Project Background

Drawing from a substantial body of research on the evidence-based crime control strategies, the Tacoma Crime Plan includes three components:

1. A near-term hot spots policing strategy meant to substantially increase police visibility at addresses where violent crime is concentrated and prioritize street-level deterrence in these areas.

2. A mid term strategy focused on violent places within the city using a Problem-Oriented, Place-Based Policing approach.

3. A longer-term Focused Deterrence strategy to help break the cycle of violence among the small number of repeat and high-risk offenders who are responsible for committing most of the violent crime in Tacoma.
Hot Spots Policing Strategy

Beginning early July 2022, TPD began executing its near-term, hot spots policing strategy:

• Focus is on violence-prone addresses by increasing police visibility at or near those locations (associated hundred blocks) to deter violent offenders

• Officers are dispatched to recommended hot spots during peak crime hours
  • Officers are instructed to be within sight of the hot spot address for least 15 minutes with all vehicle lights illuminated
  • Periods 5 - 7 (May-October 2023) randomly assigned half of hot spots to an “HV+” treatment that involved officers exiting their lighted patrol cars and foot patrolling in the immediate vicinity
Year 1 Analysis Plan

July 2022 through June 2023

1. City-wide changes in violent street crime (murder, robbery, non-family violence aggravated assault)
   - Five-year trend analysis by violent incidents, victimization, crime type
   - Interrupted time series analysis to help isolate change before and after Crime Plan implementation

2. Hot spots analysis
   - Change in violent crime at hot spots compared to same months last year and 12-month averages
   - Difference-in-differences analysis comparing treated areas to untreated areas before and after implementation
   - Contribution of hot spot crime to city-wide totals

3. Change in arrests and calls for service

4. Treatment fidelity: Alignment between expected and actual treatment at hot spots
Tacoma Violent Crime Incidents Per Month: July 2018 - Jun 2023

**Tacoma Average Monthly Violent Crime Incidents**
- July 2018-June 2019: 81
- July 2019-June 2020: 81
- July 2020-June 2021: 101
- July 2021-June 2022: 173
- July 2022-June 2023: 143

- Start of Crime Plan
- Pre-Crime Plan
- Post-Crime Plan
- Pre-Crime Plan Trend
- Post-Crime Plan Trend
Interrupted Time Series Results

173 violent incidents prior to Crime Plan vs. 143 incidents after (-17.5%)
Violent Victimization: 5 Year Trend

Tacoma Violent Crime Victims Per Month: July 2018 - Jun 2023

Tacoma Average Monthly Violent Crime Victims
- July 2018-June 2019: 98
- July 2019-June 2020: 98
- July 2020-June 2021: 125
- July 2021-June 2022: 202
- July 2022-June 2023: 167

17.1% reduction in Year 1 of the Crime Plan compared to the previous year
Change by Crime Type: Treatment v. Last Year

Tacoma Average Monthly Violent Crime Offenses
Comparison of July 2021-June 2022 vs. Year 1 of Crime Plan
Murder: 26.7% reduction
Robberies - Individuals: 13.5% increase
Robberies - Businesses: 41.6% reduction
Aggravated Assaults (non-family): 17.2% reduction
Violent Crime Change in Hot Spots

% Change in Treatment & Catchment Locations:
Year 1 & Periods 1-5
Same Months, Last Year: Solid Bars
Previous 12 Months: Hatched Bars
Change in Arrests

Comparison of Average Monthly Arrests: City-Wide and Treatment Locations

- City-Wide: Y1 vs. Previous 12 Months - Increase in Arrests
- City-Wide: Y1 vs. Previous 12 Months - Decrease in Arrests
- Treatment Locations: Y1 vs. Previous 12 Months - Increase in Arrests
- Treatment Locations: Y1 vs. Previous 12 Months - Decrease in Arrests
Change in Calls for Service

Comparison of Average Monthly Calls For Service: City-Wide and Treatment Locations

- City-Wide: Y1 vs. Previous 12 Months - Increase in CFS: 6.4%
- City-Wide: Y1 vs. Previous 12 Months - Decrease in CFS: -0.2%
- Treatment Locations: Y1 vs. Previous 12 Months - Increase in CFS: -2.7%
- Treatment Locations: Y1 vs. Previous 12 Months - Decrease in CFS: -19.8%

Percent Change Average Monthly Calls For Service

0% 20% 40% 60% 80% 100%
## Treatment Fidelity

<table>
<thead>
<tr>
<th>Treatment Periods</th>
<th>Fidelity Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period 1</td>
<td>91.8%</td>
</tr>
<tr>
<td>Period 2</td>
<td>96.9%</td>
</tr>
<tr>
<td>Period 3</td>
<td>97.0%</td>
</tr>
<tr>
<td>Period 4</td>
<td>98.2%</td>
</tr>
<tr>
<td>Period 5</td>
<td>98.1%</td>
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Year 1 Summary (1 of 2)

• Tacoma experienced a 17.5% decrease in violent street crime incidents in Year 1 of the Crime Plan compared to the previous 12 months. Yearly violent crime counts remain substantially higher than they were prior to the onset of the Covid 19 pandemic.

• Violent crime in treated hot spots was down more than 25% compared to the previous year, and it was down a similar amount in surrounding catchment areas, indicating that crime displacement did not occur as a result of the hot spots treatment.

• Total arrests were up slightly city-wide and in hot spots during Year 1 of the Crime Plan, but violence-related arrests, drug arrests, and illegal weapons arrests were down 38%, 61%, and 7%, respectively, in the hot spot areas.
Year 1 Summary (2 of 2)

- Violence-related calls were down nearly 20% in the treated hot spots.

- Taken together, the hot spot results, along with an interrupted time-series analysis of violent crime pre- and post-implementation of the Crime Plan, provide strong evidence that the Crime Plan’s focus on hot spots was likely responsible for a 17% reduction in city-wide violent crime compared to the previous year.
Next Steps – Mid-Term Strategy

• Problem-Oriented, Place-Based Policing (POPBP)
  • POPBP strategies are carefully tailored to address underlying conditions that contribute to recurring problems in crime-prone locations and can be more effective at reducing crime than merely increasing or intensifying traditional police activities.

• Initial location: 8810/8820 Hosmer Street

• POPBP Working Group has developed an operations plan for the area

• The working group has begun implementation, and data collection is underway

• Engagement with stakeholders and community members in the area have already produced improvements

• The site likely will move into a maintenance phase in the near future

• An additional site(s) will be identified soon
UTSA Evaluation

• Hot spot policing evaluation and reporting continues

• POPBP
  • Monitor data collection processes
  • Advise on any emerging issues or concerns
  • Conduct process & impact evaluation of the POPBP
  • Follow key outcome metrics over time (e.g., 24-36 months) to track long-term impacts
  • Mid Year 2 report (Jan-Feb 2024) will include initial evaluation of POPBP impact on Hosmer Street
Questions?

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Supplemental Information

• Diff-in-diff

Table 1: Difference in Difference Models – Year 1 Treatment Effect

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>Robust Std. Err.</th>
<th>Impact on Crime</th>
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</thead>
<tbody>
<tr>
<td>Average Treatment Effect</td>
<td>-.06</td>
<td>.012</td>
<td>-3.6%</td>
</tr>
</tbody>
</table>

***p≤0.001, **p≤0.01, *p≤0.05. This model controls for 3 months of pre-treatment crime.

• Crime remains substantially higher in Tacoma than it was before Covid
  • Murder (July to June yearly totals)
    • 2018 19
    • 2019 24
    • 2020 27
    • 2021 45
    • 2022 33
Supplemental Information

• Aggravated assault counts (July to June)
  • 2018  487
  • 2019  561
  • 2020  742
  • 2021  1328
  • 2022  1100

• See Appendix B from the report for additional crime counts by type and month