Change in Response Times

Redistricting 90 Day Comparison

Presentation Agenda

Response times were <u>not</u> negatively impacted by redistricting.

- CPD/ECC Changes
- Response Time Refresh
- Comparison Methods
- Comparison Results
- Continual CPD Monitors
- Questions

Change Day: November 12

More than *just* redistricting occurred on November 12, 2023.

- CPD changed district boundaries
    - Beat boundaries
    - Note: Neighborhood boundaries did not change

- CPD reallocated *formerly* D5 officers

CPD District structure as of November 12, 2023

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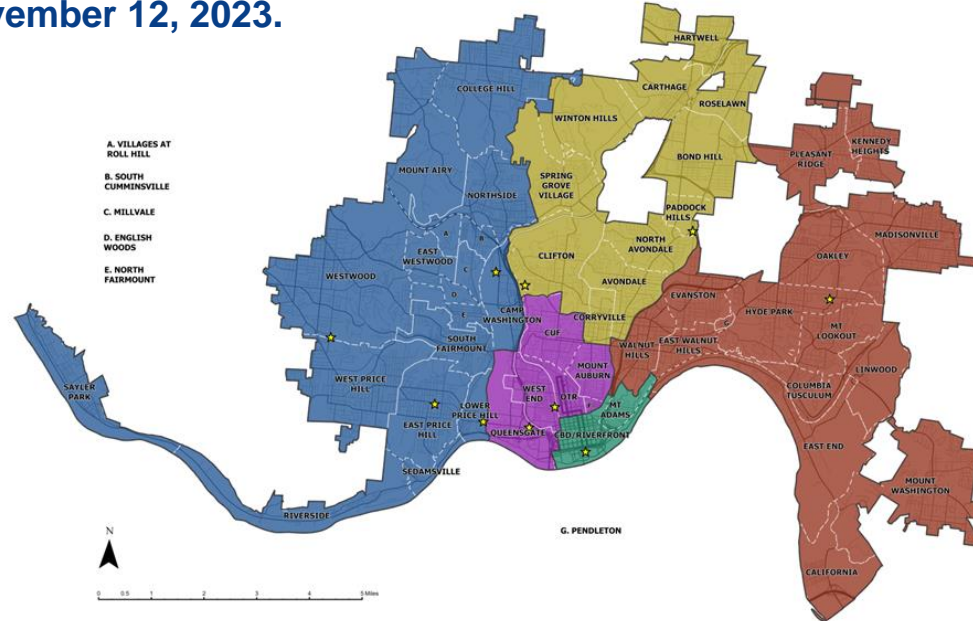
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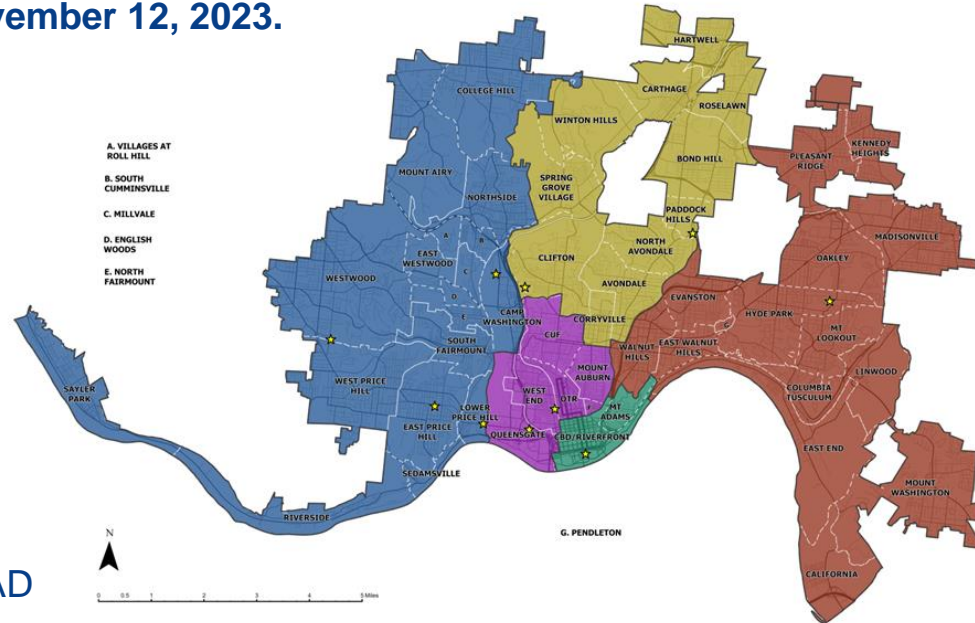
- CPD reallocated *formerly* D5 officers

- ECC & CPD restructured beat coverage
    - Who backs up who? And when?

- ECC updated radio procedures
    - Tones for priority runs
    - Utilizing MDC for low priority messages

- ECC turned on Computer-Aided portion of CAD

A. VILLAGES AT ROLL HILL

B. SOUTH CUMMINSVILLE

C. MILLVALE
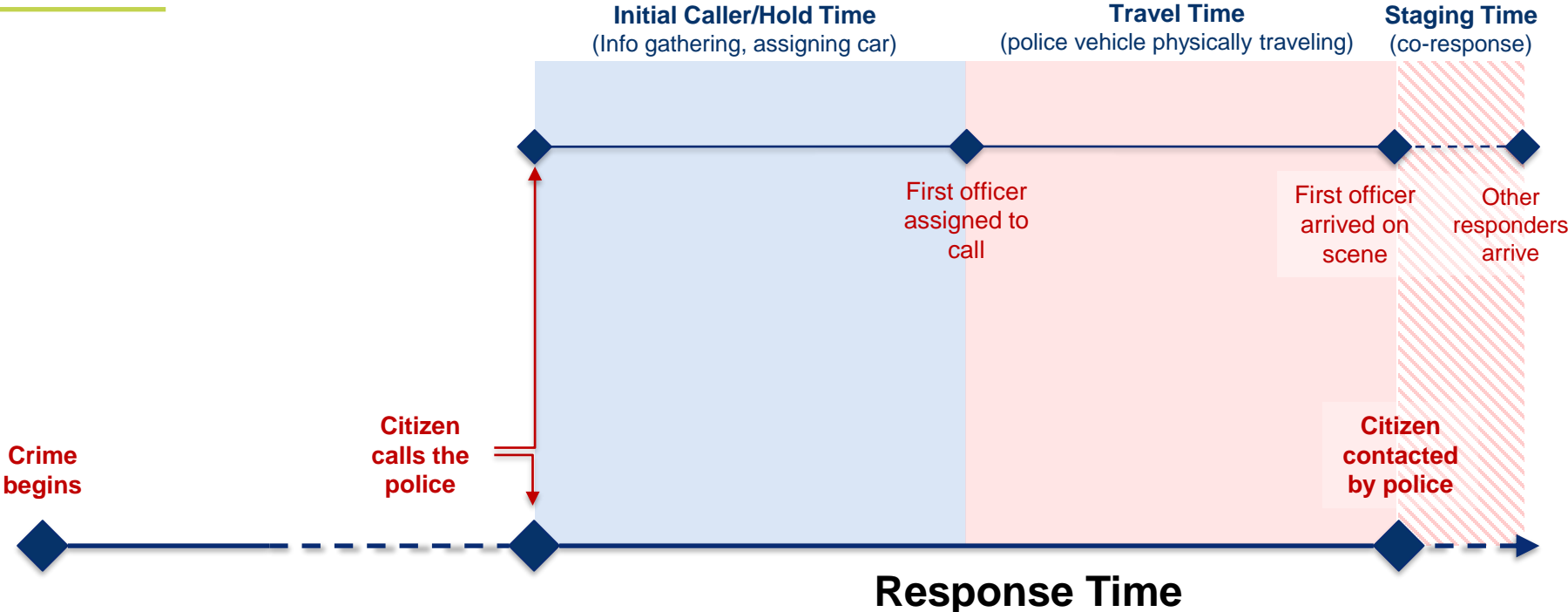
D. ENGLISH WOODS

E. NORTH FAIRMOUNT

G. PENDLETON

CPD District structure as of November 12, 2023

city of CINCINNATI

Response Time Refresh

Response times are **more complicated** than just picking up the phone and driving to a scene.

Crime begins

Crime begins **&** **Citizen calls the police**

Citizen contacted by police

Response Time

Response Time Refresh

Initial Caller/Hold Time
(Info gathering, assigning car)

Travel Time
(police vehicle physically traveling)

Staging Time
(co-response)

First officer assigned to call

First officer arrived on scene

Other responders arrive

Citizen calls the police
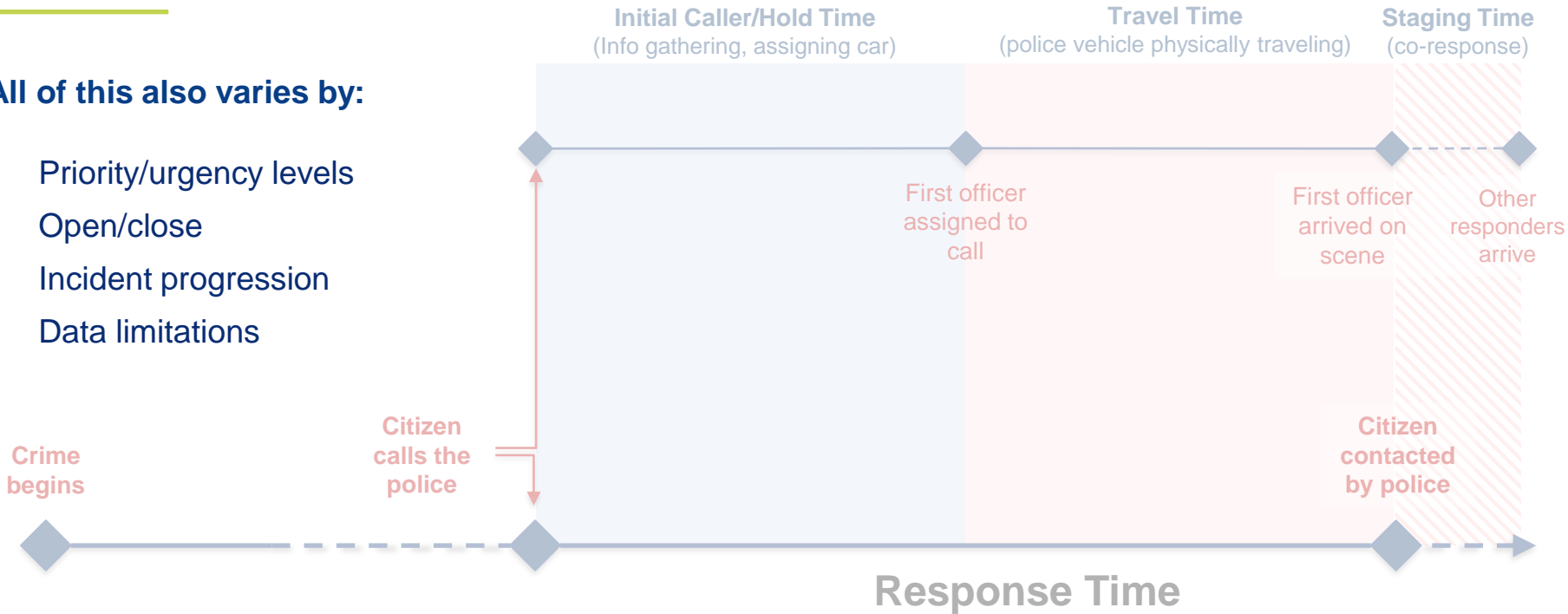
Crime begins

Citizen contacted by police

Response Time

Response Time Refresh

All of this also varies by:

- Priority/urgency levels
- Open/close
- Incident progression
- Data limitations

Initial Caller/Hold Time
(Info gathering, assigning car)

Travel Time
(police vehicle physically traveling)

Staging Time
(co-response)

First officer assigned to call

First officer arrived on scene

Other responders arrive

Citizen calls the police

Crime begins

Citizen contacted by police

Response Time

Response Time Refresh

Year	2019	2020	2021	2022	Change
New Orleans	50.8	83.6	97.2	145.8	+95.0
Nashville	44.2	40.3	57.8	73.8	+29.6
Portland	26.6	37.5	40.4	48.6	+22.0
New York	18.0	17.3	30.2	33.0	+15.0
Seattle	48.9	42.6	55.6	61.8	+12.8
San Francisco	65.9	58.7	66.9	78.5	+12.5
Sacramento	54.0	48.9	60.0	63.7	+9.7
Detroit	31.4	31.5	33.8	40.4	+9.0
Virginia Beach	22.1	21.5	23.8	29.8	+7.7
Gilbert	21.9	20.0	22.5	25.8	+3.9
Montgomery County	23.0	20.1	22.3	25.3	+2.4
Boise	21.5	23.8	24.6	23.0	+1.5
Chandler	20.8	20.5	22.2	22.0	+1.1
Mesa	8.0	7.8	8.9	8.8	+0.9
Cincinnati	22.9	20.8	22.5	22.2	-0.7

Average estimated response times for agencies with available Calls for Service data, 2019 - 2022 (Source: agency open data)

Initial Caller/Hold Time
(Info gathering, assigning car)

Travel Time
(police vehicle physically traveling)

Staging Time
(co-response)

All Avg: 17 mins

Priority Avg: 6 mins

Shots/Spots Avg: 5 mins

All Avg: 9 mins

Priority Avg: 7 mins

Shots/Spots Avg: 6 mins

Response Time

https://jasher.substack.com/p/police-are-taking-longer-to-respond

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90 Day Comparison: Methods

Types of Calls
- Citizen-generated
  - All calls
  - Priority, Urgent, Routine

Methods
- T-test (pre/post) & significance
- Removed outliers (> 2 SD)

Limitations
- All changes happened at same time (ECC & CPD)
- Sample size & seasonal differences
- Reasonable to assume officers learning beats
- CFS data complexities

CAD Priority Levels

"Priority"

Red = High priority, life threatening, in progress
    ie. Shooting, robbery personal, animal attack, carjacking

Orange = High priority, potentially life-threatening or weapon-involved, in progress
    ie. MHC violent, weapon incident, crash injuries

"Urgent"

Yellow = Urgent, non-life threatening, in progress, just occurred or suspect in area
    ie. Reckless activity, burglary (IP), vehicle theft (JO)

Blue = Urgent, not in progress, but injury or unknown trouble
    ie. 911 Silent, MHRT, family trouble

"Routine"

Purple = Routine, not in progress, response needed
    ie. Damage (NIP), theft (NIP), abandoned vehicle

Green = Routine, not in progress, referral to desk or other non-patrol
    ie. Station run, lock out non-urgent

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90 Day Comparison: Results

Aug 14, 2023

Redistricting: Nov 12, 2023
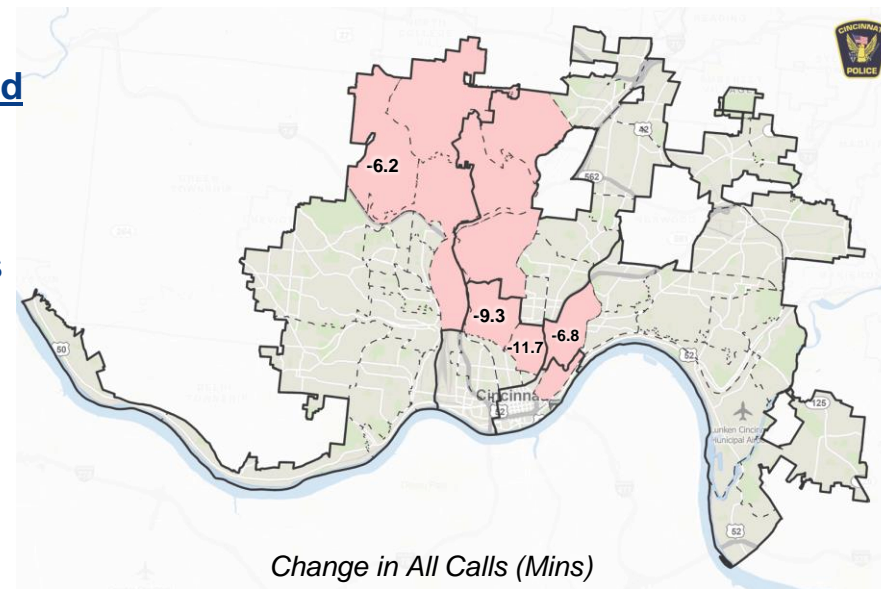
Feb 10, 2023

90 days before

90 days after

Overview

- Redistricting **did not** result in slower response times
- Furthermore, response times were **improved** with the changes made by ECC

City Wide

- Average decrease of 3 minutes, 30 seconds

Redistricted Only

- **Priority**: No sig change
- **Urgent**: -3 minutes
- **Routine**: -6 minutes

-6.2

-9.3

-11.7

-6.8

Change in All Calls (Mins)

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90 Day Comparison: Results

Aug 14, 2023   Redistricting: Nov 12, 2023   Feb 10, 2023

90 days before   90 days after

Change in All Calls (Mins)

Table 1. Change in Response Times for Neighborhoods Affected by Redistricting; 90 Days Before/After Redistricting Date

District	Neighborhood	Count		Average Response Time (Mins)		
		Pre	Post	Pre	Post	Change
CBS	Mt Adams	174	138	29.1	25.2	--
D1	CUF	1,281	952	33.5	24.2	-9.3
	Mt Auburn	586	551	34.5	22.9	-11.7
D2	Walnut Hills	1,173	957	31.4	24.6	-6.8
D3	Camp Washington	507	516	24.8	23.9	--
	College Hill	797	803	27.2	25.5	--
	Mt Airy	822	826	28.8	22.6	-6.2
	Northside	613	614	26.0	22.7	--
D4	Clifton	801	721	26.8	28.4	--
	Spring Grove Village	363	334	24.2	23.3	--
	Winton Hills	586	648	23.0	25.1	--
	Affected Neighborhoods	7,703	7,060	28.9	24.4	-4.5
	Total City	32,045	28,372	27.9	24.4	-3.5

Notes: Changes are only reported if the difference is statistically significant (p <= 0.05)

Change in Priority Calls (Mins)

Table 2. Change in "Priority" Response Times for Neighborhoods Affected by Redistricting; 90 Days Before/After Redistricting Date

District	Neighborhood	Count		Average Response Time (Mins)		
		Pre	Post	Pre	Post	Change
CBS	Mt Adams	7	7	12.1	11.6	--
D1	CUF	73	58	14.1	11.3	--
	Mt Auburn	45	35	16.1	11.0	-5.1
D2	Walnut Hills	73	62	14.2	15.1	--
D3	Camp Washington	41	34	12.5	12.7	--
	College Hill	58	52	11.6	14.0	--
	Mt Airy	69	68	13.7	13.8	--
	Northside	57	44	12.2	13.5	--
D4	Clifton	57	36	14.0	17.9	--
	Spring Grove Village	26	29	14.2	16.0	--
	Winton Hills	73	64	13.8	16.6	--
	Affected Neighborhoods	579	489	13.6	14.1	--
	Total City	2,348	1,923	13.5	13.3	--

Notes: Changes are only reported if the difference is statistically significant (p <= 0.05)
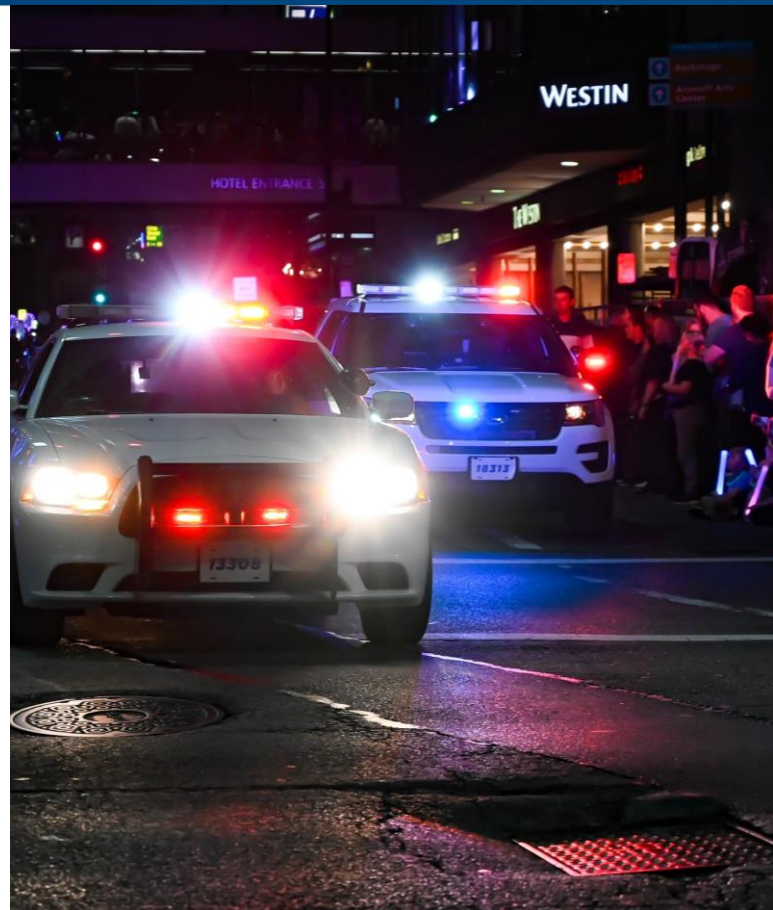
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CPD Continual Monitoring

Assistant District Commander

Monitoring Priority Calls
- Weekly reviews
- Summertime peak

Ongoing Problem Solving

CPD/ECC Adjustments as Needed

Questions?

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Cincinnati Police Department

Chief Teresa Theetge
Dr. Jillian Desmond

Emergency Communications Center

Director Bill Vedra