CRIME STATISTICS: 2018-2020, Dublin vs London

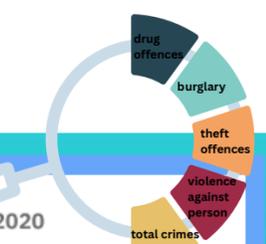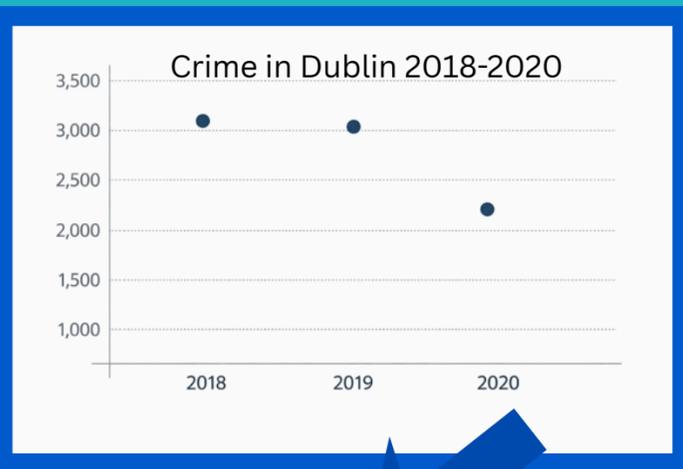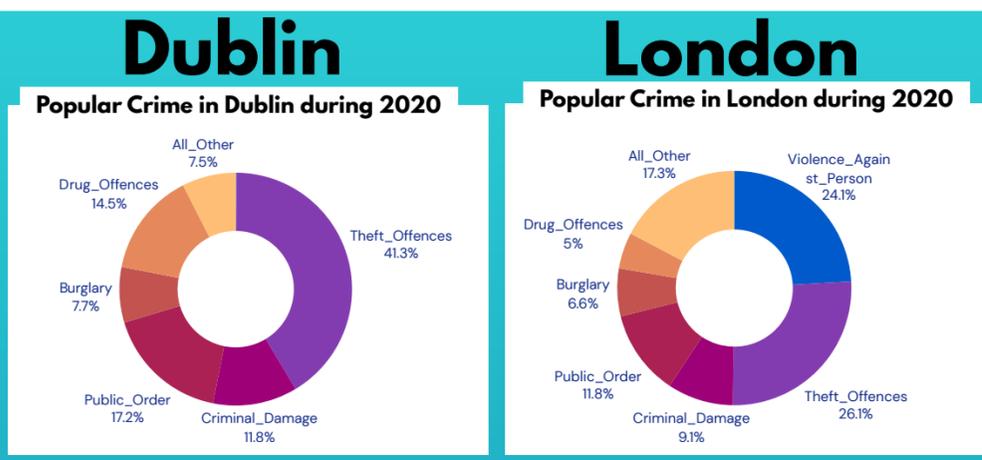## Dublin

London

INTRODUCTION
This analysis compares crime in two major European capitals during a transformative period, such as Brexit and the COVID-19 pandemic. Dublin and London share similarities as English-speaking financial spots, but operate within different policing control and legal frameworks. Both are major capitals, but did crime trends play out the same way? By looking past national headlines, we can see how two different cities faced similar challenges.

What I Want to Find Out & Why
This project aims to compare crime in Dublin and London from 2018 to 2020 by using per capita rates, which allows for a fair comparison between a city of 1.4 million people and a metropolitan region of 8.9 million. Did crime in these two capitals move in sync or diverge, especially during the pandemic? And how did the mix of crimes, such as violence, theft, and burglary, differ between them?
Understanding this isn't just academic. The goal is to provide insights that help residents, policymakers, and police in both cities understand what works, ultimately contributing to safer urban communities.

METHODS
Data Collection:
London Data: Extracted from ONS "Police Force Area tables" for years ending December 2018, 2019, and 2020. Specific focus on Metropolitan Police Force area.
Dublin Data: Extracted from CSO "Recorded Crime" annual publications for 2018, 2019, and 2020, focusing on Dublin Metropolitan Region.
Population Data: Mid-year population estimates from ONS (UK) and CSO (Ireland) for rate calculations.
Supplementary Data: Daytime population estimates, deprivation indices, and seasonal patterns from respective national statistics offices.
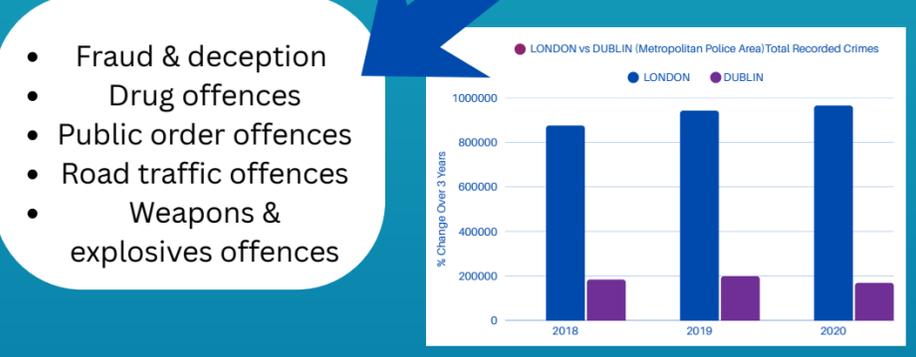
AIMS
The aims of our project are:
To investigate if crime rates in two capital cities changed in relation to population density and socio-economic factors.
To see if both cities showed similar patterns in crime type distribution and seasonal variation.
To determine if the COVID-19 pandemic affected crime trends differently in each city.

Between 2018 and 2020, London had higher total crime numbers, but per capita rates were closer to Dublin's, which showed relatively higher property crime. Both cities saw declines in several crimes in 2020 due to COVID-19 restrictions. Overall, the data shows similar trends, with differences mainly influenced by population size and crime type rather than overall danger.

Popular Crime in Dublin during 2020

- All_Other 7.5%
- Drug_Offences 14.5%
- Theft_Offences 41.3%
- Burglary 7.7%
- Public_Order 17.2%
- Criminal_Damage 11.8%

Popular Crime in London during 2020

- All_Other 17.3%
- Violence_Against_Person 24.1%
- Drug_Offences 5%
- Burglary 6.6%
- Public_Order 11.8%
- Criminal_Damage 9.1%
- Theft_Offences 26.1%

Crime in Dublin 2018-2020

- Fraud & deception
- Drug offences
- Public order offences
- Road traffic offences
- Weapons & explosives offences

LONDON vs DUBLIN (Metropolitan Police Area) Total Recorded Crimes

Quarterly Crime Totals - London 2018-2020

COMPLETE PERCENTAGE CHANGE ANALYSIS (2018-2020)

Crime Category	Dublin Change	Dublin (Actual Numbers)	London Change	London (Actual Numbers)
Total Crime	-3.50%	77,305 → 74,561	0.101	876,334 → 964,557
Violence Against Person	0.051	8,622 → 9,054	0.098	182,614 → 200,520
Theft Offences	-8.80%	26,548 → 24,210	0.058	235,678 → 249,341
Burglary & Related	-21.30%	6,994 → 5,503	-10.90%	70,123 → 62,463
Criminal Damage	-7.20%	8,434 → 7,828	0.021	85,234 → 87,025
Public Order Offences	0.035	8,943 → 9,256	0.067	106,718 → 113,845
Drug Offences	-0.60%	5,328 → 5,293	0.134	42,536 → 48,228
All Other Offences	0.012	12,436 → 12,577	0.128	153,429 → 173,135

CONCLUSIONS
1. Did crime rates change similarly in both cities?
No. London's crime rate increased by 10.2% from 2018-2020, while Dublin's decreased by 8.4%. The cities followed divergent trajectories despite facing similar global challenges.
2. Did both cities show similar crime type distributions?
Partially. While theft was the largest category in both cities (Dublin: 35%, London: 26%), London had a significantly higher proportion of violent crime (24% vs Dublin's 13%). The crime mix reflected different urban challenges.
3. How did the pandemic affect crime differently?
The COVID-19 pandemic had asymmetric impacts:
Dublin: Overall crime decreased, burglary dropped sharply (-21%)
London: Overall crime continued rising, though burglary decreased (-11%)
Both cities saw changes in crime patterns but different overall directions
4. What explains the differences?
Several factors likely contributed:
Scale: London's larger, denser population created different crime dynamics
Policing: Different strategies and resources between Garda Síochána and Metropolitan Police
Urban Structure: London's extensive CBD with high daytime populations created different crime opportunities
Socio-economic factors: Different deprivation patterns and inequality levels
5. Are there lessons for urban safety?
Yes. Dublin's success in reducing burglary (-21%) suggests strategies that could be adapted elsewhere. London's challenge with violent crime despite similar urban characteristics suggests need for targeted interventions. Both cities show that crime patterns are locally specific and require tailored responses.

CALCULATION DETAILS:
Dublin Calculations (CSO Data):
Violence Against Person:
2018: 8,622 offences
2020: 9,054 offences
Change: (9,054 - 8,622) ÷ 8,622 × 100 = +5.1%
Public Order Offences:
2018: 8,943 offences
2020: 9,256 offences
Change: (9,256 - 8,943) ÷ 8,943 × 100 = +3.5%
Criminal Damage:
2018: 8,434 offences
2020: 7,828 offences
Change: (7,828 - 8,434) ÷ 8,434 × 100 = -7.2%
All Other Offences:
2018: 12,436 offences
2020: 12,577 offences
Change: (12,577 - 12,436) ÷ 12,436 × 100 = +1.2%
London Calculations (ONS Data):
Violence Against Person:
2018: 182,614 offences
2020: 200,520 offences
Change: (200,520 - 182,614) ÷ 182,614 × 100 = +9.8%
Public Order Offences:
2018: 106,718 offences
2020: 113,845 offences
Change: (113,845 - 106,718) ÷ 106,718 × 100 = +6.7%
Criminal Damage:
2018: 85,234 offences
2020: 87,025 offences
Change: (87,025 - 85,234) ÷ 85,234 × 100 = +2.1%
All Other Offences:
2018: 153,429 offences
2020: 173,135 offences
Change: (173,135 - 153,429) ÷ 153,429 × 100 = +12.8%
KEY PATTERNS REVEALED:
Opposite Trends:
Total Crime: Dublin ↓ 3.5% vs London ↑ 10.1%
Theft: Dublin ↓ 8.8% vs London ↑ 5.8%
Drug Offences: Dublin ↓ 0.6% vs London ↑ 13.4%
Both Cities Increased:
Violence: Dublin ↑ 5.1%, London ↑ 9.8%
Public Order: Dublin ↑ 3.5%, London ↑ 6.7%
Both Cities Decreased:
Burglary: Dublin ↓ 21.3%, London ↓ 10.9%
Mixed Results:
Criminal Damage: Dublin ↓ 7.2%, London ↑ 2.1%
All Other: Dublin ↑ 1.2%, London ↑ 12.8%

$$\text{Crime Rate} = \frac{\text{Total Crimes}}{\text{Population}} \times 1000$$

1. Overall Crime Rate Distribution (2018–2020):

Dublin
Mid Value: (52.6 + 58.7) / 2 = 55.65

Interquartile Range (London Borough Rates)
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Sorted Rates (sample): 42.5, 56.9, 68.4, 87.1, 116.0, 121.7, 169.3
Q1 (25th percentile): 68.4
Q3 (75th percentile): 116.0
IQR: 116.0 – 68.4 = 47.6

Statistic	Dublin Crime Rate	London Crime Rate
Mean	56.2 per 1,000	104.2 per 1,000
Median	57.4 per 1,000	105.8 per 1,000
Range	6.1 per 1,000	10.0 per 1,000
Interquartile Range	3.3 per 1,000	5.8 per 1,000
Mid Value Interval	55.65 per 1,000	99.4-109.4 per 1,000
Standard Deviation	2.7	4.7

4. Monthly Crime Pattern Analysis (2018–2020):

Dublin Monthly Variation:
Mean Monthly Crimes: 6,477
Median Monthly Crimes: 6,403
Standard Deviation: 487 crimes

London Monthly Variation:
Mean Monthly Crimes: 78,397
Median Monthly Crimes: 78,912
Standard Deviation: 3,945 crimes