



Office of the City Auditor  
Performance Audit  
September 2024

# Timeliness of Residential Single-Family Building Permits



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# Office of the City Auditor

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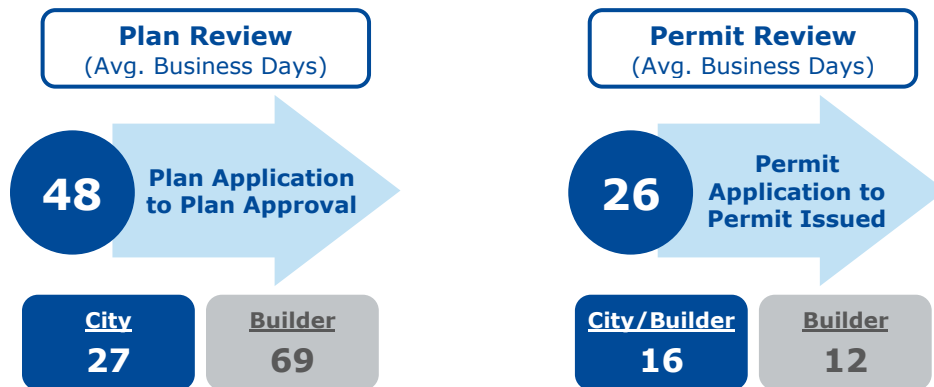
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September 9, 2024

Honorable Mayor and Members of the City Council:

The City Council adopted [Resolution 240484](#) directing the city auditor to conduct a performance audit to assess the timeliness of the issuance of residential single-family housing building permits between January 1, 2023, and April 30, 2024.

During the time period, the city issued 971 residential single-family housing building permits based on 478 approved construction plans. Permits go through three phases – construction plan review, builder decision to apply for a permit, and permit review – before being issued. On average, these plans were approved in 48 business days and permits were issued in 26 business days. City Planning and Development staff and builders both have responsibilities during the plan and permit review processes. The time between plan approval and the application for the permit impacts the overall time it takes to issue a permit. However, the builders determine when they need to apply for permits after plans are approved.



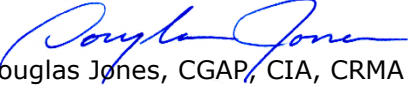
Permit issuance fluctuated between 10 to 134 permits per month between January 2023 and April 2024. Fewer single-family building permits were issued after the energy code changed in September 2023. Builders continued to obtain permits under the previous energy code through April 2024. Permits issued under the current energy code begin appearing in January 2024.

Between January 2023 and August 2023, the city received an average of 35 single-family home construction plan applications per month. Construction plan applications jumped to 122 in September 2023, before the energy code change. Following this surge, the number of plan applications dropped significantly then increased to 43 plan applications in March 2024 and 44 in April 2024.

On April 30, 2024, 22 of 30 unissued single-family housing building permits were waiting for the builder to pay fees required to issue the permit. By July 15, 2024, four of the eight remaining unissued permits were issued, and four were in the review process waiting for the builder to send additional information.

As of July 15, 2024, 48 construction plans applied for during the period were still in the review process. The city was waiting an average of 147 days for the builder to submit documents for 41 of these plans. The builder was waiting an average of one business day for city staff to complete their review work on the seven remaining plans.

We shared and discussed a draft of the report with the director of city planning and development on September 3, 2024. We did not request a response from the department because we did not make any recommendations in this audit. We would like to thank staff in City Planning and Development Department as well as the Information Technology Division for their assistance and cooperation during this audit. The audit team for this project was Clinton Pullam, Kara Jorgensen, and Jonathan Lecuyer.

  
Douglas Jones, CGAP, CIA, CRMA  
City Auditor

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# Timeliness of Residential Single-Family Building Permits

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# Introduction

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## Audit Objective(s)

*How long did it take the city to issue Residential Single-Family Housing Building permits between January 1, 2023, and April 30, 2024?*

The City Council adopted [Resolution 240484](#) directing the city auditor to conduct a performance audit to assess the timeliness of the issuance of residential single-family housing building permits between January 1, 2023, and April 30, 2024 and to:

- Identify the number permits issued
- Calculate the average time from application to permit issuance
- Calculate the number of permits pending
- Calculate the average time in process for pending permits

Our audit of permits focuses on calculating the number of single-family housing building permits issued during the period and the average processing time for various milestones. We did not evaluate the process.

We conducted this audit in accordance with Government Auditing Standards with the exception of reporting the views of responsible officials concerning the audit because we did not make any recommendations.

See Appendix A for more information about the audit objective, scope, methodology, and compliance with standards.

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## Background

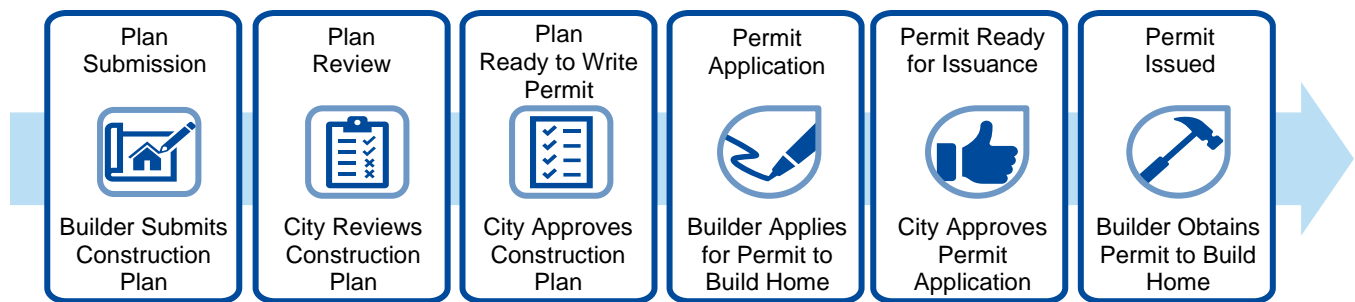
### **Permit Process: Single-Family Home Construction**

City code requires a builder to obtain a permit to build a single-family home in Kansas City.<sup>1</sup> To obtain a valid permit, a builder must have an approved construction plan for the single-family home they plan to build. The permitting process is outlined in Exhibit 1.

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<sup>1</sup> Code of Ordinances, Kansas City, Missouri, Sec. 18-16.

Exhibit 1: Permitting Process: Single-Family Home Build



**Construction plan review.** The permitting process begins when a builder submits a construction plan for review in CompassKC, the city’s public facing website for managing permit applications. The City Planning and Development Department reviews the plan submitted by the builder. Separate groups in City Planning review different aspects of the construction plan at the same time. Typically, one group reviews zoning requirements while a different group reviews the structural build plans. The city may request documentation, clarifications, or corrections for the builder to address prior to approving the construction plan.

**Code review requirements.** The city reviews each single-family home construction plan submitted by the builder against building code requirements. Recently, the city amended the building code to adopt new energy code standards. In October 2022, the City Council passed [Ordinance 220364](#) adopting the 2021 International Energy Conservation Code as part of the current energy code requirements. The 2021 energy code standards became mandatory as part of the current building code on September 29, 2023.

Once the city approves the plan, its status is changed to ‘Ready to Write’ in CompassKC. Builders can begin to apply for permits based on the approved construction plan.

**Single-family home permit types.** New single-family homes built in Kansas City require a series of permits including building, mechanical, electrical, and plumbing permits. The building permit is the permit to construct the home’s structure. Builders may apply for all four permits together once the construction plan has been approved. This audit reviewed processing time at various milestones for only the building permit.

**Permit application review.** When construction is ready to begin a builder applies for a permit to build the home’s structure in CompassKC based on the approved construction plan. The city reviews the building permit application and may request additional documentation, such as proof of licensure, from the builder prior to approving the permit. Once approved by the city, the building permit status becomes ‘Ready for Issuance’ in CompassKC. When the builder needs to obtain the permit, they pay the permit fees and can then access the permit through CompassKC. The permit status changes to ‘Issued’ when the fees are paid.

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## Findings and Recommendations

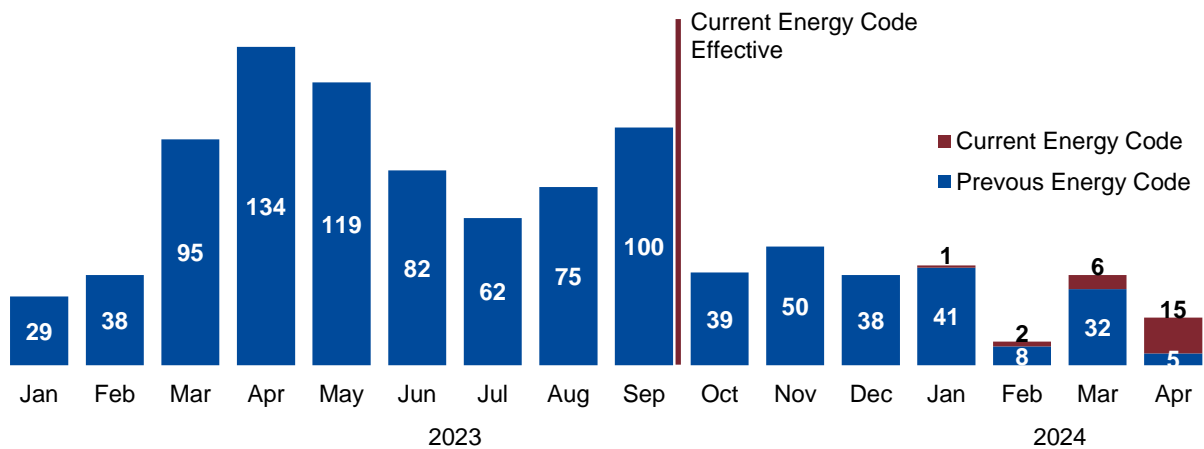
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### Fewer Single-Family Building Permits Issued After September 2023, Construction Plan Applications Starting to Increase

#### Single-Family Building Permit Issuance Declined After September 2023

Between January 1, 2023, and April 30, 2024, the city issued 971 residential single-family building permits.<sup>2</sup> The city requires builders to obtain a building permit based on an approved construction plan for each new home prior to beginning construction of the home's structure. A total of 24 permits were issued for plans reviewed under the current energy code. (See Exhibit 2.)

Exhibit 2: Single-Family Building Permits Issued by Month/Year and Energy Code (January 2023 – April 2024)



Source: CompassKC and City Auditor's Office analysis.

The current energy code for new construction became mandatory September 29, 2023. This change appeared to impact how builders apply for permits in the months after the code change. Builders have 180 days<sup>3</sup> to apply for a permit after the construction plan is approved. This means builders can apply for permits through approximately March 2024 from construction plans approved under the previous energy code in September 2023. Exhibit 2 shows builders continued to obtain permits under the previous energy code through April 2024. Permits issued under the current energy code began to appear in January 2024.

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<sup>2</sup> We removed one single-family building permit issued under the 2006 building code from our data as an outlier.

<sup>3</sup> Builders can apply for an extension beyond 180 days.

### Permit Issuance Has Three Phases

Permits go through three phases – construction plan review, builder decision of when to apply for a permit<sup>4</sup>, and permit review – before being issued. We calculated the average business to complete each phase as well as the average business days that both the city and builders were responsible for within each phase. (See Exhibit 3.)

Exhibit 3: Average Business Days – Construction Plan Review and Permit Review Processes (January 2023 – April 2024)



Source: CompassKC and City Auditor’s Office analysis.

### Single-Family Home Construction Plans Averaged Two Months to Approve

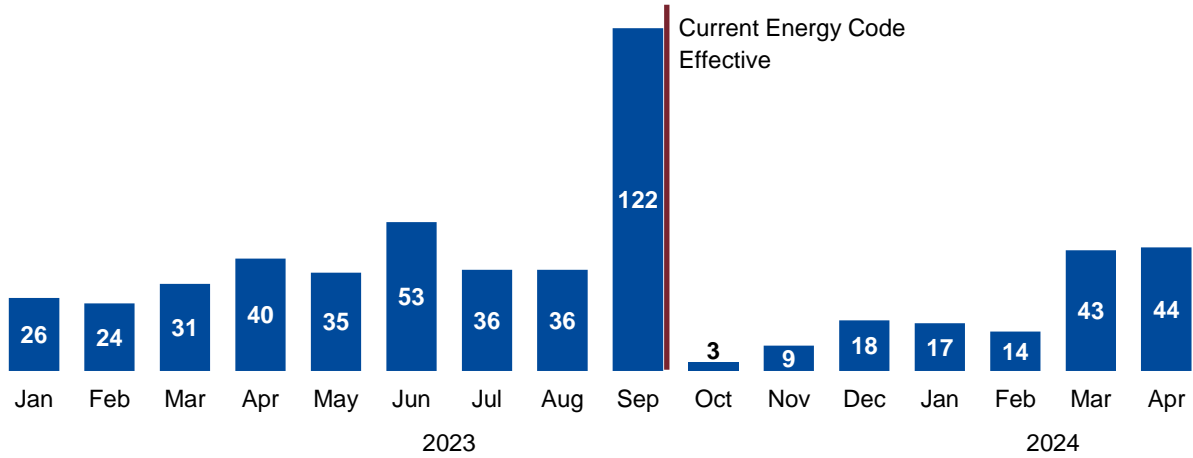
The construction plan review process (application to approval) took an average of 48 business days to complete for the 478 plans associated with the 971 building permits issued during the period. Construction plan review is the first step required for a builder to obtain a permit. This process begins when a builder submits a construction plan for review and ends when the city approves the plan.

Builders submitted a surge of construction plans for review prior to the effective date of the city’s current energy code. Between January 2023 and August 2023, the city received an average of 35 single-family home construction plan applications per month. In September, prior to the energy code change, the number of plan applications received increased to 122. Following this surge, the number of plan submittals dropped significantly then increased to 43 plan applications in March 2024 and 44 in April 2024. (See Exhibit 4.)

<sup>4</sup> Builders have 180 days to apply for permits after a construction plan is approved and can apply for an extension beyond 180 days. Builders can construct more than one home from one construction plan; each new home requires a separate building permit.



Exhibit 4: Single-Family Home Construction Plan Submittals (January 2023 – April 2024)



Source: CompassKC and City Auditor’s Office analysis.



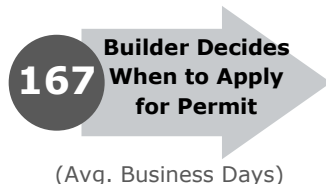
Builders accounted for most of the time during the construction plan review process. Builders used an average of 69 business days to respond to city requests for information and clarifications throughout the plan review process. City staff averaged 27 business days reviewing plans. The city approved 22 construction plans for the 24 permits issued during the period under the current building code. The city’s review time for these 22 constructions plans averaged 26 business days.

The construction plan review process may take several rounds of review if the city requests documentation, clarifications, or corrections for the builder to address. The plan review process averaged close to four review rounds per plan to achieve approval. City Planning’s goal is to complete each review round within seven business days. The department’s average business days per review round is close to their goal.

**Builders Applied for Half of Issued Permits Within Three Weeks After Construction Plans Approved**

The time it took builders to apply for their permit varied greatly. Once a construction plan has been approved and receives the status of ‘Ready to Write’, a builder can apply for a permit against the construction plan. Builders decide when they are ready to begin construction and need to apply for a building permit and have 180 days to submit a permit application before the construction plan expires.<sup>5</sup> Builders can construct more than one home from a single construction plan and each home requires a separate building permit.

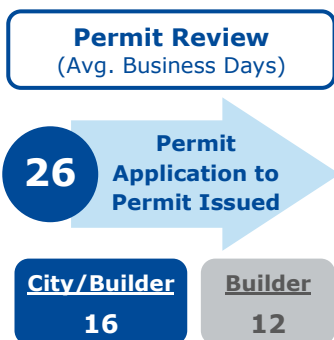
<sup>5</sup> Builders can apply for an extension beyond 180 days.



On average builders took 167 business days to apply for a permit after the city approved the plan associated with the permit.<sup>6</sup> However, a third of permits were applied for within 3 business days and half had applied within 13 business days.

### Single-Family Housing Building Permit Issuance Took About One Month

The building permit review process (application to issuance) averaged 26 business days for the 971 single-family housing building permits issued during the period. The average number of business days includes the time it took city staff to review the permit application and the builder to pay the fees required to issue the permit.



The average number of business days to review a permit application was significantly affected by a few permits. On average, permit approval took 16 business days. About one quarter of the permits were approved the same or following business day. Half of the permits were approved within 5 business days. Permits applied under the current energy code averaged four business days to complete review. Permits applied for under the previous energy code averaged 16 business days to complete review. We were unable to determine how frequently the city contacted builders for additional information and how long builders took to respond while the city was reviewing permit applications across the entire data population. We found this level of detail embedded in staff notes.

Builders paid permit fees on average 12 business days after the city approved the permit for issuance. CompassKC automatically issues a permit when the fee is paid, completing the permitting process.

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## Few Permits Applied for by Builders Remain Unissued, More Plans Remain Under Review

### Most Unissued Single-Family Housing Building Permits Waiting for the Builder

Thirty building permits applied for after January 1, 2023, remained unissued as of April 30, 2024. Of the 30, the city was still reviewing 8 and 22 had been approved. The 22 approved permits were ready to be issued but are waiting for the builder. Issuing a

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<sup>6</sup> The average business days between plan approval and building permit application are affected by multiple permit applications submitted on different dates from the same plan.

permit depends on the builder paying the permit fees. All 22 approved but not issued permits were applied for under the previous energy code. On April 30, 2024, these 22 permits had been waiting for fees to be paid an average of 95 business days. By July 15, 2024, 16 of these permits had the fees paid for and were issued.

Permits applied for under the previous energy code averaged a much higher pending time. (See Exhibit 5.) Of the eight permit applications pending on April 30, 2024, the three permits applied for under the current energy code were issued and one of the permits under the previous energy code was approved by July 15, 2024. According to staff notes and permit application history, the four permits that remain under review are waiting for the builder to submit information.

Exhibit 5: Single-Family Building Permits Under Review as of April 30, 2024

Energy Code	Permits Under Review	Average Business Days
Previous	5	144
Current	3	10

Source: CompassKC and City Auditor's Office analysis.

### Most Pending Construction Plans are Waiting for the Builder

Builders submitted 48 plans between January 1, 2023, and April 30, 2024, that were still in the plan review process on July 15, 2024. The city was waiting on the builder to respond to information requests for 41 of these, while 7 were under city staff review. (See Exhibit 6.) The city has been waiting on average 147 business days for a response from the builder. This is significantly higher than 69 business days, the average total time builders took to respond to the city for approved plans related to permits issued during the period.

Exhibit 6: Single-Family Construction Plans Under Review as of July 15, 2024

Plan Waiting On:	Energy Code	Plans	Average Business Days Waiting
Builder	Previous	23	222
Builder	Current	18	52
<b>Builder Total</b>		<b>41</b>	<b>147</b>
City	Previous	1	2
City	Current	6	1
<b>City Total</b>		<b>7</b>	<b>1</b>
<b>Grand Total</b>		<b>48</b>	<b>126</b>

Source: CompassKC and City Auditor's Office analysis.

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## Appendix A: Objective, Scope and Methodology, and Compliance Statement

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We conducted this performance audit of Residential Single-Family New Building Permits under the authority of Article II, Section 216 of the Charter of Kansas City, Missouri, which establishes the Office of the City Auditor and outlines the city auditor's primary duties.

A performance audit provides "objective analysis, findings, and conclusions to assist management and those charged with governance and oversight with, among other things, improving program performance and operations, reducing costs, facilitating decision making by parties with responsibility for overseeing or initiating corrective action, and contributing to public accountability."<sup>7</sup>

### Why We Did This Audit

The City Council adopted Resolution 240484 directing the city auditor to conduct a performance audit to assess the timeliness of the issuance of residential single-family housing building permits between January 1, 2023 and April 30, 2024 and to:

- Identify the number permits issued
- Calculate the average time from application to permit issuance
- Calculate the number of permits pending
- Calculate the average time in process for pending permits

### Audit Objective

This report is designed to answer the following question:

How long did it take the city to issue Residential Single-Family Housing Building permits between January 1, 2023, and April 30, 2024?

### Scope and Methodology

Our audit focuses on analyzing Residential Single-Family Housing Building permits data. Our audit methods included:

- Interviewing staff in the City Planning and Development Department to understand the permitting process and how they use CompassKC to process construction plan submittals and issue permits.
- Identifying permitting process milestones and outlining the entire process needed to obtain a permit to understand the permitting process and data needed for our analysis.

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<sup>7</sup> Comptroller General of the United States, [Government Auditing Standards](#) (Washington, DC: U.S. Government Printing Office, 2018), pp. 10, 11.

- Gaining access to CompassKC’s staff portal to obtain needed data and review records in more detail, as necessary.
- Downloading data from CompassKC for residential single-family newbuilding permits issued between January 1, 2023, and April 20, 2024, and construction plans submitted for residential single-family new housing building during the same period to analyze the timeliness of permit issuance.
- Reviewing and developing additional information and data from CompassKC needed for our analysis.
- Analyzing the construction plan and building permit data to calculate how long it takes to issue a permit as well as how long it takes for to complete the various milestones to in the permitting process for permits issued between January 1, 2023, and April 30, 2024.
- We did not evaluate the permitting process.

### **Statement of Compliance with Government Auditing Standards**

We conducted this performance audit in accordance with generally accepted government auditing standards with the exception of reporting the views of responsible officials concerning the audit because we do not make any recommendations. We do not believe the absence of a response affects the audit results.

Government auditing standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. No information was omitted from this report because it was deemed confidential or sensitive.

### **Scope of Work on Internal Controls**

We did not assess internal controls for the permitting process as part of this audit because we determined they were not significant to the audit objective.

### **Scope of Work on Data Reliability**

We worked with data provided by the Information Technology Division and from the city’s permitting system, CompassKC. We assessed the reliability of the data by reasonableness testing including date logic, comparing provided information against CompassKC records and interviewing City Planning and Development staff about the data. We determined the data used in this report was sufficiently reliable for the purposes of this audit report.