Call Center Service Request Analysis – Kansas City (2018–2021)

This document presents a comprehensive analysis based on SQL query outputs   
for 311 Call Center Service Requests in Kansas City between 2018 and 2021. Each business question   
is addressed using SQL logic and interpreted to extract key insights, intended for use in dashboards, reports,   
and stakeholder communication.

## 1 .Service Requests Over Time (2018–2021)

## A graph with a line going up AI-generated content may be incorrect.

A graph of blue squares

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* 2019 was the peak year with 166,021 requests – a 33% increase from 2018.
* 2020 saw a drop to 125,906 requests, likely due to COVID-19 disruptions.
* 2021 recorded only 19,683 requests, indicating possible incomplete data.
* Seasonal peaks occurred from May to August, with dips in January and February.

## Service Requests by Source

A pie chart with numbers and text

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* Phone accounts for 77% of all requests (~1.2 million).
* Web and Email collectively account for ~20%.
* Sources like Fax, Mail, CTI contribute negligible volume.

## Requests by Department

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* NHS handled over 783K requests – 50% of total.
* Public Works and Water Services follow with large shares.
* Fire, IT, and HR received minimal requests, reflecting internal roles.

## Top 10 Fastest Response Categories

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* These categories and Types had near same-day resolution performance.
* Many of these types are directly actionable or routed through on-site interactions, requiring minimal processing or escalation.

## Top Geographic Locations by Requests

A screenshot of a map

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* Shoal Creek leads with 55,839 requests.
* ZIP code 64130 recorded 133,000+ requests.
* Frequent addresses: 414 E 12th St, 4800 E 63rd St, etc.
* Metro and East police districts had the highest volumes.

## Departmental Workload & Work Group

A screenshot of a computer screen

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* NHS-Neighborhood Preservation and NHS-Solid Waste each handled 200K+ requests.
* Public Works-Street & Traffic and Water-Meter Services showed high activity.

## Response Time by Department

A screenshot of a graph

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* Fastest: Housing (1 day), KCPD (3 days), Court (4 days).
* Slowest: NHS (75 days), City Planning (100 days).
* Wide variability indicates possible operational inefficiencies.

## Request Status Composition (2018–2021)

This version groups raw status values into 3 simplified categories:

* **Closed**: Includes Resolved, Closed
* **Open**: Includes only Open
* **Inprogress**: Captures all remaining status values (e.g., Assigned, Duplicate, Cancelled, etc.)

A screen shot of a graph

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* **91.6%** of all requests between 2018–2021 were successfully **closed**, indicating a high resolution rate.
* Only **2.3%** remain **open**, suggesting strong operational efficiency.
* **Inprogress** cases (0.56%) are likely due to records stuck in intermediate statuses or mid-workflow states.

## Workload vs Efficiency

A screenshot of a computer

AI-generated content may be incorrect.

* NHS: Highest workload (783K) with slowest closure (75 days).
* Public Works: Large volume with fast closures (10 days).
* KCPD: Efficient performance with lowest avg days (3).