



SOLID WASTE MANAGEMENT THE “BIG PICTURE” IN IOWA

Walter Willis, *Shaw Environmental*

- Current Landfill Status
- Iowa’s Comprehensive Planning Requirements
- Waste Reduction Success
- Impacts on Local Level Decision Making
- Q&A



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CURRENT LANDFILL STATUS

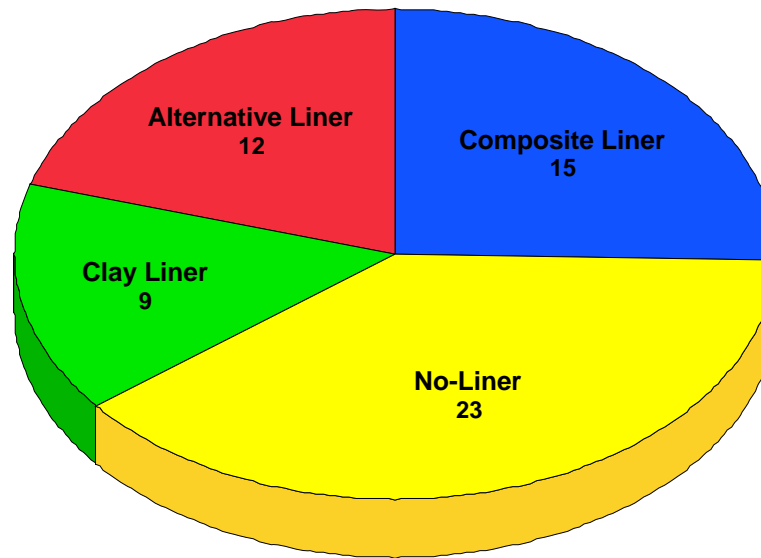
- 59 operating municipal solid waste landfills:
 - 27 have Subtitle D compliant liners,
 - 9 have clay liners, and
 - 23 have no liner (in-situ).



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CURRENT IOWA LANDFILL STATUS

59 MSW Landfills



■ Composite Liner ■ No-Liner ■ Clay Liner ■ Alternative Liner

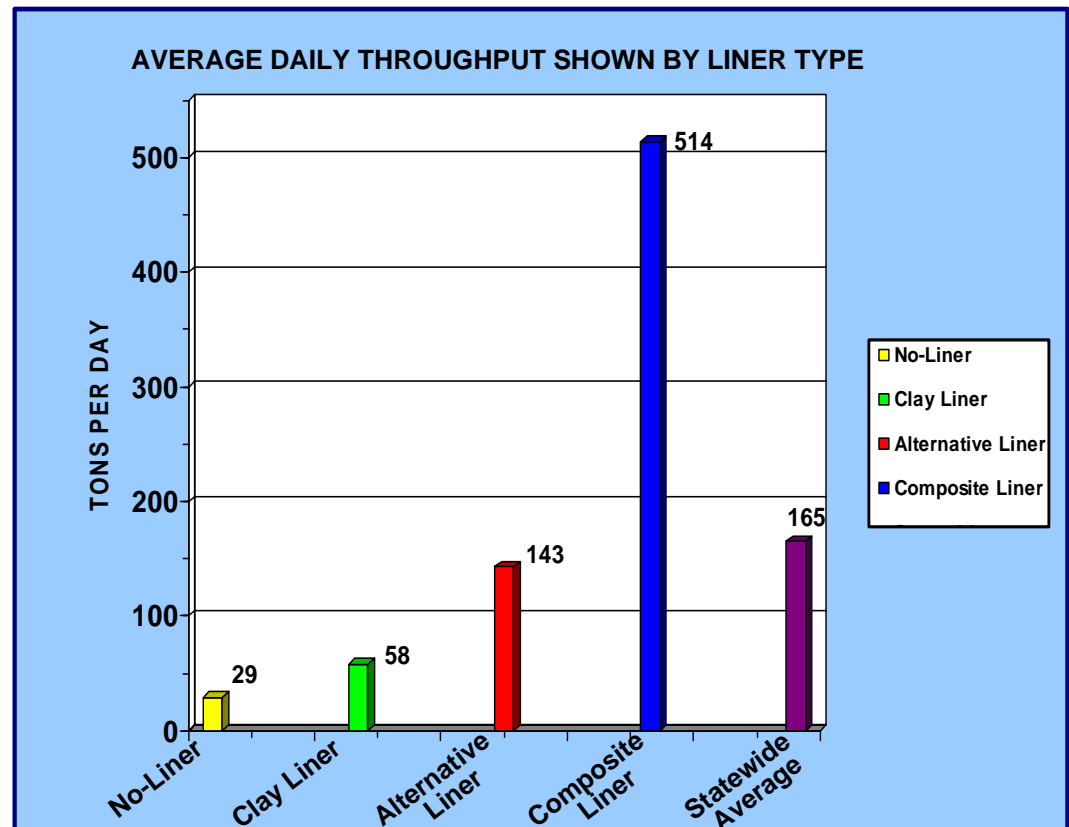


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CURRENT LANDFILL STATUS (cont'd)

Iowa's landfill service areas vary significantly by liner type.

Smaller service areas typically have liners that may not comply with Subtitle D.

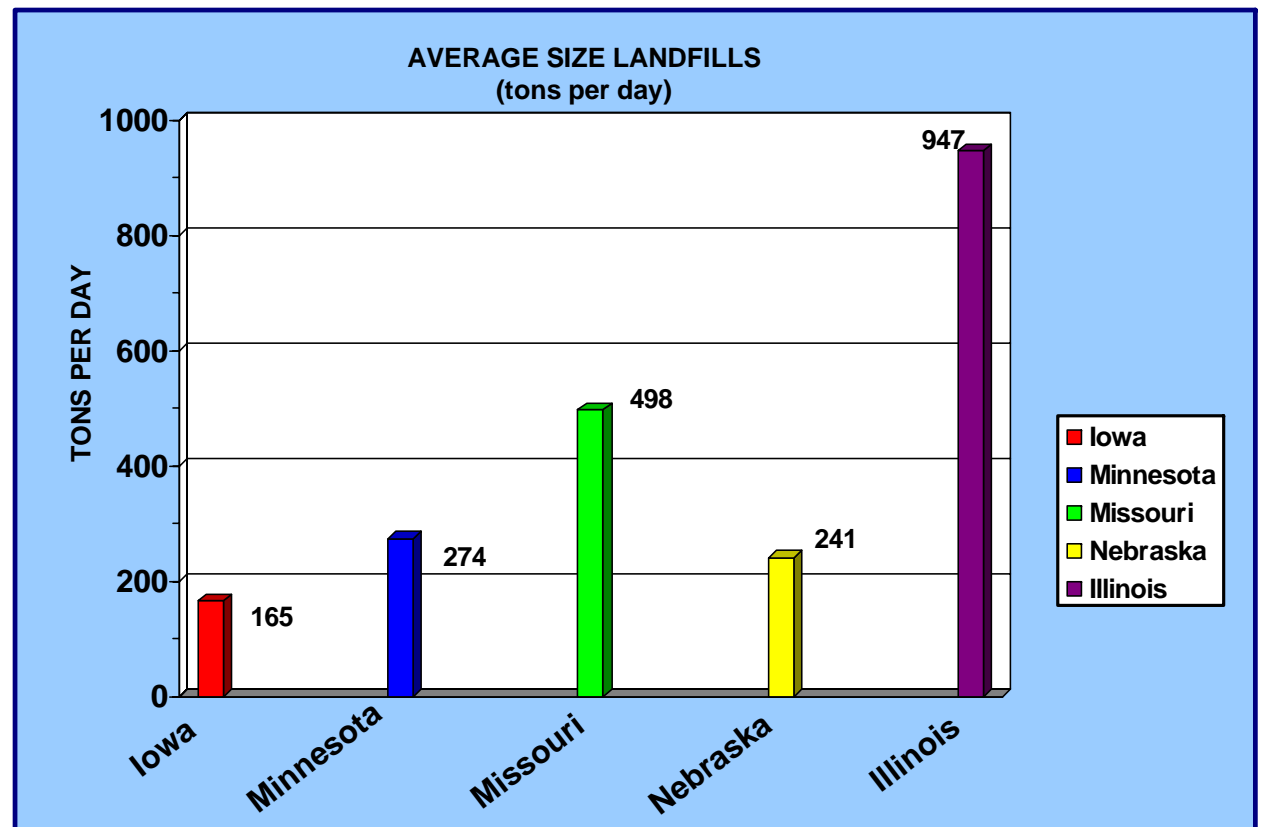




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CURRENT LANDFILL STATUS (cont'd)

How does Iowa compare to surrounding states?



Notes:

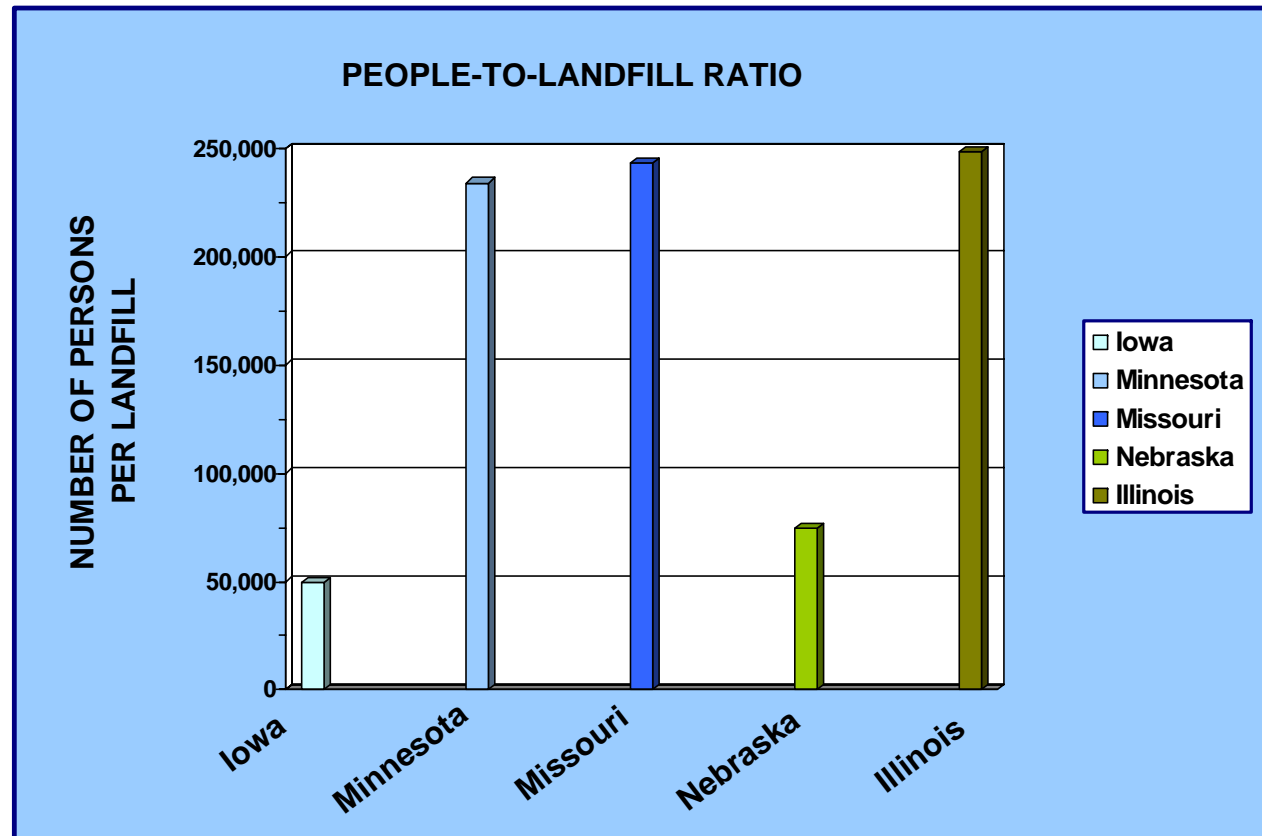
1. Landfill data from Iowa DNR (dated 2004), Minnesota PCA (dated 2002), Missouri DNR (dated 2002), Nebraska DEQ (dated 2001), and Illinois EPA (dated 2004).



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CURRENT LANDFILL STATUS (cont'd)

How does Iowa compare to surrounding states? (cont'd)

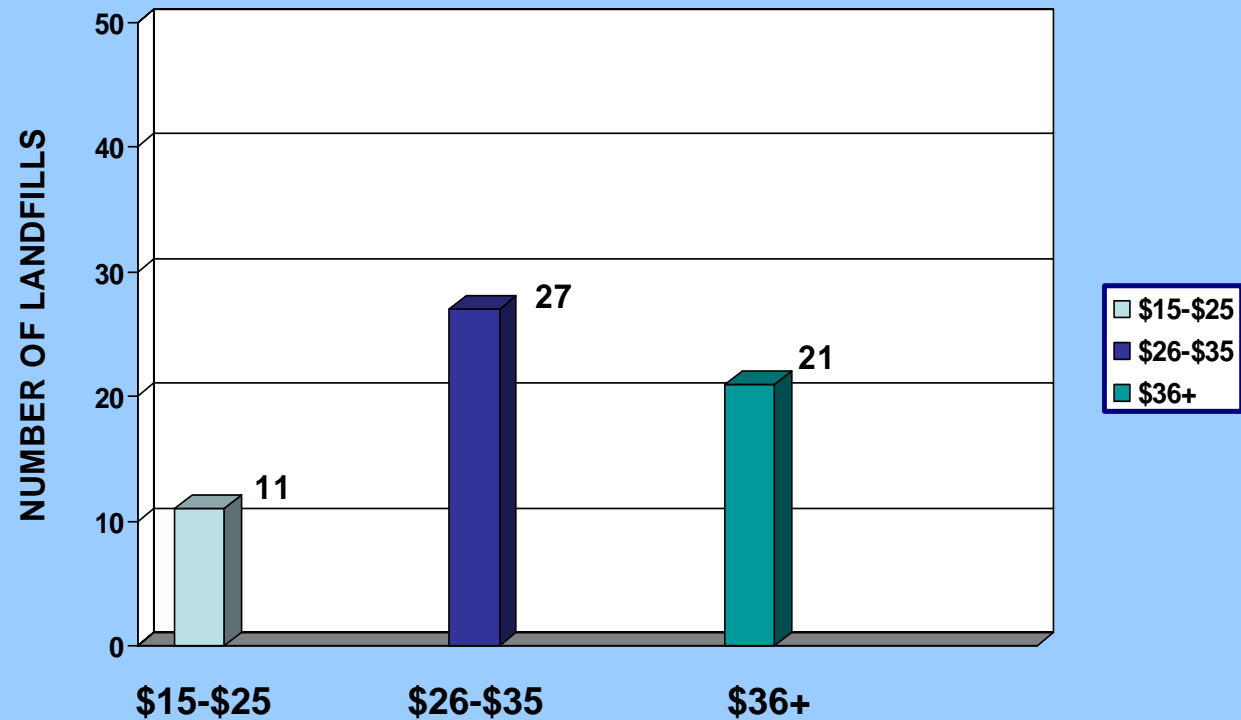




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CURRENT LANDFILL STATUS (cont'd)

Iowa landfill tipping fees range from \$15 to \$60 per ton.

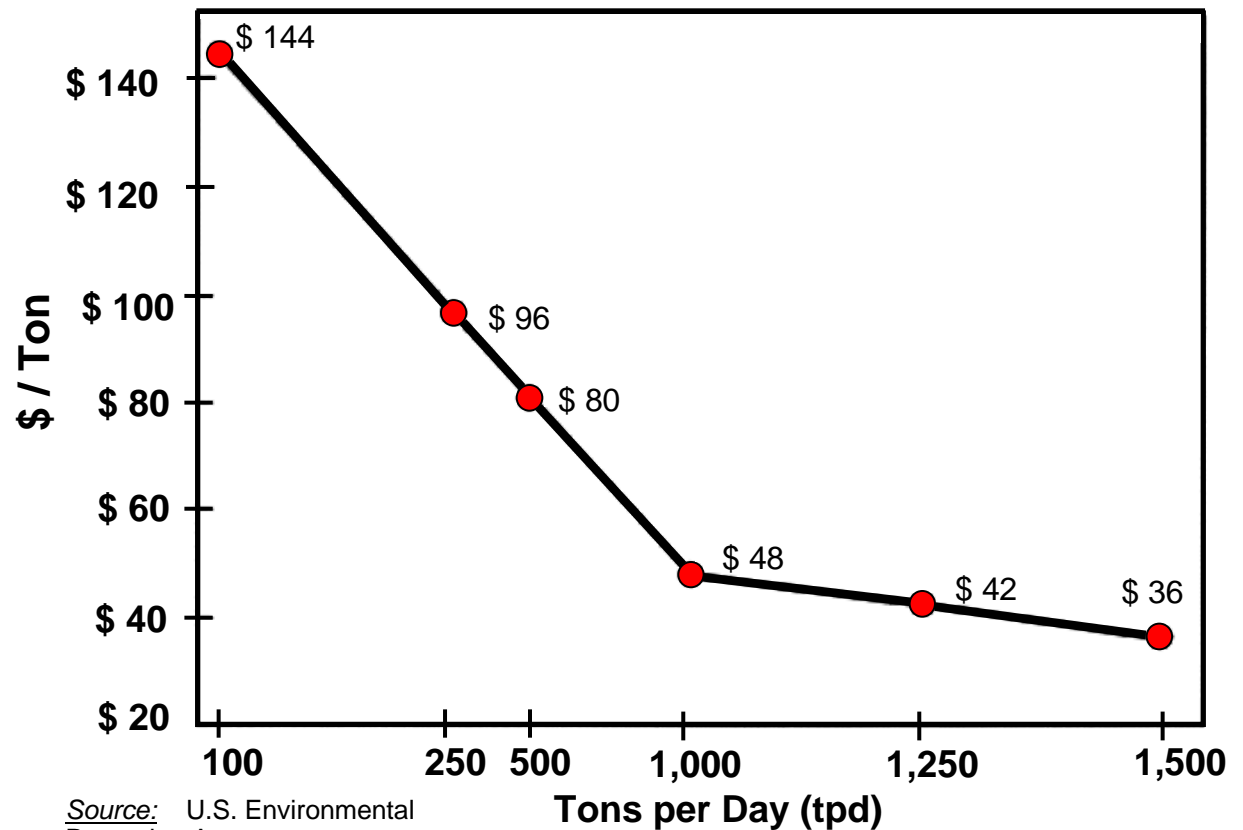




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CURRENT LANDFILL STATUS (cont'd)

- 80% of planning areas assess a per capita fee, ranging from \$1 per person to \$37 per person.
- With per capita fees included, overall per ton costs reach up to \$108 per ton for one Iowa planning area.



Source: U.S. Environmental Protection Agency



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COMPREHENSIVE PLANNING IN IOWA

Iowa’s Unique Approach

Link between planning areas and landfill service area

Intrastate flow control

Establishment of a baseline (July, 1988)

Penalties / rewards for waste reduction programs

Dominant role of public sector in facility ownership



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COMPREHENSIVE PLANNING IN IOWA (cont'd)

Outcomes of Iowa’s Approach

Continued operation of numerous small landfills vs. regionalization and fewer, larger landfills.

Importance of “control” over the waste disposal system.

Local pride in programs and facilities.

Some barriers for planning areas to further consolidate.



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COMPREHENSIVE PLANNING IN IOWA (cont'd)

House File 399, “the Rathbun Bill”

- Signed into law April 15, 2005, effective July 1, 2005 supported by DNR & ISOSWO working together.
- Creates two types of comprehensive plans.
 - Waste disposed in sanitary landfill within planning area.
 - Waste consolidated at transfer station and taken to a landfill in another planning area.
- Planning areas that close landfills and replace with a permitted transfer station can retain their planning area autonomy if they desire - they can consolidate too.



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COMPREHENSIVE PLANNING IN IOWA (cont'd)

House File 399, “the Rathbun Bill” (cont'd)

Planning areas involved must enter into a 28E agreement.

Planning areas that close landfills will still receive retained fees.

Sanitary landfills serving more than one planning area will be required to submit separate fee reports to the Department.



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COMPREHENSIVE PLANNING IN IOWA (cont'd)

Impact of HF 399

Reduces barriers for planning areas to work together.

Reduces barriers for planning areas to develop transfer stations - in that they had to consolidate or ship out of state.

Rational state response to the anticipated closure of smaller landfills due to Subtitle D requirements.



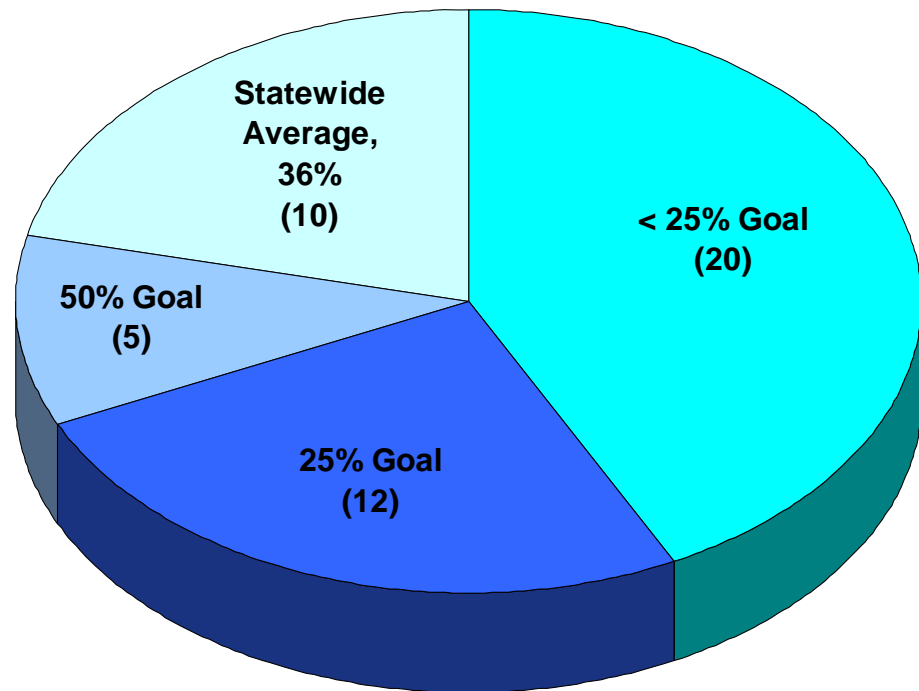
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WASTE REDUCTION SUCCESS

Background:

- Goal of the state is to reduce the waste stream existing as of July, 1988.
 - 25% by July 1, 1994
 - 50% by July 1, 2000

Iowa's planning areas have achieved varying success, overall statewide average is 36%.



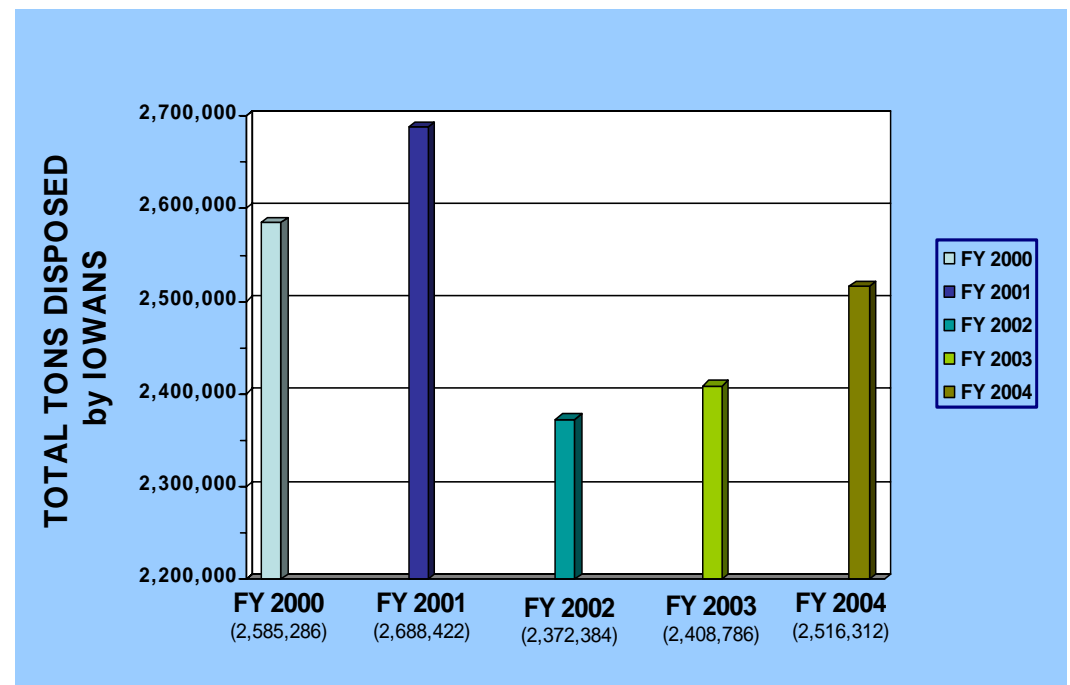


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WASTE REDUCTION SUCCESS (cont'd)

Impact on Landfill Need:

- Extends landfill life, reducing “demand” on need for landfill capacity.
- Waste reduction programs, while effective, have had a minimal impact on waste disposed.
 - Offset by increases in population, economic growth and per capita waste generation rates.





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WASTE REDUCTION SUCCESS (cont'd)

Impact on Landfill Economics:

Waste reduction acts as a “brake” on demand, thus helping to moderate landfill costs (assuming landfill “supply” remains steady).

If waste disposed begins to decline due to waste reduction, demographic or economic factors:

- Tipping fees could be forced to increase to cover fixed costs, or
- Landfill regionalization may increase



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WASTE REDUCTION SUCCESS (cont'd)

Further Diversion with Transfer Stations/MRFs:

Transfer stations offer flexibility to increase waste sorting and to upgrade recyclables - - and screen for prohibited wastes such as hazardous wastes.

Transfer stations will be more cost effective than landfilling for many planning areas.

- Reallocate money previously spent on disposal costs for new and/or expanded waste reduction programs.
- Transfer stations provide greater flexibility in choosing more lucrative end markets for recyclables and more affordable landfills.



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IMPACTS ON LOCAL LEVEL DECISION MAKING

Difficult, long-term impact decision must be made shortly

- Build a new disposal cell or transfer haul waste.
- Within the context of Iowa’s planning and waste management realities
- HF 399 enhances transfer station option



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IMPACTS ON LOCAL LEVEL DECISION MAKING (cont'd)

Common concerns for local officials

- Without a landfill I lose “control” and am at the mercy of outside landfills

- 1. Contract for disposal capacity and gain price protection



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IMPACTS ON LOCAL LEVEL DECISION MAKING (cont'd)

Common concerns for local officials

- Without a landfill I lose “control” and am at the mercy of outside landfills
- 2. Landfills rely on your volume as much as you rely on their capacity



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IMPACTS ON LOCAL LEVEL DECISION MAKING (cont'd)

Common concerns for local officials (cont'd)

- Without a landfill my liability exposure increases as I export to outside landfills.

- 1. Conduct a landfill audit before transporting waste
- 2. Conduct ongoing review of the landfill's environmental compliance
- 3. Contract with protection mechanisms
 - Insurance
 - Indemnification



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IMPACTS ON LOCAL LEVEL DECISION MAKING (cont'd)

Common concerns for local officials (cont'd)

4. Impossible to eliminate all liability, the key is to minimize exposure.
 - Superfund limits local government liability
 - Waste screening at the transfer station
 - You likely will not be the major generator of waste into a regional landfill
5. Owning and operating a non-subtitle D compliant landfill represents a much greater liability exposure than transferring waste.



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QUESTIONS & ANSWERS