

CITY OF BERKELEY ILLEGAL MATTRESS DUMPING PILOT PROJECT

In July 2020, MRC invited the 21 Illegally Dumped Mattress Collection Initiative (Initiative) participants with the highest per capita rates of illegal mattress dumping to apply for illegal dumping pilot study funding. MRC awarded funds to the City of Berkeley for a multifamily curbside mattress collection project.

The Problem

Illegal dumping damages communities and harms the environment. As is the case in many municipalities, it has been a significant issue for the City of Berkeley, California.

Berkeley city crews have picked up between approximately 1,200 and 1,700 illegally dumped mattresses annually, and the number of dumped mattresses generally increases when University of California (UC), Berkeley students move out in May and June (i.e., Cal Student Move Out).

Residents have options for disposing of their used mattresses, including dropping them off at the City's transfer station for recycling through **MRC's Bye Bye Mattress program**. However, many residents, in particular students, don't have convenient or affordable access to a vehicle to transport their mattress.

In the past, the City also offered one free curbside bulky item collection per year for residents living in properties with one to four units, but this method, too, had limitations. The City's Zero Waste Division has one rear-end loader garbage truck for bulky item pickup, meaning that mattresses left out for free curbside collection were crushed in the truck, alongside other garbage, and then landfilled. Given this, the City did not advertise this method as the best way for residents to dispose of mattresses.

The goal of this pilot project was to determine a correlation between increased access to mattress recycling and a decrease in the number of mattresses illegally dumped.

How the City Addressed the Problem

The City implemented a 12-month pilot curbside collection program dedicated to mattresses in order to make proper mattress disposal and recycling more convenient for residents, property owners and students. By targeting residences with one to nine units, the City was able to collect from the majority of its residence types.

In conjunction, the City began a campaign to raise awareness and educate residents, property owners and students about the pilot program and to promote other existing options for proper mattress disposal and recycling. To address the annual increase in illegally dumped mattresses during Cal Student Move Out, the City focused its outreach efforts during the late spring to early summer.

The campaign included two mailers sent to all residents living in properties with one to nine units, information posted on the City website, and coordinated messaging to UC Berkeley staff and students.



What the City Accomplished

The program exceeded expectations on two key metrics: an increase in the number of mattresses collected for recycling and a decrease in the number of mattresses illegally dumped.

As it launched the pilot program, the City predicted it would collect roughly 800 mattresses curbside, moving them into the recycling stream and away from landfills. However, over the 12 months, the city collected far more at curbside – 1,334 mattresses – and recycled them.

Prior to the launch of the pilot, City crews collected between 1,270 and 1,730 illegally dumped mattresses annually. However, during the pilot, City crews picked up far fewer illegally dumped mattresses, just 940. Table 1 shows the year over year comparison of illegally dumped mattresses picked up by the City.

Table 1. Total illegally dumped mattresses collected in the City of Berkeley

Annual Comparison Timeframe	Illegally dumped mattresses picked up by City crews
March 2017 - March 2018	1,730
March 2018- March 2019	1,470
March 2019- March 2020*	1,270
March 2020- March 2021	1,372
March 2021- March 2022 <small>(Pilot Year Data Collection Timeframe)</small>	940

* The City of Berkeley began seeing a decrease in illegal mattress dumping in 2019 when the transfer station started participating as one of the no-cost drop-off locations in MRC's Bye Bye Mattress program.

Notably, the number of dumped mattresses picked up by City crews during Cal Student Move Out also dropped significantly, from 457 mattresses in the previous 12-month period to 208 mattresses during the pilot. Table 2 shows the year over year comparison of illegally dumped mattresses picked up by the city during Cal Student Move Out.

Table 2. Total Illegally Dumped Mattresses Collected During Cal Student Move Out

Annual Comparison Cal Student Move Out Timeframe	Illegally dumped mattresses picked up by City crews
May 1, 2017 - June 30, 2017	434
May 1, 2018 - June 30, 2018	449
May 1, 2019 - June 30, 2019	370
May 1, 2020 - June 30, 2020	457
May 1, 2021 - June 30, 2021 <small>(Pilot Year Data Collection Timeframe)</small>	208



Lessons Learned

To head off potential problems before launching the pilot and to address some issues that arose after the program's launch, the City implemented a number of measures:

- To prevent mattresses left at curbside from becoming blight, magnets for other debris or safety hazards, the City switched from an original five-day pickup window to one designated day for mattress pickup. If a mattress hasn't been picked up as expected, the City asks residents to call and report that the mattress has been missed.
- To prevent residents from overwhelming operations with requests for pickups, the City limited pickups to two times per property per year and set other restrictions: a limit of two mattresses or box springs per pickup for single-family residences, and a limit of four mattresses or box springs per pickup for multifamily residences. Very few residents tried to exceed these limits during the pilot.
- To make it clear to neighbors and others that residents were not illegally dumping mattresses by placing them at curbside, the City posted a downloadable tag to its website and encouraged residents to affix it to their mattress with the scheduled collection date or to make their own sign to indicate that collection had been scheduled.
- To prevent mattresses from being left out in the rain, making them too heavy to handle and damaging the components for recycling, the City added a message to its website asking residents to avoid scheduling a pickup if heavy rain was forecast and informed them pickup might be rescheduled due to inclement weather. A drought made this issue insignificant during the pilot period.
- The City originally allowed only property owners/ authorized account holders to request mattress pickup. To be more accommodating, it also scheduled pickups called in by city residents.

The Economics of the Program

The City calculated the total cost to collect 1,334 mattresses at curbside was \$97 per unit. The cost includes curbside collection, program management and education/outreach expenses.

Going Forward

After seeing a significant reduction in the number of illegally dumped mattresses (particularly during the Cal Student Move Out period) and significantly increasing the number of mattresses being recycled instead of landfilled during the 12-month pilot period, the City is continuing the mattress curbside collection and drop-off recycling program on a permanent basis.

