







### **Study Purpose**

- Mattress Recycling Council retained York University faculty to conduct a study on illegal dumping of durable goods
- Goal of study was to identify best practices in mitigating illegal dumping
- Study identified both the primary drivers of illegal dumping, as well as prevention, abatement and mitigation strategies to address illegal dumping
- Study engaged a panel of subject area experts to help inform study findings
- Survey also conducted to gauge household attitudes and behaviors with respect to illegal dumping

# Drivers of Illegal Dumping

#### Lack of awareness:

- Lack of adequate and accessible waste collection primary driver of illegal dumping
- Convenience a significant predictor of illegal dumping behavior
- Incidences of illegal dumping highest in areas with the fewest designated collection/drop off points
- Incidences of illegal dumping higher in rural and remote areas
- Households lack awareness regarding potential environmental harm

#### Lack of infrastructure:

- Households not knowing where to properly dispose of durable waste contributes to illegal dumping
- Households frustrated when expectations of when and where to dump durable waste are not made clear



### **Drivers of Illegal Dumping Continued**

#### **Lack of Enforcement:**

- Illegal dumping highest in areas with lack of supervision/visibility
- Illegal dumping more prevalent in areas where penalties for illegal dumping are not enforced

### Lack of normative pressures (peer pressure):

- Illegally dumping waste is a function of whether a public space is being maintained and whether that space is perceived to be a communal space
- Surveillance by neighbors or other members of the community act as a deterrent to illegal dumping
- Fear of judgment from neighbors and broader community acts as a deterrent to illegal dumping



# **Drivers of Illegal Dumping Continued**

- Understanding these attitudes is important as remedial strategies are developed and implemented.
- Policymakers need to understand that illegal dumping is based on a series of decisions that follow a path of least resistance.
- There are multiple opportunities to divert residents from the path that leads to illegal dumping and onto a path where the destination is legal disposal through appropriate collection channels.









# Addressing illegal dumping requires a multi-faceted approach – No single solution:

- Encouraging stakeholder collaboration and coordination
- Improving access
- Fostering awareness among the community and focusing on community engagement
- Strengthening enforcement
- Enacting appropriate policies and legislation



# **A Coordinated Approach**

- Stakeholder collaboration critical A coordinated approach across multiple stakeholders, jurisdictions and agencies is likely to be most effective.
- Prevention less costly than remediation- Emphasis should be placed on preventative measures to illegal dumping as opposed to reactionary responses.
- Getting on the same page Important to understand the scale of the problem, identify problem areas and track effective prevention and mitigation strategies.
- Development of Central Organization If possible, a central organization should be formed and be responsible for region wide collection of data (instances/frequency of illegal dumping, quantities of material dumped etc.)
- Community Involvement Residents should be consulted to gauge which factors they think contribute to illegal dumping, and what can be done to address the issue.



# Improving Access to Proper Mattress Disposal Options

- The most significant predictor of illegal dumping is a lack of convenient, low- or no-cost disposal options for households.
- Local jurisdictions need to ensure that residents have readily available access to proper waste disposal options (i.e. setting minimum targets for household access and service coverage in a given area).
- A combination of collection strategies is the most effective

   designated drop off points, free bulky collection
   (curbside/drop off), special events/community collection days, establishing temporary collection points during specific times of the year when residents are likely to generate more waste (end of the school year, spring cleaning etc.)



### **MRC's Collection Network**

MRC collects used mattresses through the following channels in California:

- retailer take back
- permanent collection sites
- curbside bulky item collection programs
- mattress collection events
- Commercial Volume Program (CVP)



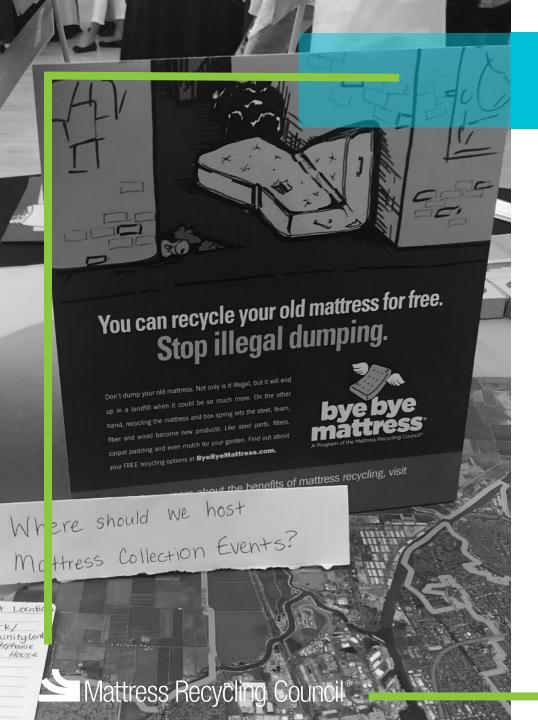
### **Raising Awareness**

- Adequate waste collection services must be accompanied by clear and consistent promotional and educational initiatives that build community support for proper disposal of durable waste.
- Households need to understand why illegal dumping is an issue, including the environmental, economic and social impacts to the broader community.
- Educational campaigns should clearly explain the "what, why, where and when" of waste disposal programs, and clearly communicate where durable waste can be sent for disposal.
- Promotion and education campaigns need to be multichannel (digital and print), multi-lingual, culturally appropriate and relevant



# Strengthening Enforcement

- One of the first steps to improving enforcement is to train local authorities to fully understand the broader consequences of illegal dumping.
- Law enforcement needs to review the efficacy of existing laws and identify what changes need to be made to deter illegal dumping.
- Context matters: Law makers should consider contextual factors when setting a penalty, i.e.
   Who is the perpetrator? What type of harm did the dumping cause? How much will remediation cost?
- The creation of environmental courts and tribunals have been shown to be an effective way to adjudicate illegal dumping violations.



### **Additional Enforcement Strategies**

# Additional strategies to prevent illegal dumping include:

- The adoption of extended producer responsibility (EPR) programs, in which manufacturers of a particular product are responsible for managing that product at the end of its life.
- Physical barriers (such as fencing), safety measures (such as lighting) and surveillance methods (such as CCTV cameras, drones and patrols by police or community members) can be used as part of an overall prevention strategy.
- Some communities have installed "smart" monitoring technologies that detect illegal dumping and help identify perpetrators.

### Conclusion

- Illegal dumping is a dumping is a complex issue driven by a multitude of factors, necessitating multi-faceted solutions.
- Effective prevention/mitigation of illegal dumping requires the coordinated efforts of multiple stakeholders (local government, authorities, the community etc.).
- No single strategy for preventing illegal dumping a comprehensive strategy
  for discouraging illegal dumping requires convenient access to disposal points, promotion
  and education initiatives to increase public awareness, adequate enforcement and a
  mechanism to collect data on incidences and types of illegal dumping.
- Illegal dumping of durable goods can be addressed most effectively through a comprehensive, collaborative and inclusive approach.

# **Steps MRC is Taking**

- Illegally Dumped Mattress Collection Initiative
- Over \$400,000 in funding of illegal dumping mitigation projects since 2021
- Illegal Dumping Lesson Plan and Activities
- Illegal Dumping White Paper
- Ongoing participation in illegal dumping task force meetings
- Statewide collection site recruitment for residential and commercial
- Collection event support

# **THANK YOU**

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