to continuously monitor performance, identify areas for improvement, and clearly articulate service levels and performance to the community. Therefore, the Fire Chief should consider establishing a Compliance Team to consistently monitor elements of this SOC and make recommendations for system adjustment or improvement quarterly.

Compliance Team and Responsibilities

A Compliance Team generally consists of the following department members and has the responsibility to continuously monitor changes in risk, community service demands and department performance in each program area, fire department demand zone, and/or risk category.

Chair – Fire Chief or Designee

Member – Operations

Member – Community Risk Reduction

Member – EMS

Member – Training

Recommendation

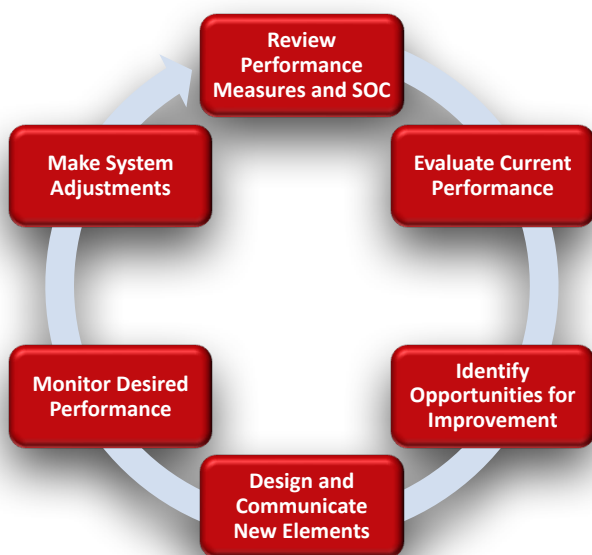
The department should regularly analyze performance data and outcome measurements to ensure alignment with strategic goals and objectives.

Performance Evaluation and Compliance

Compliance Teams evaluate system performance by regularly measuring unit performance at the 90th percentile. It is recommended for KFD to annually evaluate individual performance by unit, FDZ and program area. Measures for the ERF should also be evaluated by each program area, FDZ, and risk category on an annual basis. Annual reviews should be conducted after the previous year has concluded and all records have been subsequently reviewed and validated.

Compliance Teams also aid in determining the strength, weaknesses, opportunities, and challenges of the system performance and can make recommendations for system adjustments to the Fire Chief. If desired, this team can also aid in annually updating and evaluating the risk assessment matrices for relevancy and changes in community risk.

Ultimately, it is recommended that outcome measures are adopted and serve as the primary evaluation tool. In addition, the traditional performance objectives and measures presented previously should be utilized primarily as a management tool. In this manner, KFD will not be overly sensitized to incremental changes in performance criteria if the outcomes continue to be met.



Community Risk Reduction Strategies

The Fire Prevention Division schedules and coordinates public education events to provide community risk reduction education. KFD strives to improve the quality of life in the City of Kennewick through community outreach programs and is committed to ensuring that its residents are made to feel safe within their homes. The goal of KFD's Fire Prevention Division is to provide community risk reduction activities to the citizens of the City of Kennewick in order to prevent and better prepare for emergencies and have a reduced risk of loss from fire, injury, or illness.

KFD provides smoke alarm battery replacement assistance to senior and disabled citizens in Kennewick who are unable to independently replace the batteries in their existing smoke alarms. Additionally, the department provides many safety/tip sheets online through the fire department's website. Currently, Thursday mornings are reserved as community outreach time for station tours, safety talks and other public education assistance. KFD also strives to accommodate large community special events, which often take place on other days of the week or during the evening.

Research has shown that the best opportunity to reduce loss of life and property destruction is to prevent these events from occurring. The term Community Risk Reduction (CRR) is an evolution and expansion of the core principles learned since the 1970s in fire prevention. In fact, it is the very concept that the department offers various programs to educate the public on risk reduction (*see example below*).

Community Risk Reduction and Other Preventative Process Efforts		
Measure	Benchmark Performance	Current Performance
Fire Investigations Program		
Percentage of incendiary fire investigations that meet the elements for arson referred to the district attorney for prosecution	%	%
Percentage of fire investigations resulting in a classification of accidental, incendiary, that meet the elements for arson	%	%
Number of fire investigations conducted	#	#
Number of juveniles referred to the Youth Fire-Setter Intervention Program	#	#
Fire Code Compliance Program		
Percentage of fire protection system plan reviews completed within 5 business days of receipt	%	%
Percentage of identified high-risk commercial locations inspected by renewal date	%	%
Percentage of initial new construction inspections completed within 2 business days of request	%	%
Number of identified high-risk commercial locations inspected by renewal date	#	#
Number of requests for service completed (re-inspections, surveys, open records requests, training sessions, and monthly permits)	#	#
Public Safety Education Services Program		
Percentage of elementary public schools in city limits participating in CRR activities	100%	%
Percentage of youth referred to department that have previously attended the Youth Fire-Setter Intervention Program	%	%
Number of Fire Department public safety education participants served	#	#
Number of elementary students in the city limits participating in CRR activities	#	#
Number of Health and Safety sessions provided	#	#
Number of hours spent on CRR requests for service	#	#
Number of smoke alarms distributed to residents	#	#
Emergency Medical Services Program		
Number of MIH interventions completed	#	#

Community Driven Strategic Planning

Core Values: Honor Selflessness Competence

In FITCH's experience, the most successful strategic planning processes typically include a high level of involvement from key leaders. Participants should be both formal and informal, from within the organization such as the fire chief and labor group leadership, as well as external stakeholders and community members. Best practices support the concept that fire departments benefit from a focused strategic planning effort to help guide the next five-year period. In 2022, KFD developed a five-year (2022-2026) strategic plan based on input gathered from the community, including the public at large, as well as a diverse mix of internal and external stakeholders.

Department Vision

We strive to be trusted, respected and valued. We seek to preserve community safety and enhance the quality of life by providing premier emergency and non-emergency services.

Strategic Plan Overview

GOAL 1 Strengthen our core emergency response, supporting functions, and proactive community risk reduction efforts.

- A. Evaluate our service response protocols and future service demands to ensure efficient use of resources.
- B. Address increasing mental health-related calls to ensure the ongoing safety and wellbeing of KFD staff and customers.
- C. Coordinate with neighboring fire departments and other providers.
- D. Strengthen our current proactive programs to address our most frequent and/or highest-risk hazards.
- E. Identify, prioritize, and implement strong support functions.
- F. Support regional emergency preparedness efforts.

GOAL 2 Cultivate a healthy, safe, and productive work environment.

- A. Prioritize the health of KFD individuals.
- B. Leverage training and professional development to hone the competency of our team and build a shared culture of excellence.
- C. Enhance our ability to learn and improve as individuals and as an organization.
- D. Streamline and strengthen internal communications.
- E. Expand our recruitment efforts to reach hiring candidates who represent Kennewick's community, including the diversity of languages spoken in Kennewick.

GOAL 3 Enhance our Mission through effective administration, technology, and data-based decision making.

- A. Strengthen administrative functions to ensure the most efficient use of resources.
- B. Improve our deployment of technology.
- C. Improve our use of data to respond to emerging issues and plan for long-term service delivery.

GOAL 4 Sustain and improve our services by planning for funding challenges and opportunities.

- A. Maximize the efficient use of existing funding.
- B. Collaborate with City of Kennewick leadership and elected officials to establish a sustainable funding mix.

GOAL 5 Lay the groundwork to enhance our community engagement efforts.

- A. Enhance our media presence to share educational content and build public awareness of KFD.
- B. Increase our ability to serve and communicate with our non-English speaking community members.
- C. Build staff capacity and partnerships with community organizations to expand our reach.

Department Mission

We partner with our community to proactively reduce risk and mitigate fire and life safety emergencies for those who live, work and recreate in and around the City of Kennewick.

KFD's Focus

Community Safety	Community safety is central to everything we do. It's essential to our Vision and Mission and is the primary focus of Goal 1.
Economic Development	Through commercial building inspections and building plan review for new developments, KFD helps individual businesses, neighborhoods, and our entire community thrive economically.
Infrastructure and Growth	KFD is an essential part of the City of Kennewick infrastructure that supports the ongoing safe growth of our community.
Quality of Life	Our Vision for the Kennewick community describes a high quality of life supported by strong public safety services and we aim to support a high quality of life and a positive work experience for all members of the KFD team.
Responsible Government	As a department of the City of Kennewick, we strive to embody the ideals of good governance and responsible stewardship of public resources. These principles are foundational to Goals 3 and 4.

Appendices - Supporting Documents

This summary report has provided the high-level, substantive results of the Community Risk Assessment, comprehensive Data Analysis, and GIS analysis reports. In conjunction with the aforementioned documents, a complete review of the area's characteristics and fire department programs was performed.

The following supporting documents are provided in the appendices to supply greater detail and transparency into the information and data provided.

Community Risk Assessment: Provides further details regarding the risk assessment process.

Data Analysis Report: Furnishes a comprehensive and quantitative look at the historical performance of the fire department.

GIS Analysis Report: Supplies a comprehensive review of the department's response time and fire station location study.

Area Characteristics and Program Descriptions: Discusses the area and community served, as well as the agency's organizational structure, programs, and services.



Council Agenda Coversheet	Agenda Item Number: 3. Council Date: 2/13/2024	Category: Info Only
	Agenda Item Type: Presentation Subject: Fire Department Apparatus Purchase Department: Fire Department	
Summary The Kennewick Fire Department has a number of significant fleet replacement needs. The purpose of this presentation is to: • Review the types of apparatus used by the Kennewick Fire Department • Discuss best practices for apparatus replacement vs. current approach • Review age of fleet and discuss fleet replacement considerations • Examine fleet challenges and needs • Discuss replacement funding and share current projected costs, as well as the pros and cons associated with potential cost savings • Recap presently approved fleet purchases • Discuss Ground Emergency Medical Transport (GEMT) funds and how they may be applied to capital • Seek direction on the purchase of a third engine		
Attachments: 1. Presentation		

KENNEWICK FIRE DEPARTMENT

Committed to serving the community since 1907



KFD Fleet



Types of KFD Apparatus

Apparatus we use to deliver emergency services include:

- Aerial Ladder
- Medic Units
- Engines
- Battalion Chief Vehicle





NFPA Replacement Recommendation

NFPA Recommends:

10 years front-line use

+

5 years reserve use

=

Replacement after **15 years**

Additionally, KFD understands:

Each community is unique and must consider a few things including, but not limited to:

- Use
- Cost for repairs
- Out of service time





KFD Engines & Ladder Truck

Unit	Year	Description	Fund	Cost	Yrs. in Use	Replace
E1812	2018	Pierce Pumper	Med Svcs	\$ 634,147	6	2035
E1811	2013	Pierce Pumper	Med Svcs	\$ 567,256	11	2030
E1813	2010	Pierce Pumper	Fire	\$ 498,178	14	2027
E1814	2009	Pierce Pumper	Fire	\$ 465,756	15	2025
L1815	2009	Pierce Ladder Truck	Fire	\$ 831,159	15	2025
E1817	2002	Pierce Pumper -Reserve	Med Svcs	\$ 399,851	22	Surplus
E1816	1996	Pierce Pumper -Reserve	Fire	\$ 296,855	28	Surplus



KFD Fleet Replacement Considerations

1. How much money needs to be set aside?
2. Should the increased demand for emergency services accelerate the replacement of apparatus?
3. Do we have the correct number of call back (reserve apparatus) for a fleet our size



Fleet Challenges and Needs

Challenges

- Aging fleet
- Significant increase in use (greater wear and tear)
- Supply chain issues
- Limited mechanic staff
- Rising cost of ownership
- Stringent emission standards
- Technology advancements

Needs

- Dependable and reliable apparatus
- Minimal out of service time
- Availability of call back/reserve apparatus
- Standardized fleet



Funding for Replacement

Current Strategy:

Kennewick sets money aside to replace apparatus

- General Fund
- Medical Services Fund

To date, we have not needed to use bonds for apparatus replacement.

Funding Considerations:

- Rising costs
- Reduction in life cycle



Current Projected Costs

- Engine = \$1.35 million
- Ladder = \$2.1 million



Cost Savings for Purchases

- Pros and Cons
- Our approach



Currently Approved Purchases

2 - Engines

1 - Ladder truck

2025/2026 Budget:

1 – Engine

1 – ladder truck

2027/2028 Budget:

1 – Engine

Funding Sources:

- Engines
- Ladder truck

ARPA funding has enabled the City to accelerate of purchase of the second engine (*originally planned for the 2027/2028 biennium*).



GEMT Funding

What is Ground Emergency Medical Transport (GEMT) funding?

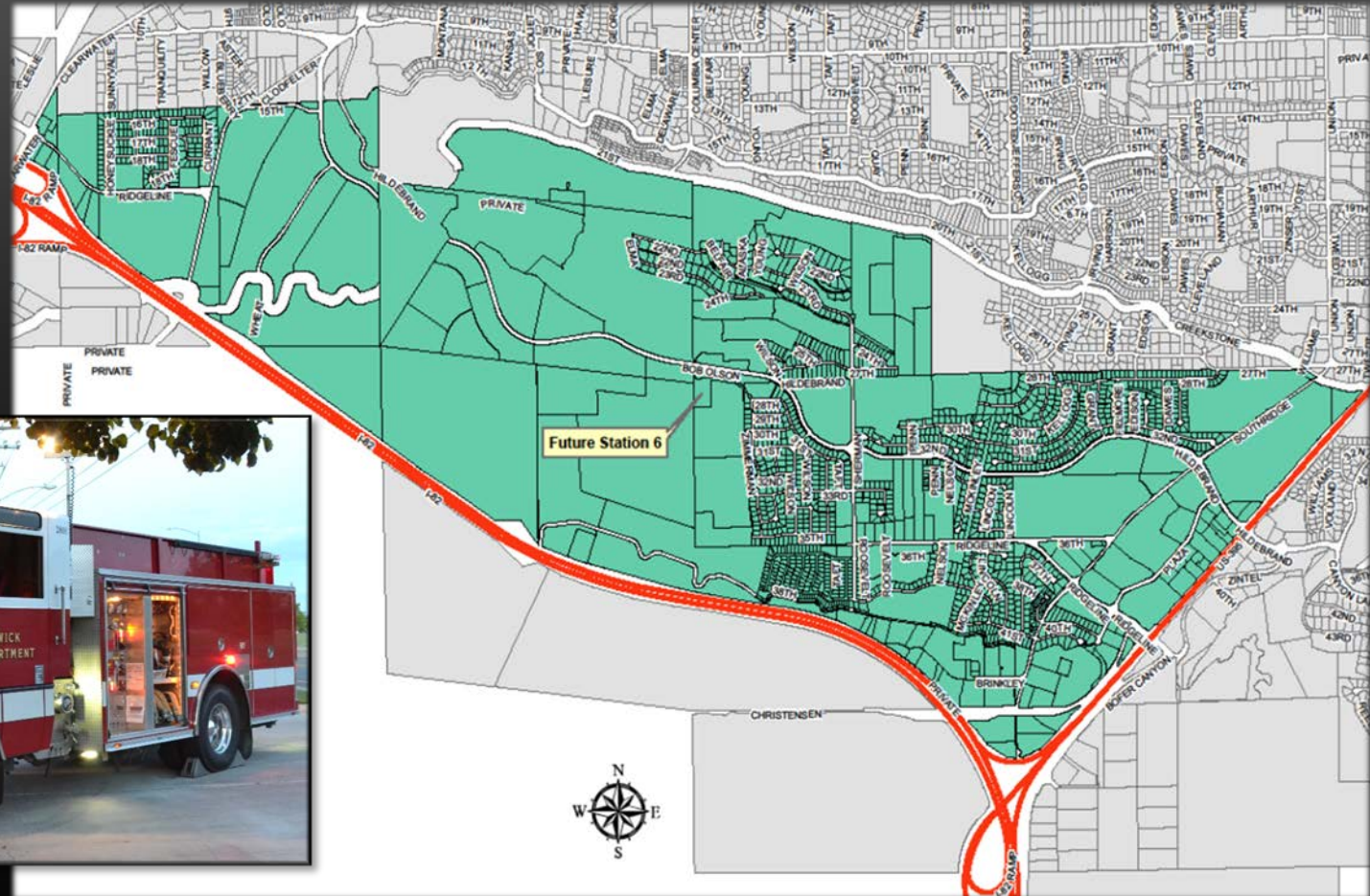
Federal program that provides supplemental payments to cover the gap between allowed Medicaid payments and the provider's actual costs.

- Conservative approach
- Intentional planning



New Purchase Request

- Request use of GEMT funds to purchase a 3rd Engine
- Anticipation of Station 6





Summary

- Completing specifications and working through fleet replacement plan
- Council previously approved funding for two engines and a ladder.
- Seeking authority to purchase a third engine in anticipation of Fire Station 6.



Any Questions?



Council Agenda Coversheet	Agenda Item Number: 4. Council Date: 2/13/2024	Category: Info Only
	Agenda Item Type: Presentation Subject: City Revenue Sources: Overview Department: Finance	
Summary At the Council's request and in an effort to provide more transparency around the City budget, staff will provide an overview of existing revenue and additional revenue tools available to the City should the City Council decide that additional resources are needed to finance priority items. Washington state provides an array of revenue tools that local government may use to provide services. The PowerPoint is intended to serve as a resource for the City Council by providing a broad overview of the array of tools the City Council may wish to explore. The PowerPoint contains a number of hyperlinks if Councilmembers are interested in more details about the various options. Staff will be seeking direction from Council as to which revenue option(s) the Council wishes to explore further at the spring retreat.		
Attachments: 1. Revenue Overview Presentation - Feb 13 2024		

Overview: City Revenue Sources

Kennewick City Council Workshop

February 13, 2024



Purpose:

- As the City considers new and expanded services outlined in various strategic plans and in response to a growing and evolving community, the City will need to consider **how to pay for these services**
- Tonight's presentation will provide a **high-level overview of the City's current revenues as well as options for new revenues**, should the Council decide that is how it wants to pay for these services
- Staff is seeking **general direction from Council** about which options it wishes to consider further at the spring retreat

Needs, Needs, & More Needs

Fire

- Fire Strategic Plan
- New Fire Station/Peak Hour Unit
- Additional Personnel

General Government

- Civic Campus
- Ongoing Facilities O&M/Backlog
- Convention Center

Parks

- Rec Center
- Parks & Rec Comp Plan
- Trails & Pathways Strategic Plan

Information Technology

- IT Strategic Plan
- Cyber Security Costs

Routine/Ongoing Needs that Come with Serving a Growing Population

Four Primary Revenue Sources

Washington State authorizes four primary revenue sources (often referred to as the “four legs of a stool”) for general government services. Other revenues also allowed for specific purposes.

Property Tax

Sales Tax

Utility Tax

Business &
Occupation
(B&O) Tax

Governmental Accounting: Fund Type

General Fund

Most **flexible fund**. Supports general government services. Primary revenue sources include property, sales, and utility taxes; and fees for service among others. General Funds (GF) may be transferred to the funds below with limited restrictions. However, funds below generally don't transfer to the GF except under very limited circumstances.

Special Revenue Funds

Repositories for revenues **legally restricted for specified purpose**. Examples include Street Fund (state shared revenues), Public Safety Fund (voter-approved utility tax), Criminal Justice Sales Tax Fund (voter-approved sales tax), Lodging Tax Fund (hotel/motel tax), and ARPA Fund (Federal funds) among others.

Capital Project Funds

Capital project funds are used for **acquisition and construction of major capital facilities**. Revenues supporting capital project funds run the gamut – transfers from the GF, special revenue funds, Real Estate Excise Tax (REET), debt proceeds, and grants, among others.

Debt Service Funds

Revenues for and the payment of principal and interest on long-term debt (e.g., municipal bonds) used to finance capital projects and/or government operations) are collected here. Debt proceeds are generally deposited in the funds above. Revenues captured in debt service funds can include voter-approved taxes and/or transfers from the GF or special revenue fund and capital project funds – all designated to repay the municipal bond “loans”.

Enterprise Funds

Most services for which a **fee is charged** (typically a rate) are accounted for here. Examples include the Water and Sewer, Medical Services, Building, Coliseum, Stormwater, and Columbia Park Golf Course Funds. Rates for these services are not set to make a “profit”, but rather to cover costs of service. Rate revenues for a particular service cannot be used for another service. For example, water rate revenue cannot be used to pay for police services.

Internal Services Funds

Costs/revenues associated with **internal department services** provided to other internal departments are captured here. Departments are charged a rate for the services they receive. Rates are set to cover the cost of the service, not as a “profit” center. Examples include Equipment Rental, Risk Management, and Central Stores Funds.

Fiduciary Funds

Trust or custodial funds that account for assets held by the City in a trustee or agent capacity for individuals, private organizations, other governmental units, and/or funds. Examples include the Firemen's Pension Fund and the OPEB Trust fund. Funds collected here cannot be used for any other services.

Balancing Expenditures with Revenues

Expenditures

- Expenditure growth rate for existing services often exceeds revenue growth rate – inflation and other pressures
- Growing community – growing needs
- Aging infrastructure
- Strategic plans – robust list of operating and capital needs

Revenues

- Growth rates may be limited
- “Colors of money” can restrict flexibility
- On-going vs. one-time
- Taxpayer willingness

Questions to Consider

Expenditures

- Can expenditures be contained/restricted to free up resources for new investments?
- Are there efficiencies in how services are delivered?
- Are there programs that can be reduced or eliminated?

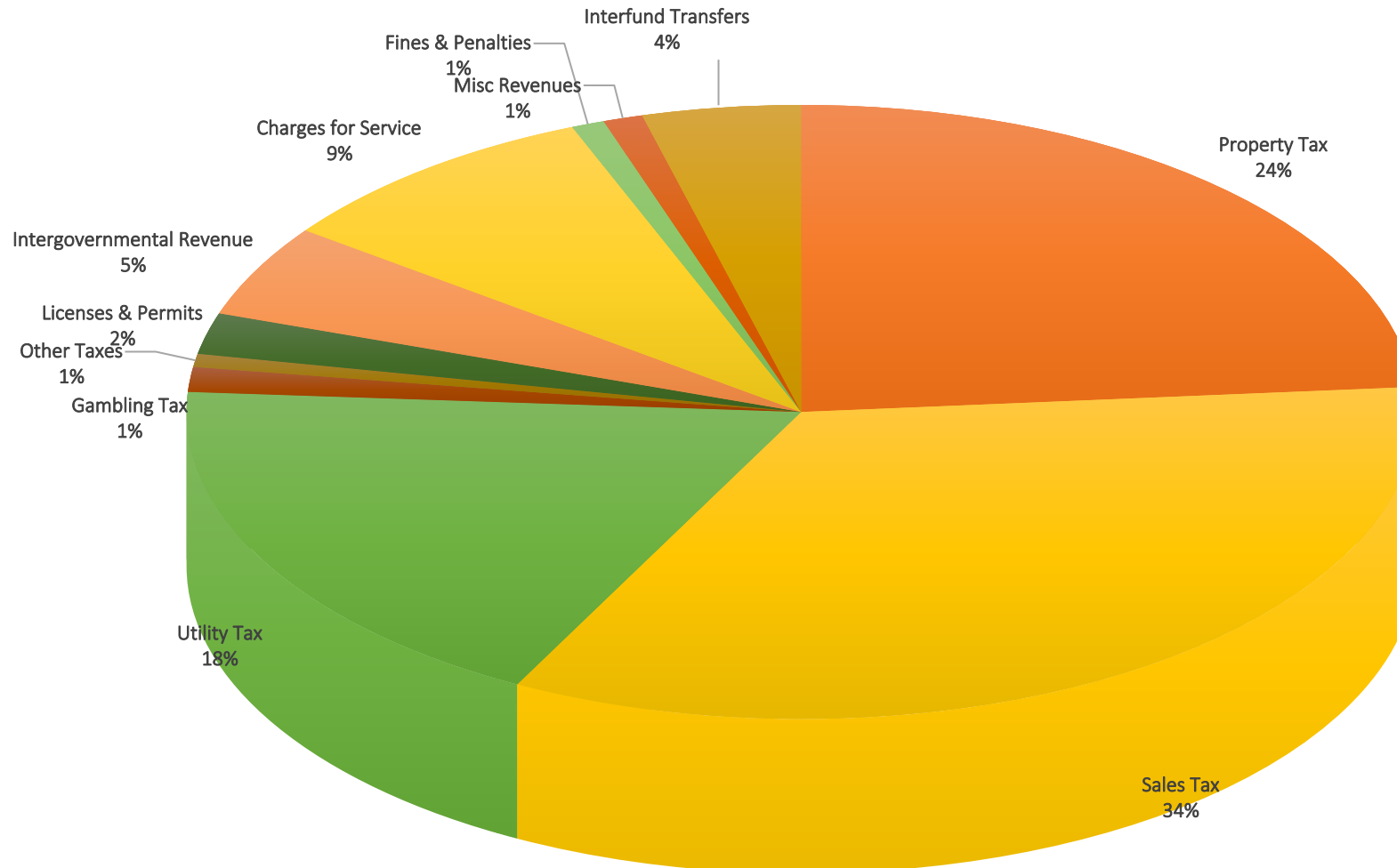
Revenues

- How to best match revenue strategies with funding needs?
- What is the revenue for? Covering cost of service? To fund new or expanded service?
- How much revenue is needed?
- Who will pay and who will benefit?
- Is voter approval required? What is voter appetite for new taxes?
- When do you need the revenue?
- What are the limitations?
- Is fund balance available?

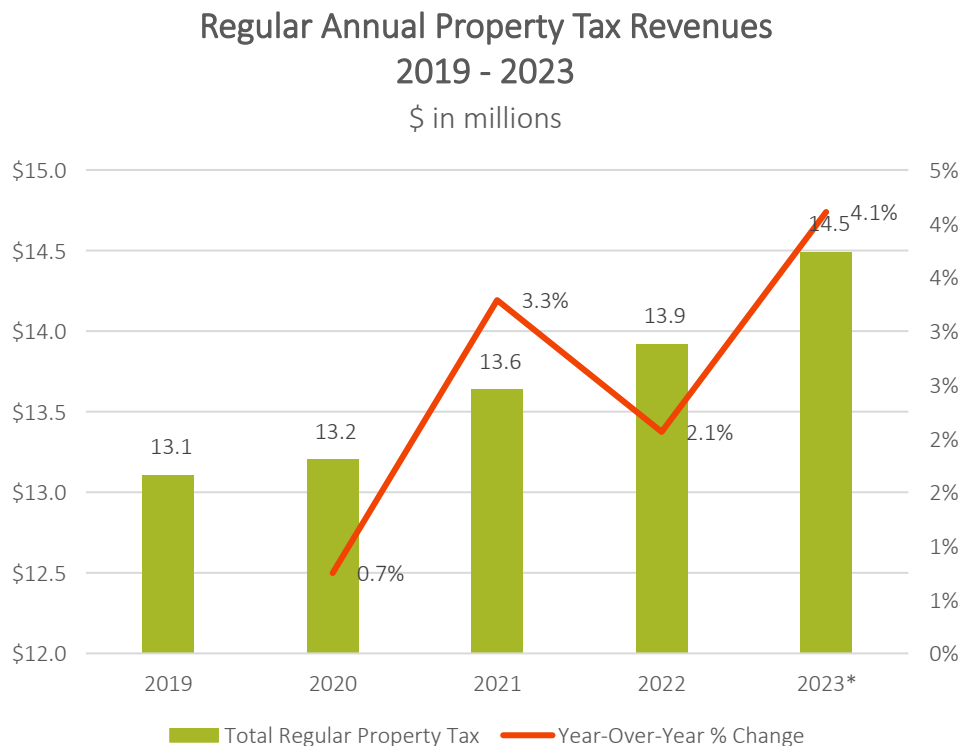
2023/2024 General Fund Revenues

Total Revenue \$115.2M

\$ in millions



Property Tax Overview



At \$27.3M** for the '23/'24 biennium, a key source of funding for the General Fund, second only to sales tax

Challenge: By State law, property tax growth is capped at 1% above previous year's collections plus new construction

- Generally does not keep up with inflation, creating structural imbalances in City budgets
- Since 2019 property tax revenues increased by an average of \$346K per year, with a low of \$98K in 2020 and a high of \$572K in 2023
- If property tax allowed to grow by IPD, City would have collected an additional \$1.1M since 2019

* Preliminary
** An additional \$1.7M in regular property tax revenue is allocated to the Street Fund in 2023-2024

The Property Tax Paradox

- Budget-based, not rate-based, meaning the amount that can be collected combined with assessed valuation drives the rate, not the other way around

Result: Amount collected can increase, but the rates charged to taxpayers can decrease, especially in communities experiencing a lot of growth and/or increases in assessed property values, such as Kennewick. But, with growth comes increased demand for service

	2024	2023	2022	2021	2020	2019	2018	Change Since 2018
Assessed Valuation (AV)	\$ 11,626	\$ 9,615	\$ 8,429	\$ 7,735	\$ 7,319	\$ 6,630	\$ 5,933	95.9% 
Total Property Tax Rate (\$/1,000 AV)	\$ 7.8740	\$ 6.9831	\$ 9.6465	\$ 9.9549	\$ 10.4148	\$ 10.1805	\$ 12.4550	-36.8% 
Kennewick Property Tax Rate (\$/1,000 AV)	\$ 1.3246	\$ 1.5493	\$ 1.7099	\$ 1.8169	\$ 1.8587	\$ 1.9894	\$ 2.1708	-39.0% 
Kennewick Property Tax Revenue	\$ 15.40	\$ 14.49	\$ 13.92	\$ 13.64	\$ 13.20	\$ 13.11	\$ 12.53	22.9% 
Cost to Owner of \$200,000 Home	\$ 1,574.81	\$ 1,396.62	\$ 1,929.30	\$ 1,990.98	\$ 2,082.96	\$ 2,036.10	\$ 2,491.00	-36.8% 

Additional Property Tax Tools

Levy Lid Lifts

[Levy lid lifts](#) are voter-approved property tax increases that allow property tax rate to exceed the 1% limit. Revenues generated can be used to support operating costs or capital costs, including debt service costs. Duration of the increase and amount of the increase is influenced by the type of levy lid lift put on the ballot.

EMS Levy

With an [EMS Levy](#) cities can levy up to an additional \$0.50 per \$1,000 AV to provide for emergency medical services. This voter-approved levy may be imposed for 6 years, 10 years, or permanently. According to MRSC, voters have approved the vast majority (90%) of city EMS levies in recent years. The City of Kennewick has typically charged a rate for ambulance services. The City could select both options provided that the collective revenues generated do not exceed the cost of delivering the service.

Affordable Housing Levy

An [Affordable Housing Levy](#) allows cities to increase the property tax rate by \$0.50 per \$1000 AV to finance affordable housing for “low income” and “very low income” residents for up to ten-years. Requires voter approval.

Excess Levies (O&M Levies)

[Excess levies aka Operations & Maintenance levies](#) are one-year property tax increases that are typically best suited for short-term or one-time uses, including bridge funding while waiting for another funding source to materialize. Requires super-majority voter approval.

G.O. Bond Excess Levies (Capital)

[General Obligation \(G.O.\) Bond Excess levies](#) are voter-approved (super majority) property tax increases that provide a steady stream of revenue to repay debt for a particular capital project(s) and are sized to cover the annual debt service costs until the bonds issued for the project(s) is paid off, at which point the levy expires. This contrasts with Limited Tax General Obligation (LTGO) bonds which can be issued through councilmanic action (i.e. without voter approval) using existing General Fund revenues.

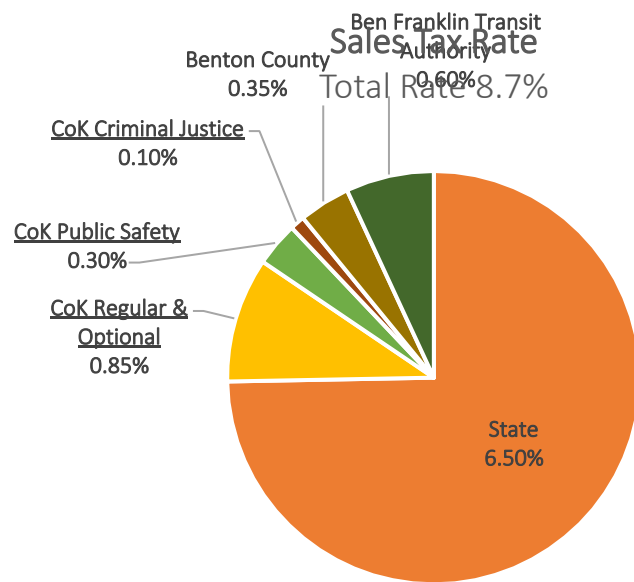
Banked Capacity

Cities that forgo all or a portion of the 1% allowable increase in property tax can “bank” that capacity and tap into that capacity in a subsequent year(s). [Banked capacity](#) can accumulate deliberately where by a City Council decides not to levy the full 1% or unintentionally if final assessed property values set by the county assessor comes in higher than what was assumed when the property tax levy rate was approved by the City Council. The City has roughly \$173K in banked capacity.

Sales Tax Overview

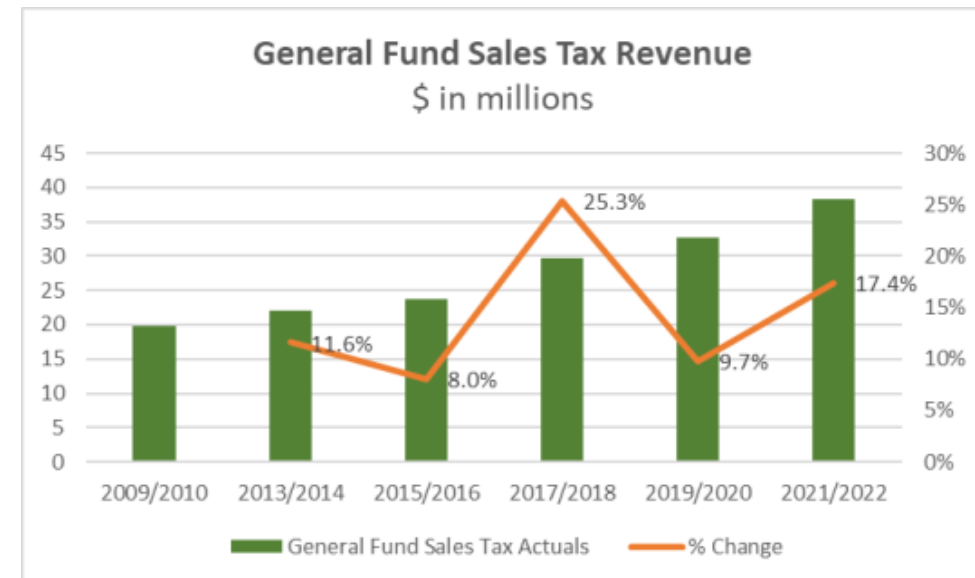
Most retail sales in Kennewick are subject to an 8.7% sales tax – same rate as nearby cities

- 1.25% goes to the City of Kennewick (CoK)
- 7.45% goes to other jurisdictions, including the State, County and Ben Franklin Transit



At \$38.2M in the '23/'24 budget, sales tax is Kennewick's largest GF revenue source

- Somewhat unusual – speaks to Kennewick's large retail and commercial base



Additional Sales Tax Tools

Annexation Services Sales Tax

An [Annexation Services Sales Tax](#) may be imposed through July 1, 2028 if an annexation is consistent with the city's Comprehensive Plan; if the City Council determines that the projected costs of serving the annexed area exceeds projected revenue; and the city has entered into an interlocal agreement with the county regarding the proposed annexation area. Depending on the population of the annexed area, up to 0.2% of the States' 6.5% sales tax rate is credited to the city so long as revenues from the annexed area fall short of the costs to serve the area.

Cultural Access Program (CAP) Sales Tax

A city may councilmanically impose up to 0.1% [Cultural Access Program \(CAP\) Sales Tax](#) for up to seven years to benefit or expand access to nonprofit cultural organizations if the county has not imposed a CAP sales tax. Also a property tax option, but no cities have implemented this tax.

Housing & Related Services Sales Tax

A city may levy a sales tax of up to 0.1% for [affordable housing and related services](#) as long as the county has not done so first. This can be enacted with a simple majority vote of the city council or an optional vote of the people. At least 60% of the revenue must be used for constructing or acquiring affordable housing, constructing behavioral health-related facilities, acquiring land for those purposes, or funding the operations and maintenance costs of new affordable housing within which housing-related programs are provided. The remaining funds must be used for the operation, delivery, or evaluation of behavioral health treatment programs and services or housing-related services.

Transportation Benefit District (TBD) Sales Tax

A city that has created a [transportation benefit district \(TBD\)](#) may impose a [TBD sales tax](#) of up to 3% to fund TBD projects (0.1% can be approved without voter approval, while the remaining 0.2% required voter approval). May be imposed for up to 10-years, with renewal options, unless the sales tax is used for the repayment of debt, in which case the tax remains in place until the debt is retired. TBDs come with other revenue generating tools, as well.

Utility Tax Overview

Electric/Natural Gas/Telephone

- **Rate: 8.5%**
- Maximum rate: 6% unless voters approve a higher rate
- 2.5% increase approved in 1995 to fund 32 public safety positions

Garbage & Cable

- **Rate: 7%**
- No maximum for garbage; cable cannot be “unduly discriminatory”

Water & Sewer Utility

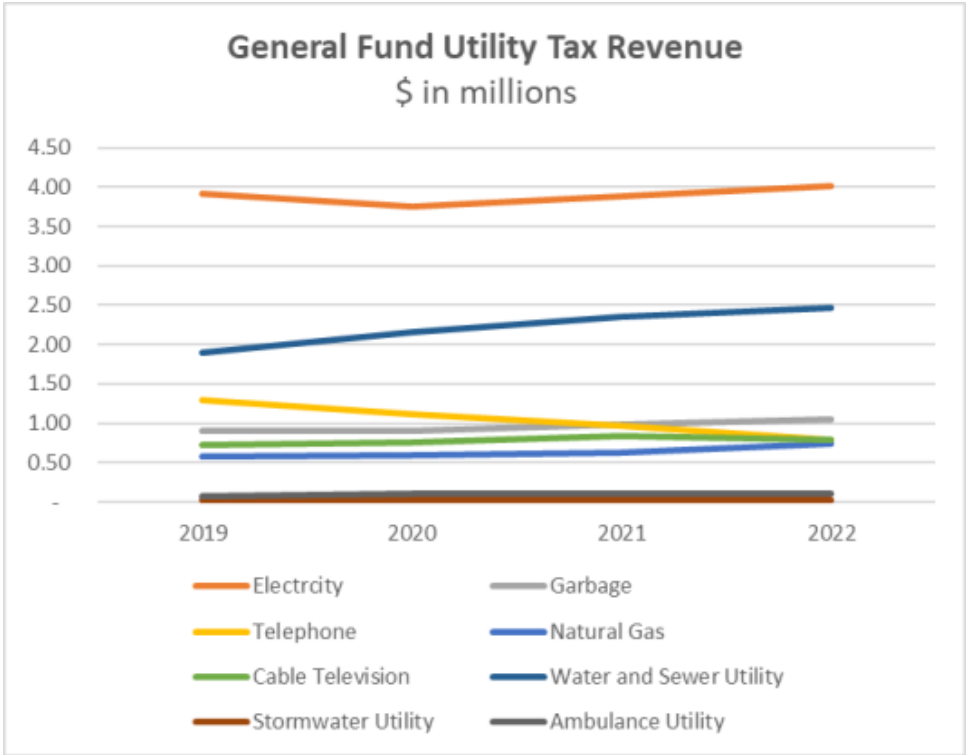
- **Rate: 15.5%**
- No maximum
- 2.5% dedicated to OPEB benefits for LEOFF1 retirees
- 4% dedicated to debt service costs for bonds issued to replace fire stations

Stormwater & Ambulance Utility

- **Rate: 1%**
- No maximum

Utility Tax Revenues

- At \$21.2M for '23-'24, utility tax is the 3rd largest General Fund revenue source
- Growth rate is relatively flat



					%
\$ in millions	2019	2020	2021	2022	Change
					'19 - '22
Total	9.40	9.39	9.76	10.01	
Annual % Change		-0.04%	3.86%	2.62%	6.55%

Other General Fund Revenues

General Fund receives \$27.6M in other revenues, with General Government Services being the largest of the other revenues



Additional Revenue Tools

Fund Balances

- The City has accumulated fund balances in the General Fund and in the CIP Fund
- One-time money – once it's spent it's gone, meaning best used for one-time costs
- Many capital facilities come with on-going operating costs, that fund balance generally does not support
- May be colors of money issues with the CIP fund balance

Business & Occupation (B&O) Tax

- [B&O Tax](#) is the fourth leg of the local government “revenue stool”
- Tax on gross business receipts. In 2022, 49 of Washington’s 281 cities levied this tax
- Administrative costs and obligations associated with administering this tax
- Can be unpopular. Levied on gross receipts rather than net profits

Fees & Charges for Service

- What is the City’s philosophy on recovering costs of certain services?
- Any rate or fee for service (e.g. recreation fees, business license fees, development fees, credit card fees, overhead rates) especially those that have not been adjusted in some time could be evaluated against the cost of delivering the service as well as market trends and may be a source of additional revenues.
- The City is currently doing a rate review for Ambulance Services that will likely result in increased charges and additional revenues. If this City chose, could also combine it with a voter-approved EMS property tax levy.
- The City will also be completing a utility rate study later this year.
- While utility rate revenue **cannot** be used for non-rate costs, the utility tax that is applied to increased utility rates benefits the General Fund.
- Increased fees & charges for service is primarily a tool to cover costs of delivering service rather than new or expanded programs.

Additional Revenue Tools

Impact Fees

- Kennewick currently collects parks and transportation [impact fees](#) on new development to pay for “system improvements” needed as a result of new development
- State law also allows for fire impact fees
- City increases parks and transportation impact fees annually by an inflation factor
- Cities typically review impact fees periodically to ensure fees are aligned with substantiated need

Metropolitan Parks District (MPD)

- Creation of a voter-approved [Metropolitan Parks District](#) could offer some additional property tax revenue tools to the City
- Regular levies up to \$0.75 per thousand, levy lid lifts, and one-year excess levies
- Considered a “junior taxing district”
- MPDs can issue debt up to 2 ½% of the district’s AV – ¼% can be non-voted, with the remaining requiring voter approval
- Depending on how formed, City Council can act as the MPD Board
- According to MRSC, there were 23 metropolitan parks districts in Washington state in 2023

Transportation Benefit District (TBD)

- Creation of a [Transportation Benefit District](#) could also offer some additional revenues tools to the City, including sales tax, vehicle license fees, and property tax
- Formation of a TBD can be done councilmanically as can the imposition of some of the revenue tools, but other revenues require voter approval
- TBDs can use revenues to issue debt
- Depending on how formed, City can act as the TBD Board

Passport Services/Notary Services

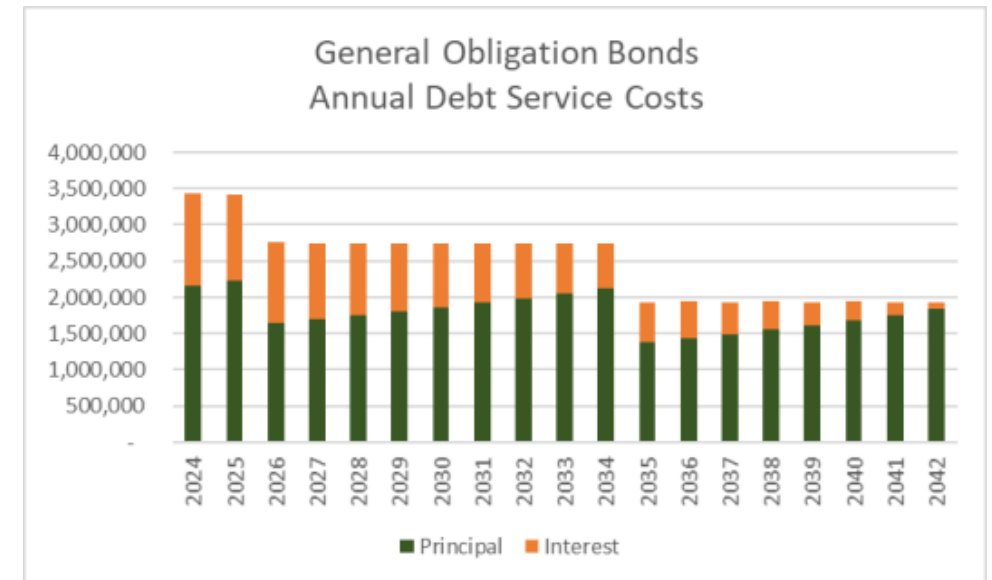
- If the City were to offer passport processing and/or notary services to the public, it could charge a fee for such services to generate new revenues.
- To process passports, the City would receive \$35/passport application
- For notary services the City would receive \$10/notary
- Would need to evaluate costs to administer vs. revenue potential vs. benefit to the community

Debt Financing

- While not a revenue, per se, debt can be a useful tool in financing capital costs. To benefit from debt proceeds, a revenue source must be identified to pay off the debt.
- **Debt financing vs. pay-as-you-go** (i.e. existing revenues or fund balances): There are a number of reasons why issuing debt is advantageous.
 1. For long-term facilities that will benefit both current residents and future residents, allows jurisdiction to spread the costs to those who will benefit
 2. Assuming a revenue source is identified and debt capacity is available, a mechanism for affording more up-front costs that a jurisdiction can afford.
 3. Can also used a combination of fund balances and debt.
- In addition to traditional municipal bonds, [63-20 financing](#) *may be* an option for the City to explore as a mechanism for funding new facilities. This public-private partnership [tool](#) has been used throughout Washington state and around the country to build [public facilities](#)
- The City would want to consult with bond counsel and a financial advisor before deciding on debt financing and voter-approved bond structures

Annual Debt Service Costs: Outstanding General Obligation Debt

- In 2026, roughly \$670K in annual debt service capacity freed up as existing debt is retired
- Another \$800K freed up in 2035
- May be financing strategies to “wrap” new debt around this schedule



Next Steps

Direction requested: Which revenue option(s) does Council wish to discuss further at the spring retreat?

Questions Council may wish to consider as discussions about revenues continue:

Expenditures

- Can expenditures be contained/restricted to free up resources for new investments?
- Are there efficiencies in how services are delivered?
- Are there programs that can be reduced or eliminated?

Revenues

- How to best match revenue strategies with funding needs?
- What is the revenue for? Covering cost of service? To fund new or expanded service?
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Questions & Discussion

