



Space And Budget Estimating Resource

Crime Lab Design can help you develop a sound space and budget projection for early-stage facility planning, whether for new construction or renovation. Our SABER tool is about the metrics. These basic metrics significantly affect the budget and are the same for every forensic facility, but it's the data that makes *your* facility unique.

- 1 Planning horizon** targets the facility's growth potential (10, 15 or 20 years out) and not the life of the building. Align this target against reliable documents such as a recent population study, an annual operations report or city budget to add credibility.
- 2 Forensic services** are the services you would like to offer or need to prepare for in the future; e.g., mass casualty, toxicology and DNA. It could also be representative of services that are being phased out such as trace or questioned documents.
- 3 Staff capacity** is the number of staff that would be working in each section and should represent growth projections or result of potential consolidation.
- 4 Space** is split into two groups: variable and fixed. Variable numbers are based on a portion of a planning module for a specific scientific function then multiplied against the number of staff. Office space is treated the same way. Fixed numbers are based on the scientific function regardless of how many people might be working in the section.
- 5 Net-to-gross ratio** is a space factor to cover the difference between paint-to-paint area and the space needed to support this net area. Additional space that makes up gross square feet include: toilets, circulation and building infrastructure. The ratio for lab space can range from 50% to 65%, depending on the function of the lab. A lower ratio yields more gross square footage. The ratio for office space can range from 60% to 75% depending on the configuration of office space. A higher ratio yields less gross square footage.
- 6 Construction costs** are the dollars per GSF to build the project. This number varies from region to region across the country and will vary between new construction or renovation.
- 7 Soft costs** represent a percentage of the construction cost and are commonly associated with: design services, contingencies and other fees that apply to your project. This percentage will also vary from region to region and the type of construction.
- 8 Instrument/equipment cost** is a placeholder for providing or relocating equipment necessary for the scientific work. It is derived from our instrument/equipment database into a dollar figure per staff member then multiplied by the number of staff per section.

You need to know right now!

| ① | Space type that changes (variable) with the number of occupants (Net Square Footage) | | | | | | | | | Space type that does not change (fixed) with the number of occupants (Net Square Footage) | | | | | Construction Cost / SF \$ 400 | Soft Cost 25% | Total Project Cost | Instrument Allowance \$ 30,000 | | |
|-------------------------------------|--|-------------------------|--------------------------------------|---------------------|--|--|----------------|-----------|------------------|---|------------------------|------------------------|----------------|---------------|-------------------------------|---------------|-------------------------|--------------------------------|-------------------------|-------------------------|
| | Discipline | Staff | Examination | Preparation | Reference | Storage | Analysis | Office | Office Support | Instrument / Specialty | Instrument / Specialty | Instrument / Specialty | NSF / Occupant | NSF Fixed | | | | | Total NSF | GSF Factor |
| Latent Print | 34 | 61 Individual | 151 Prep ALS Vestibule Swabbing | 20 Library | 40 Individual Bulk 10 Print | 40 Wet Process Dry Process Digital Imaging | 64 Individual | 32 Shared | 242 VMD | 484 | 0 | 13,892 | 726 | 14,618 | 62% | 23,577 | \$ 9,430,860.22 | \$ 2,357,715.05 | \$ 11,788,575.27 | \$ 3,460,000.00 |
| Questioned Documents | 34 | 61 Individual | 91 ALS Vestibule Prep | 30 Library | 61 Individual Bulk | 61 Instrument Comparison | 64 Individual | 32 Shared | 0 | 0 | | 13,549 | 0 | 13,549 | 62% | 21,853 | \$ 8,741,290.32 | \$ 2,185,322.58 | \$ 10,926,612.90 | \$ 7,340,000.00 |
| Photo | 6 | 30 Individual | 121 Color Lab B&W Lab | 20 Library Material | 121 Individual Bulk Film & Equip | 121 Digital Station Photo Finish | 64 Individual | 32 Shared | 726 Studio | 968 Studi | 0 | 3,057 | 1694 | 4,751 | 62% | 7,662 | \$ 3,064,838.71 | \$ 766,209.68 | \$ 3,831,048.39 | \$ 770,000.00 |
| Evidence Control | 2 | 61 Individual | 121 Prep Vestibule | 0 | 0 | 61 Instrument | 64 Individual | 32 Shared | 242 Cold Storage | | 0 | 676 | 726 | 1,402 | 62% | 2,261 | \$ 904,516.13 | \$ 226,129.03 | \$ 1,130,645.16 | \$ 290,000.00 |
| Administration and Building Support | 4 | 363 Conference Training | 484 Entry Lobby Attorney Review Shop | 242 Library | 484 Office Supply Case Files Lab Supply Dead Files | 0 | 128 Individual | 32 Shared | 2000 Back Door | | 0 | 6,932 | 2000 | 8,932 | 62% | 14,406 | \$ 5,762,580.65 | \$ 1,440,645.16 | \$ 7,203,225.81 | \$ 530,000.00 |
| Totals | 80 | | | | | | | | | | | 38,105 | 5,146 | 43,251 | | 69,760 | \$ 27,904,086.02 | \$ 6,976,021.51 | \$ 34,880,107.53 | \$ 12,390,000.00 |

As a first and critical step in planning new or renovated facilities, you can anticipate how much funding you will need and what that funding will support. Crime Lab Design's SABER tool identifies and calculates space and budget* assumptions based on your unique data† and presents them in a clear spreadsheet format. This resource can be used by itself or as a companion to a Needs Assessment.

How big...How much?



ARCHITECTURE
ENGINEERING
PLANNING
DESIGN

26913 Northwestern Hwy Suite 200
Southfield MI 48033

www.crimelabdesign.com

For additional information, or to discuss your facility issues with an expert, please contact:

Ken Mohr
kenm@crimelabdesign.com

Lou Hartman, PE, LEED AP
louh@crimelabdesign.com

248.262.1620

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* Costs vary widely among forensic labs in different regions and states, and these facilities serve different communities with different needs. Although the benchmark figures used to model costs were obtained through extensive research, they may not represent true costs for many forensic facilities. Generally, the cost models may vary $\pm 12\%$ from the actual cost estimate at final design.

† Modeling costs for space, facilities and equipment depends on having a clear concept of the unique services that each organization offers and the demographics of its service area. Crime Lab Design gathers this and other data through a simple worksheet.