

Bloomington Public Safety

714 S Rogers Street Building Size Analysis and Area Methodology

[Draft, prepared by American Structurepoint on 3/3/2026]

1. Purpose of this Summary

This document clarifies the square footage terminology used in the study and explains how the total building size was derived from the departmental program areas. The intent is to align all parties working from a consistent methodology when discussing the Rogers Street building and potential alternatives. The analysis also illustrates why the existing building produces significantly higher grossing factors than a purpose-built public safety facility.

2. Area Definitions

NSF – Net Square Footage: NSF represents the usable space assigned to a specific function or department. This is measured wall-to-wall within a room or space and includes areas such as offices, workstations, interview rooms, storage rooms, and other program spaces used directly by staff.

DGSF – Departmental Gross Square Footage: DGSF represents the total space required for a department. It includes the department's usable rooms (NSF) plus internal circulation and wall thickness within the departmental area.

DGF – Departmental Grossing Factor: The Departmental Grossing Factor (DGF) estimates the additional space required within a department beyond its usable rooms.

BGSF – Building Gross Square Footage: BGSF represents the total size of the building measured to the outside face of exterior walls.

BGF – Building Grossing Factor: The Building Grossing Factor (BGF) accounts for shared building spaces such as public corridors, stairways, elevators, mechanical rooms, restrooms, janitor closets, shafts, structural elements, and wall thickness.

The exhibit below illustrates a typical building floor plan organized into **tenant suites**. For the purposes of this study, each tenant suite can be thought of as equivalent to a **departmental area**.



Diagram adapted from ArchToolbox, "Building Area Calculations."

3. Programming Methodology

The study organized the police program using Departmental Gross Square Footage (DGSF). The departmental areas used in the study were derived from multiple sources, including a review of the Shower's Building construction documents, the prior programming prepared for the Shower's facility, discussions with the Police Chief and other staff, and references to comparable public safety facilities. These inputs were used to establish reasonable departmental planning areas for each function within the department.

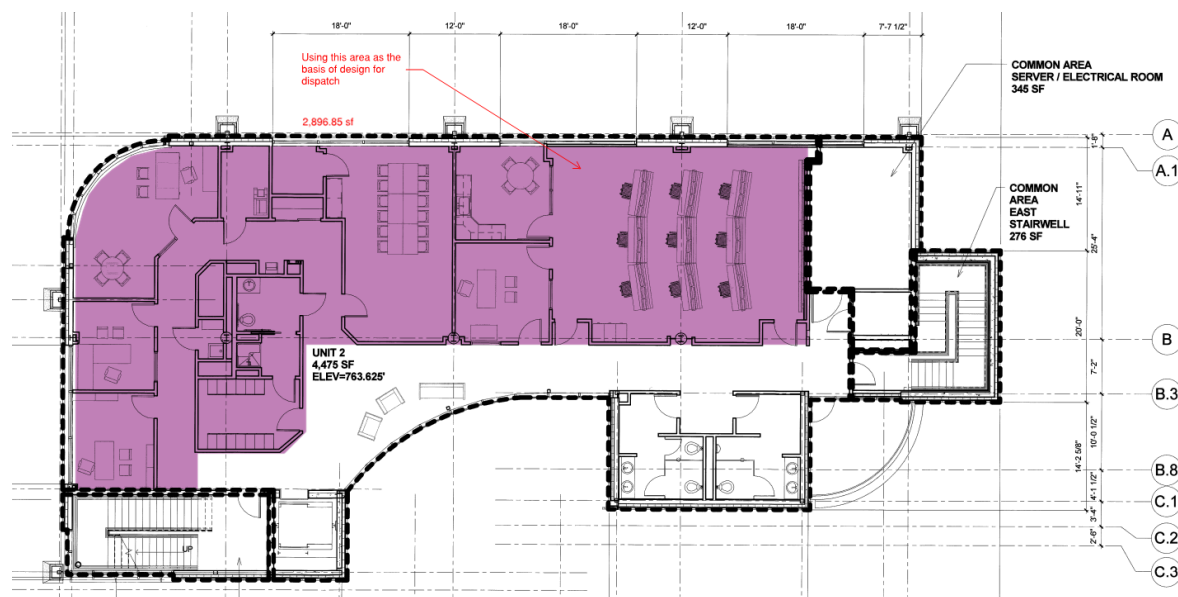
Program Components	Programmed Net ASF	Grossing Factor	Programmed DGSF	As Designed DGSF	Delta	Recommend	Basis of Design	Comments
Clerk + Records	3,252	1.30	4,228	2,274	(1,954)	2,300	Shower's Building Layout	Program split between programming and design - no concerns
Intake	463	1.25	579	-	(579)	600	Original Program	
Reports	240	1.25	300	1,014	714	1,000	Shower's Building Layout	
Sally Port	1,080	1.25	1,350	-	(1,350)	1,350	Original Program	Size for a BearCat and two patrol vehicles
E.O.C.	-	0.00	-	567	567	1,200	N/A	Increasing the scale of the EOC to include a larger gathering and command area
MEP	-	0.00	-	-	-	2,300	N/A	Specific to new building
Admin	-	0.00	-	4,157	4,157	4,000	Shower's Building Layout	
Social Work	-	1.30	-	1,088	1,088	1,200	Shower's Building Layout	Program split between programming and design - no concerns
Collab. / Breakroom	920	1.25	1,150	211	(939)	400	Shower's Building Layout	Program split between programming and design - no concerns
Detectives	4,456	1.30	5,793	5,943	150	6,000	Shower's Building Layout	
Dispatch	-	0.00	-	-	-	2,900	County Dispatch Layout	See reference drawing
Evidence	2,424	1.30	3,151	2,626	(525)	2,600	Shower's Building Layout	
Lockers + Showers	965	1.25	1,206	1,390	184	1,400	Shower's Building Layout	
RTCC	-	1.30	-	-	-	1,500	Lafayette Police Department	See reference drawing, collaborative area split between current program
Support + Storage	1,236	1.25	1,545	303	(1,242)	300	Shower's Building Layout	Program split between programming and design - no concerns
Uniform	1,528	1.25	1,910	1,299	(611)	1,300	Shower's Building Layout	
Interview	520	1.30	676	894	218	900	Shower's Building Layout	
Training + PT	1,200	1.25	1,500	1,942	442	2,000	Shower's Building Layout	
Wellness + Fitness	-	1.25	-	2,619	2,619	-	Shower's Building Layout	
IT	500	1.25	625	419	(206)	450	Shower's Building Layout	
Building Support	-	1.30	-	-	-	200	N/A	Specific to new building
Restrooms	-	1.30	-	-	-	1,700	N/A	Specific to new building
Shell Space	-	1.25	-	3,880	3,880	-	N/A	Specific to new building
						35,600		

It is important to note that this study did not validate the program at the individual room level (Net Square Footage – NSF). The analysis was conducted at the departmental level (DGSF) to evaluate

the viability of repurposing the Rogers Street building for police operations. Detailed room-by-room programming and validation of individual space sizes will occur during a subsequent programming phase if the City chooses to move forward with either repurposing the existing facility or developing a new purpose-built facility.

4. Application to the Police Program

Using this methodology, departmental areas were estimated for police functions. For example, the Dispatch unit was treated as a departmental suite. The conceptual diagram prepared for the study illustrates the approximate departmental takeoff used in the analysis.



Dispatch DGSF $\approx$ 2,900 SF

This approach allowed the study to establish reasonable departmental area assumptions without conducting a full room-by-room programming exercise.

In some instances, building support spaces were allocated directly to departments rather than treated as shared building infrastructure. These spaces support specific operational functions associated with police activities and would not typically be included in a standard office building program. Generally in this study, spaces that directly support a department's operations were included within that department's Departmental Gross Square Footage (DGSF), while spaces intended to serve the building were treated as part of the overall building gross.

For example, the Dispatch suite includes a single hold restroom associated with that unit. Because this restroom supports dispatch operations directly and would not function as a shared building amenity, it is included within the departmental allocation. Shared restrooms located along public

corridors are excluded from the departmental area and instead considered part of the overall building gross.

A similar approach was used for certain department-specific mechanical and equipment areas. Public safety facilities often require specialized building systems that exceed those found in conventional office buildings. Examples include spaces for evidence-related environmental control systems, backup power generation, and security or communications equipment. Because these systems are integral to police operations, the space required to support them was allocated to the relevant department rather than treated as general building infrastructure.

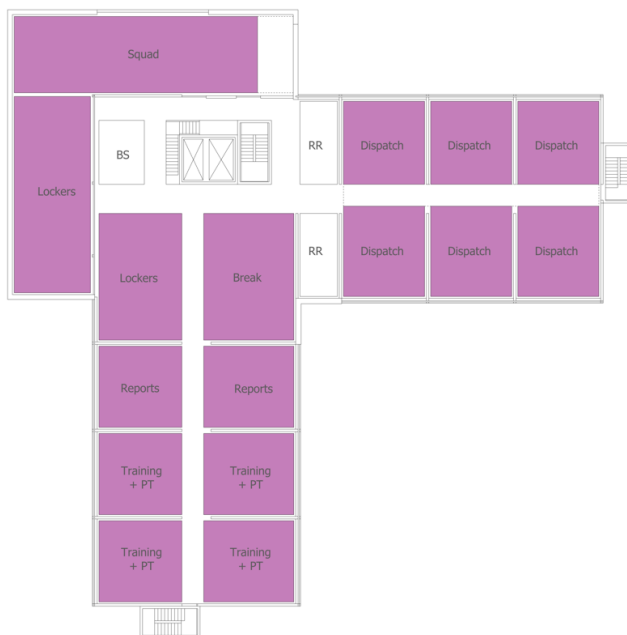
5. Building Gross Calculations

When estimating the total building size required to support a program, a building grossing factor is applied to departmental areas. $BGSF = DGSF \times \text{Building Grossing Factor}$. Grossing factors are derived from experience designing similar facility types and allow planners to estimate building size without fully designing the building. In this case, the conceptual layouts allow us to directly measure the effective grossing factors of the Rogers Street building.

For the second floor of the Rogers Street building:

Building Gross Area: $\approx 16,300$ GSF

Departmental Gross Area: $\approx 10,600$ DGSF



The resulting grossing factor is: $16,300 \div 10,600 = 1.54$

This equates to roughly 65% building efficiency, which is lower than typical public safety facilities.

6. Causes of Reduced Efficiency

The elevated grossing factor is primarily the result of adapting an existing structure that was not originally designed for police operations. Examples include:

- Four stair towers where two would likely be sufficient
- Two elevator cores where one may be adequate
- Structural offsets that widen corridors
- Circulation patterns driven by existing structural walls

These factors create building areas that cannot be efficiently utilized by the police program.

7. Comparison to Purpose-Built Police Facilities

Purpose-built police facilities typically fall within a building grossing factor range of:

1.35 – 1.45

This corresponds to building efficiencies of roughly 70–75%.

Applying that range to the departmental program used in the study yields the following estimate:

Departmental Program Area: $\approx$ 35,600 DGSF

Estimated building size: 48,000 – 53,400 GSF

For planning purposes, a working target of approximately 54,000 GSF was used when discussing conceptual construction costs with the construction manager. This number reflects an order-of-magnitude estimate derived from the departmental program and typical public safety grossing factors. Because the study did not validate the program at the individual room level (NSF), this figure should be considered illustrative only and not a finalized building size.

8. Key Takeaway

The Rogers Street building can physically accommodate the police program but does so with significantly reduced spatial efficiency compared to what would typically be achieved in a purpose-built police facility. Based on the departmental program areas evaluated in this study, it is likely that a purpose-built facility could ultimately be smaller and more efficient. If the City chooses to explore that option, a future study could evaluate a purpose-built facility using the planning considerations outlined above.