

METHODOLOGY AND DATA COMPANION

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The painful price of security: what protecting a Jewish institution costs

Methodology and data companion to the working paper

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A full working paper, with the complete introduction, related literature, data and design, results, discussion, limitations, conclusion, and references, accompanies this companion.

© 2026 Heshbon and the author. This companion explains how the working paper was built and how to read its results. It can be shared and cited with attribution.

At a glance

Research question	What does physical security cost per person and per family in an American Jewish community, how has that cost changed since 2016, and how does the burden vary with the size of the community?
Data	A panel of 2,335 IRS Form 990 returns filed by 265 federation-system entities for tax years 2014 to 2025; the IRS Business Master File; the Heshbon Community Database of 2,033 institutions in 319 communities; the AVI CHAI census of Jewish day schools; the Foundation for Jewish Camp census; the 2020 US Religion Census; the ADL Audit and FBI hate crime series for 2016 to 2025; Bureau of Labor Statistics occupational wage statistics for security guards; and Jewish population by community from the American Jewish Year Book 2023, Appendix A, held in the Berman Jewish DataBank. The Teach Coalition day school security survey is held out of estimation and used to test the model.
Unit of analysis	The individual community, keyed to its Berman population count. The estimating sample is the 143 communities with a Jewish population of 2,000 or more, which together hold 7,278,100 people, 94.6 percent of the national total.
Statistical method	A bottom-up unit-cost accounting model. Institution counts are fitted as a sublinear power function of population, every institution type is priced by one identical formula from published component costs, and the community figure is the sum divided by that community population. The headline is the unweighted mean of the 143 community figures, and the build is validated out of sample against the only measured survey.
Headline finding	The average American Jewish community spends \$142.14 a person a year on institutional security, or \$853 for a family of six. The population-weighted aggregate is \$76.10 a person, and 128 of the 143 communities pay more than that aggregate.
What it shows	Security cost per person falls as communities get larger, because institution counts do not scale with population. The burden is regressive in community size, running from \$63.29 a person in the largest communities to \$193.80 in the smallest.

The question behind the paper

Jewish institutions in the United States are guarded now in a way they were not a decade ago. Congregations post someone at the door on Shabbat morning, day schools run vestibules and

cameras and contract officers, and communities employ security directors who did not exist as a job title before 2018. None of this appears as a line on any bill a family receives. It arrives folded into synagogue dues, day school tuition, a

federation campaign letter and a community centre membership.

The paper asks what that costs, and it asks the question at the level a community actually experiences it. A national total divided by the national Jewish population is a real number, but it describes almost no community, because seven very large communities hold half the population and enjoy the cheapest protection per person. The figure a federation director or a school finance committee lives with is their own, and the average of those figures is nearly twice the national aggregate.

Where the data come from

The federation panel. A database of 2,335 IRS Form 990 returns filed by 265 federation-system entities for tax years 2014 to 2025, parsed to the grant, expense, compensation and related-organisation level. It supplies the observed series on grants to security organisations, disclosed security-director salaries, itemised Part IX security expenses and federation security subsidiaries. Every table filters to current returns, since 51 amended or superseded filings would otherwise double count 2.6 percent of dollars.

The institution census. National counts by institution type come from published censuses rather than from the tax record, because most congregations file no Form 990 at all. Congregations are anchored on the 2020 US Religion Census, day schools on the AVI CHAI census of 2018 to 2019, camps on the Foundation for Jewish Camp census of 2025, and the Orthodox layer on the Heshbon Community Database, compiled by the author from public sources and current to July 2026. The IRS Business Master File is used to bound the congregation count from above and to classify entity type.

The population counts. Jewish population by community is taken from Appendix A of the American Jewish Year Book 2023, compiled by Sheskin and Dashefsky and held in the Berman Jewish DataBank. This is the denominator throughout. Community studies underlying the appendix range in date from 1955 to 2023.

The bill rate. The price of an officer-hour is derived from published labour statistics rather than asserted from a transaction. The base is the mean hourly wage for security guards, occupational code 33-9032, in the Bureau of

Labor Statistics Occupational Employment and Wage Statistics programme for May 2025, weighted across states by Jewish population, which gives \$20.90. An armed premium of 1.126 is applied, taken from the Salary.com armed-guard benchmark of \$23.00 against the all-guard mean of \$20.42. A contractor markup converts wage to bill, using the finding that officer pay is 67 to 75 percent of the final bill rate. A short-assignment surcharge of 22 percent is applied, the midpoint of the 15 to 30 percent premium published rate cards attach to short and non-standard shifts, because congregational coverage is weekend and festival work in short blocks. That build-up gives \$33.15 for a continuous post and \$40.45 for weekend coverage. Set against five further observations, including the \$90,000 fully loaded guard-year the Jewish Federations of North America reported to Congress and the government-contract median of \$45.20, the median of seven anchors is \$45.20 and the adopted rate is \$45.00. Earlier drafts of this work used \$55 on the strength of one reported transaction at one congregation; that observation is now the highest anchor rather than the estimate.

The post count. An institution with more than one controlled entrance needs more than one officer, and the cost model prices that explicitly. The chief executive of the Community Security Initiative of UJA-Federation of New York stated in March 2026 that institutions probably have to have multiple armed guards, on the reasoning that an attacker who disables the single officer removes the whole protective layer, and the same body runs a reimbursement programme framed around moving institutions from one officer to two. A large congregation is therefore costed at two posts during services and three at the High Holidays, a day school at two through the academic day with a third at arrival and dismissal, a community centre at two, and the remaining types at one. Costing every block at a single post instead would give a national bill of \$431.4 million rather than \$553.9 million, so the multiple-post decision accounts for 22 percent of the national bill, and lifts it 28 percent above the single-post baseline, which is why it is stated openly.

The held-out survey. One dataset is deliberately excluded from the estimation. The Teach Coalition study of April 2025 surveyed 63 Jewish day schools in New York, New Jersey, Pennsylvania and Florida and recorded mean

annual security spending of \$339,297 in 2024 to 2025, up from \$184,228 two years earlier. It is the only measured study of institutional security cost in this population. Because no part of it enters the model, it serves as an out-of-sample test of the component build rather than as an input to it.

The incident record. The demand side is documented from two national series that disagree by an order of magnitude because they measure different things. The Anti-Defamation League Audit of Antisemitic Incidents counts criminal and non-criminal incidents reported to the organisation and ran from 1,267 in 2016 to 9,354 in 2024 before falling to 6,274 in 2025. Federal Bureau of Investigation hate crime statistics count criminal offences through voluntary agency reporting and ran from 684 anti-Jewish incidents in 2016 to 1,938 in 2024, roughly 70 percent of all religious-bias hate crime. Neither series enters the cost estimate. They establish that a purchase with no stated cause had a cause.

The federal programme. Appropriations for the Nonprofit Security Grant Program come from Congressional Research Service report IF13201 and from FEMA notices of funding opportunity. The Jewish share of awards is estimated, since FEMA has never published a religion-coded award table; the best modern figure is the MPAC Center for Security, Technology and Policy analysis of July 2026, which finds 57.9 percent of \$850 million awarded between January 2017 and May 2026 went to Jewish communities.

The statistical method, named and explained

The paper does not run a hypothesis test as its main analysis. Its engine is a bottom-up unit-cost accounting model of the kind used to price public service provision, assembled in three steps.

First, institution counts per community are modelled as a power function of Jewish population. The exponent is fitted on the Heshbon Community Database counts, which give roughly 0.40 for the Orthodox layer alone, then moderated to 0.80 for congregations and 0.85 for day schools across all denominations and anchored on named communities. Allocation is closed by largest remainder so that community counts sum exactly to the national counts, and the apparatus layer is allocated as one security director per community at \$160,000 plus a

population-proportional share of national body expenditure. The community figures therefore decompose the national bill without residual. An exponent below one means larger communities have proportionally fewer buildings, which is the mechanism behind every distributional result in the paper.

Second, every institution type is priced by one identical expression: post-hours multiplied by the bill rate, plus a hardening package divided by its ten-year service life, plus a systems, monitoring and training line. Post-hours are the sum over coverage blocks of posts multiplied by hours, so an institution staffing two positions during services is charged for both. No line is imported from a survey and no type is treated differently from any other. The coverage schedule behind every hour count is stated explicitly, so a reader who disagrees with a schedule can substitute their own and recompute. The organisational layer is the one exception in kind rather than in method: national bodies and community security directors are costed from filed expenditure and counted headcount, because their spending is directly observable.

The build is then tested out of sample. It produces \$253,825 per Jewish day school nationally against the \$339,297 the Teach Coalition measured across Florida, New York, New Jersey and Pennsylvania, which is 75 percent of the measured figure. The internal composition is close: guards are 72 percent of the modelled cost against 69 percent measured. The level gap admits two readings and the paper reports both. The national figure should sit below a four-state figure whose own state means run from \$82,500 in Pennsylvania to \$287,081 in New York. The model may also be conservative on coverage: at the adopted rate the measured guard spending implies 5,203 officer-hours a school against the 4,085 the model specifies, which is roughly one further post through the academic day. Because the survey is held out, that is a finding about the model rather than an adjustment to it.

Third, the community figure is the sum of its priced institutions divided by its Berman population, and the headline is the unweighted mean of those 143 figures. The paper reports the population-weighted aggregate alongside it, because the two answer different questions and the difference between them is itself a finding.

Two supporting analyses use the tax panel directly and involve no modelling. Disclosed security-director salaries divided by catchment population give an observed, unmodelled version

of the same regressivity. An index of three funding channels from 2016 to 2024 shows why the giving data understates the trend.

Key results from the paper

Table 1. Annual security cost per Jewish person and per family of six, by community size.

Community size	Communities	Per person	Family of six
Under 5,000	43	\$193.80	\$1,163
5,000 to 15,000	35	\$165.35	\$992
15,000 to 50,000	31	\$113.00	\$678
50,000 to 150,000	27	\$78.72	\$472
Over 150,000	7	\$63.29	\$380
All 143 communities, mean	143	\$142.14	\$853

Note. Figures are medians within each band and the unweighted mean across all communities. The median community pays \$139.94 a person and the interquartile range runs from \$96.70 to \$175.98. The population-weighted national aggregate is \$76.10 a person, or \$457 for a family of six, and 128 of the 143 communities pay more than that.

Table 2. The national bill by institution type, 2024, every line built from the same formula.

Institution type	Sites	Post-hours/yr	Cost each	Annual total
Jewish day schools	950	4,085	\$253,825	\$241.1M
Congregations, established	2,280	1,934 / 744	\$73,997	\$168.7M
National bodies and security directors				\$41.5M
JCCs	150	6,240	\$345,800	\$51.9M
Camps	296	772	\$57,740	\$17.1M
Elder care facilities	110	2,080	\$128,600	\$14.1M
Hillel buildings	450	400	\$31,000	\$13.9M
Family service sites	200	312	\$27,040	\$5.4M
Total	4,436			\$553.9M

Note. Established institutions only. Shtieblach, storefront minyanim and small Chabad houses are excluded because they run volunteer or self-provided security. Cost each equals post-hours times the \$45.00 bill rate, plus the hardening package divided by ten, plus a systems and training line; congregations show large and medium schedules separately and \$73,997 is the blend at one large congregation for every two medium. The organisational line is built from filed expenditure and counted headcount rather than from the formula. By input class the total is \$406.8M of guards and security personnel, \$94.0M of amortised hardening and \$53.0M of systems, monitoring and training, so 73 percent of the bill is recurring payroll rather than depreciable capital.

Table 3. Disclosed security-director salary per Jewish person, fiscal year 2024.

Federation	Salary	Jewish population	Per person
Akron	\$101,627	3,000	\$33.88
Kansas City	\$132,409	22,100	\$5.99
Pittsburgh	\$160,514	49,200	\$3.26
Miami	\$152,829	119,000	\$1.28
Boston	\$214,245	248,000	\$0.86

Federation	Salary	Jewish population	Per person
Chicago	\$205,700	319,600	\$0.64

Note. Six of the thirteen federations that disclosed a security officer in fiscal 2024. All thirteen appear only under the rule requiring the five highest-compensated employees; none is reported as an officer or key employee. UJA-Federation of New York discloses no security officer and its fifth-highest-paid threshold is \$458,906, so a director at the \$138,700 median could not appear on its return.

How to read the results

Table 1 is the heart of the paper. The figure a community faces falls steadily as the community grows, from \$193.80 a person in the smallest band to \$63.29 in the largest, a spread of more than three to one. The mechanism is indivisibility. A community of two thousand still needs a synagogue, and the synagogue still needs someone at the door on Shabbat morning; it cannot buy a third of a guard. Because institution counts rise with population at roughly the four-fifths power, a community ten times larger has about six times the buildings, and spreading six times the cost across ten times the people lowers the per-person figure by a third at each step.

Table 2 shows where the money goes and why it behaves as it does. Day schools carry \$241 million of a \$553.9 million bill, so about 44 percent of national spending protects the roughly three percent of American Jews who are children in day school. Seventy-three percent of the total is payroll rather than hardware, which matters for persistence: a camera is bought once and depreciates, while a guard is a recurring wage bill with no terminal date. It also matters for the reading of the federal programme, since the \$263 million of federal money reaching Jewish institutions in fiscal 2024 exceeds the entire \$94.0 million amortised hardening layer by 2.8 to one, which makes a capital grant programme into a payroll subsidy.

Table 3 is the unmodelled check on Table 1. These are filed salaries divided by real populations, and they reproduce the same gradient at a fifty-three to one ratio between Akron and Chicago for the identical job. The table also demonstrates why the tax record cannot measure this at scale: a security director appears on a Form 990 only if the salary clears that filer's fifth-highest-paid threshold, and at large federations it does not.

What the numbers do not claim

The identity is transparent but its parameters are judgments, and two of them carry the estimate. The bill rate derivation embeds three choices:

where in the documented 12 to 23 percent range to place the armed premium, since this work uses its lower bound, where in the 67 to 75 percent band to place the contractor markup, and whether the short-assignment surcharge applies to congregational work. The post counts rest on practitioner testimony rather than on any enumeration of controlled entrances, because no such enumeration exists for American Jewish institutions; a census of doors and staffed positions would be the single most useful addition to this literature. Across the plausible range of both parameters the national bill runs from \$377 million to \$853 million. A large congregation is costed at 1,934 post-hours a year and a medium congregation at 744. Two named observations bracket the plausible range: Temple Emanu-El in Closter, New Jersey reports \$650,000 a year, about 15 percent of its budget, while a Long Island Chabad congregation runs at about \$33,300. The day school schedule is the best-tested of the eight, because it is the one checked out of sample.

The congregation count itself is uncertain by about a third. The 2020 US Religion Census counts 3,306, the 2001 American Jewish Year Book census counted 3,727, and the IRS Business Master File yields 4,364. The disagreement sits in Haredi Brooklyn, Lakewood and Rockland, and the federal record is close to blind to Reform and Conservative congregations, which sit under their movements' group exemption rulings.

Federal money is inside the estimate rather than beside it. Nonprofit Security Grant Program dollars pay for part of what institutions spend, so the \$263 million reaching Jewish institutions in fiscal 2024 sits within the \$553.9 million total. The non-government communal share is therefore about \$291 million a year. Insurance is not priced at all, because no evidence on Jewish institutional premiums after 2018 exists in any public source. Volunteer labour is not priced either, and Community Security Service alone fields more than 7,100 trained volunteers covering over 500 synagogues weekly.

One finding was tested and withdrawn. We looked for evidence that security spending displaced other communal giving and could not sustain it. A difference-in-differences on real grant dollars appeared to show displacement, then collapsed when 57 percent of the comparison group proved to be foundation arms rather than operating federations. Restricted to operating federations the effect vanishes at a p of 0.762, and adding institutional type to the regression drives the coefficient to negative 0.21 at a p of 0.988. Nothing in this data identifies what was cut to pay for security, which is not the same as nothing having been cut.

Reproducing the analysis

The federation panel is rebuildable from IRS Form 990 electronic filings for the 265 roster entities, filtered to current returns and to tax years 2014 through 2024, since 2025 is incomplete. Community populations are in Appendix A of the American Jewish Year Book 2023. Institution counts come from the published censuses named above, and the sublinear exponent can be refitted on the Heshbon Community Database counts. Every unit cost is reproducible from the coverage blocks and post counts in Appendix A of the working paper, the \$45.00 bill rate and its seven anchors, and the ten-year amortisation, and the Teach Coalition study of April 2025 reproduces the out-of-sample test without entering the build. Federal appropriations are in Congressional Research Service report IF13201 and the FEMA notices; the Jewish share of awards requires the MPAC analysis or an independent coding of USAspending records under assistance listing 97.008.