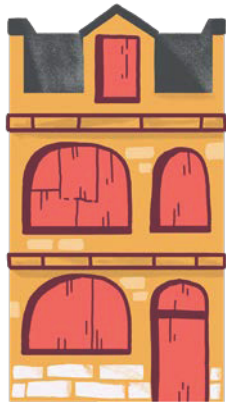


Vacancy Costs St. Louis Millions of Dollars Each Year



In 2024, the City devoted about

\$20 Million

in direct services to maintain vacant property

Public Safety and Emergency Services



\$250K EMS



\$1.6M Fire



\$7.4M Police

Total

\$9,250,000

Direct Costs to the City



\$130K Board Ups



\$2.7M Demolitions



\$3.2M Mowing



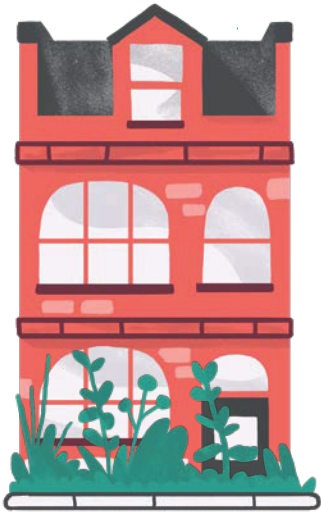
\$4.4M Stabilization

Total

\$10,430,000



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Vacancy Has Far-Reaching Ripple Effects

\$310 million

in lost personal
property value and
unrealized family
wealth potential

\$25 Million

in lost potential annual
real estate tax revenue
to the City

Lost Potential of \$25 Million of Annual Real Estate Tax Revenue

\$15M St. Louis Public Schools

\$1.7M St. Louis Public Libraries

\$756K Children's Services

\$735K St. Louis Zoo

\$275K Mental Health Services



28%

of LRA lots are
located next to
a home



[!\[\]\(eabd9f9ababee93effadc3b380fe65fd_img.jpg\) Download the *From Policy to Progress* Report](#)

Cost of Vacancy Analysis Methodology

Data Analysis: Brian Adler, University of Missouri St. Louis (UMSL)

Data Management: Dave Menninger, UMSL Community Innovation and Action Center

Investigating the cost of vacancy within any city necessitates looking beyond the vacant properties themselves. Our strategy was to conduct a spillover analysis in order to estimate the financial impacts of vacancy on nearby parcels. Our expectation is that being adjacent to vacancy and abandonment negatively impacts assessed property values and, by extension, property tax revenues.

Our analysis would incorporate certain methodological assumptions from a similar analysis of vacancy spillover effects completed by the Center for Community Progress in Pittsburgh, PA. Their analyses incorporated “best case” and “conservative” estimates of assessed property tax impacts of 3.15% and 1.12% respectively for each vacant parcel within 500 feet of any given parcel. This impact would be calculated for up to five distressed vacant properties.

We began by utilizing ArcGIS alongside Python’s Pandas and NumPy packages to generate datasets using spatial joins that would combine parcel shapefiles with vacancy and property assessment data. Our join method also generated a dataset of all properties that are within 500 feet radii of vacant properties and calculated the number of vacant properties and their associated average burden scores on their surrounding environments. Our findings suggested that not only was a significant portion of the city’s geographic area within 500 feet of vacancy, but also that the city’s northside—historically disinvested and occupied by primarily low-income people of color—contained much larger vacancy counts. Indeed, many properties in the northside contained dozens, sometimes more than 100 nearby vacant properties within 500 feet.

After analyzing various descriptive statistics and controlling for outliers, we capped vacant property effects at 50 properties. Our theory is that there are additional negative effects for each additional vacant parcel within the radius of another property,

but we suspect that for each additional parcel after a given point that the returns are of declining marginal value.

This required generating a new model of spatial relationships because further applying the assessed impacts imposed on the first five nearby distressed properties on the next 45 lacks theoretical support and would effectively zero out many assessed values.

We constructed multiple multilinear regressions model attempting to capture the relationships between property type (i.e. empty lot vs. duplex vs. single-family home), average burdens of vacant structures, and the number of vacant structures to determine estimated impact after the first five distressed structures are accounted for according to the preexisting best case and conservative estimates. This model also incorporates, through incorporating property type, different property taxation rates for commercial and residential properties.

Our findings included multiple statistically significant relationships that explain varying degrees of variance in our dataset. The model we selected incorporates as much granularity as we could support and suggests that the City of St. Louis loses more than \$20,000,000 in annual property tax revenue each year due to the impact of vacant properties in our “best reasonable guess” estimate. In our most conservative estimate, that impact is just over \$6,500,000. For the average parcel within a 500 foot radius of vacancy, we expect annual property tax revenue for the City to be \$204.39 less than if the property were not in proximity to vacant properties.