
Investing In Prevention Saves Money **Economic Returns On Public Health & Environmental Protection**

Preventive public health and environmental safeguards are not economic burdens, they are proven investments that generate measurable returns for families, communities, and state economies. Federal agencies and independent economic analyses consistently show that prevention costs far less than reacting to illness, disaster, and environmental degradation.

1. Public Health & Water Quality: Clean Water Act Returns

EPA analysis of the Clean Water Act shows that water quality improvements generate:

- **\$1 - \$23** - Drinking water protections investment compared to avoided illness and death.
- **\$11 billion** – Annual ecological benefit valuations of improved water quality.
- **\$42.3 billion** - Annual economic benefits of improved river water quality.

Clean water protections reduce gastrointestinal illness, toxic exposure, and long-term cancer risk while supporting recreation and tourism economies.

Sources:

[Risk Reduction Opportunities in Drinking Water](#)

[Economic benefits of improved water quality in the Delaware River \(USA\)](#)

[U.S. Environmental Protection Agency, Regulatory Impact Analyses for Drinking Water Rules.](#)

2. Flood Mitigation & Natural Infrastructure: \$6–\$7 Saved per \$1 Invested

The National Institute of Building Sciences (NIBS) found:

- **\$1-to-\$6** – Savings for investments in federal disaster mitigation grants.
- **\$1-to-\$7** – Savings for riverine flood mitigation projects.
- **\$1-to-\$8-13** – Kentucky investment in flood resiliency to economic impact/cleanup.

This means for every \$1 spent, yielded \$6-13 in savings including avoided property damage, reduced insurance claims, fewer emergency response costs, and less economic disruption.

Source:

[National Institute of Building Sciences, *Natural Hazard Mitigation Saves: 2019 Report.*](#)

[Kentucky DOW – Green Sinks Program](#)

3. Public Health & Air Quality: Clean Air Act Returns

The U.S. Environmental Protection Agency's most comprehensive economic review of the Clean Air Act Amendments found:

- **\$1-to-\$30 – to – \$1-to-\$90** – cost benefit analysis of Clean Air Act from 1990 to 2020.
 - **\$2 trillion benefits**, compared to approximately **\$65 billion in annual compliance costs**.
 - Avoided premature deaths, hospital visits, asthma attacks, and lost workdays.
- 1970 – 2019 - Air pollution **decrease 77%** & US gross domestic product **increased 285%**
- **2005 – Of \$4.47 trillion in goods shipped – <1% required for environmental costs.**

Sources:

[U.S. Environmental Protection Agency, *The Benefits and Costs of the Clean Air Act from 1990 to 2020*.](#)

[Statistics for Industry Groups and Industries: 2005](#)

[U.S. Environmental Protection Agency, *The Clean Air Act and the Economy*.](#)

4. Asthma & Respiratory Health: Avoided Medical Costs

EPA projects that Clean Air Act protections in 2020 alone prevented:

- **1.7 million asthma exacerbations**
- **86,000 emergency room visits**
- **3.2 million lost school days**
- **13 million lost workdays**

The CDC estimates the annual economic cost of asthma in the U.S. at **\$81.9 billion**, including medical expenses and lost productivity. Preventing even a fraction of those cases yields billions in avoided health care and workforce losses.

Sources:

[U.S. Environmental Protection Agency, *The Benefits and Costs of the Clean Air Act from 1990 to 2020*.](#)

[U.S. Environmental Protection Agency, *The Clean Air Act and the Economy*.](#)

[Centers for Disease Control and Prevention, *Asthma's Impact on the Nation*.](#)

5. Incremental Harms Carry High Stakes

When people are already sick or medically vulnerable, even small increases in air and water pollution can cause bigger health and community impacts. If SB 178 allows preventable pollution-related health problems to increase, Kentucky could experience larger health and financial consequences than other states with healthier populations.

Example: 17% of Kentuckians report having three or more chronic health conditions (US is 10.7%)

- 5% increase in asthma attacks results in:
 - 500 more ER visits in one year means hundreds of families facing unexpected medical bills.
 - Higher Medicaid increases costs for the state
 - Greater strain on rural hospitals and clinics, which are already financially fragile
 - Increased pressure on local infrastructure and budgets.

If preventable exacerbation increases even modestly, fiscal impacts can still be meaningful. Watch for:

- Higher Medicaid claims
- State Medicaid match requirements
- Pressure on rural hospitals and clinics
- Public health remediation costs to flow to taxpayers & local budgets
- Higher water treatment costs