



BULLETIN

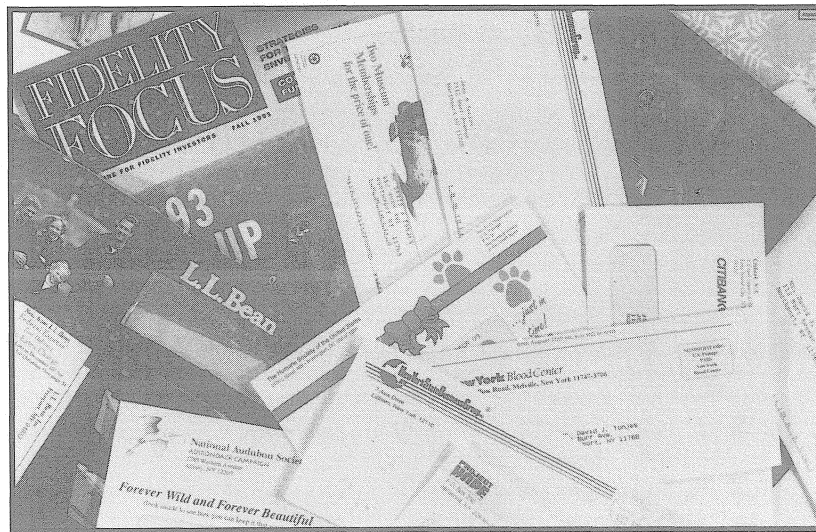
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Should third-class mail be junked?

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Introduction

U. S. mail is divided into four categories or "classes." Handled fastest and at the highest cost is first-class mail. Second-class mail is used for periodicals, such as magazines and newspapers. Third-class mail, which is used for advertising and promotional material and parcels weighing less than 16 ounces, has a lower priority than first-class mail. The slowest handling rate is fourth-class mail (parcel post). This is used for packages, books, and other large items. Other, more expensive, special handling mail options include priority mail, express mail, international mail, mailgrams, and certified letters.

This bulletin examines the environmental effects of third-class mail, which has become the fastest growing mail category in the United States over the past 10 years or so and constitutes the second largest segment of the postal market: 38.3% of total mail volume by piece in 1990, down from a peak of

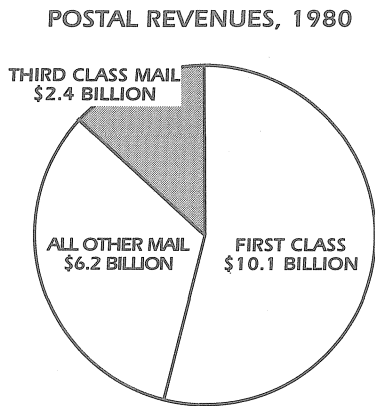
39.3% in 1988. Third class mail, which is most often used to disseminate information to a wide, yet targeted, audience, includes advertising materials, governmental literature, small parcels, and other printed matter.

Third-class mail as a revenue stream for the USPS

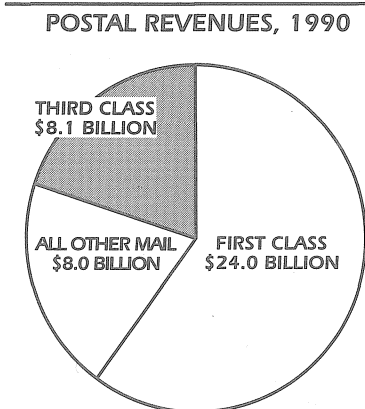
The U. S. Postal Service (USPS) is required to recover the costs of providing all mail service, and third-class mail constitutes an important revenue stream. It serves to keep other mail classes at a lower cost by offsetting the fixed costs of running post offices.

From 1980 to 1990, the share of USPS revenues from first-class mail only rose from 54% to 60% (\$10.1 billion to \$24.0 billion). Revenues from second- and fourth-class mail tumbled from 33% to 20% over the same period. Express mail volume

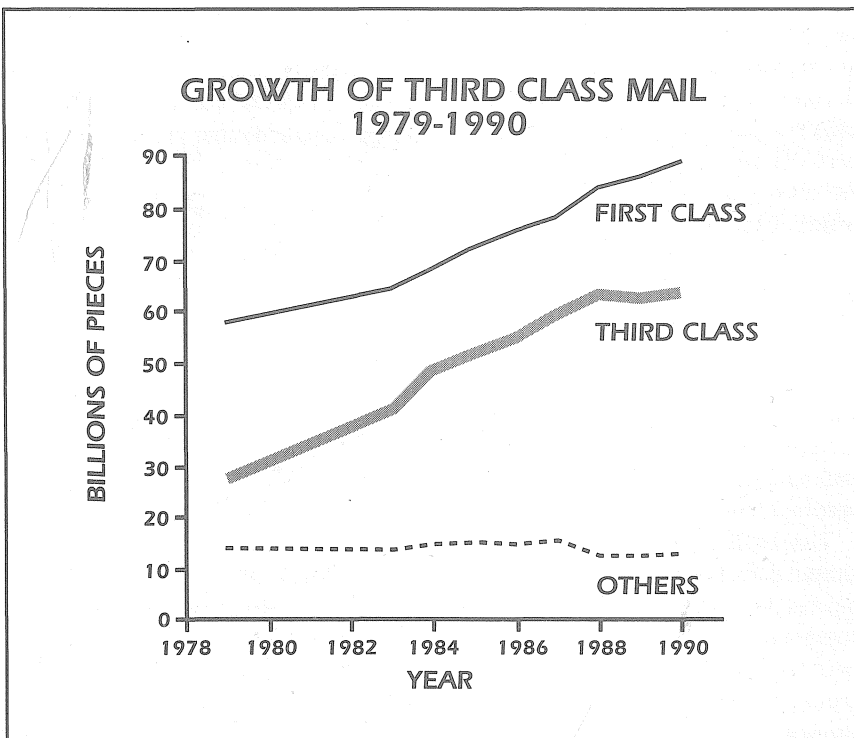
▼ Figure 1A



▼ Figure 1B



▼ Figure 2



actually grew by 10% in 1990 alone; however, this category represents only 1/60 of the USPS revenues.

The share of revenues from third-class mail rose from 13% to 20% (\$2.4 - \$8.1 billion), a 50% increase between 1980 and 1990, making it the fastest growing revenue stream for the Postal Service (Figure 1A and B). But third class mail has become a controversial issue in recent years. One concern is whether it should continue to be priced so much lower than other classes of mail. Another issue raised by the increasing sophistication of mailing list generation is privacy; and a third concern, the one discussed in this bulletin, has coalesced around environmental issues, especially solid waste issues.

Third-class Mailers

Businesses

Businesses are the greatest users of third-class mail, which provides a rapid and inexpensive means of advertising and promotion for products and services. Advancements in technology, especially in data processing, have facilitated the growth of direct mailing,

with companies generating lists to target specific individuals and demographic territories. In 1990 approximately \$23.6 billion (18% of all advertising funds) was spent in direct mailing.

From 1979 to 1990 the number of third-class mail pieces grew 130% (Figure 2). Some of the reasons for this expansion include general customer dissatisfaction with retail store services; more working women, who find it convenient to shop from catalogs; the convenience of shopping around the clock (prompted by the introduction of "800" phone service and near-universal credit card ownership); the opportunity to avoid sales taxes in some instances; and technological advancements in targeting mailing lists.

However, due to increased postage rates, businesses are being more judicious, and the amount of third-class mail the average household receives has dropped every year since 1988.

Charities and advocacy groups

Charities and advocacy groups have found the combination of computerized mailing lists and low third-class mailing rates irresistible for their efforts to find audiences and funds. Third-class mailings raised more than \$34.9 billion in 1986. Groups such as Greenpeace say that without third-class mail their fund-raising efforts would be severely compromised. In addition, mailing lists enable organizations to reach their memberships and similarly inclined citizens to galvanize opinions in relatively short periods of time.

Many organizations are not widely publicized on T.V., radio, and in daily newspapers. For them, direct mail is the only way to reach their supporters. Charities also find the well-chosen mailing list a fruitful means of collecting funds and pressing their case before the public.

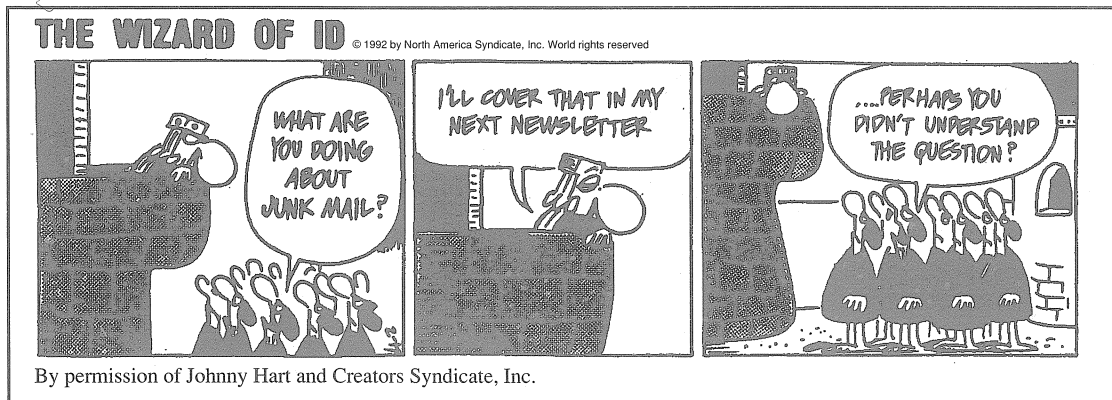
The question of the costs of using mailing lists troubles some observers. When an organization claims to exist to be a charity and is raising money to this end, it is disturbing for supporters to learn that a large percentage of the funds being raised go toward mailing costs.

Politicians and elected officials

Politicians, a special case of advocacy mailers, are also garnering the benefits of third-class mail. While running for president in 1964, Barry Goldwater discovered that mass mailings were a

is given. The names of those who do not respond to mailings are not often culled from lists. The name "junk mail," attached to third-class mail, is supported by detractors' reports that most of the third-class mail ends up in the trash before it is even opened.

receiving mail from organizations in which they have no interest. Charities and advocacy groups, however, say that using third-class mail and the sharing of mailing lists are the best means for an organization to find those whose interests are compatible with the organization's.



cost-effective means of creating a pool of donors numbering in the millions. The technique was refined in 1972 by presidential candidate George McGovern to its by now familiar form. Candidates seeking office regularly use bulk mailings to reach vast numbers of voters, to express campaign views, or to solicit donations.

Elected officials are able to use a form of mailings known as "franked" mail, which are supposed to be for constituent information. Many opponents of the current systems (both political and postal) charge that these free mailings are nothing more than paid political advertising.

Non-incumbents claim that such privileges are part of the reason so many incumbents are re-elected to office. Postal opponents point to the great taxpayer cost—\$65 million in 1988 for the U.S. Congress alone. The money spent for mailings by Congress is recovered through Congressional appropriations. State and local governments pay for mailings by office holders as well, through local tax revenues.

Recipients of Third-class Mail

Once on a mailing list, a consumer is guaranteed continual mailings, which spiral upward in volume if any response

However, one industry study reports that only 15% of all third class mail is discarded unopened.

Third-class mail proponents claim that the number of Americans (88.5 million) using telephone or catalog shopping services shows widespread support for the mailings that generate these sales. The average American makes 3.5 mail order purchases a year, with half of all adults making such purchases. Customer satisfaction is demonstrated by an 80% repeat business rate for catalog sales, and surveys showed that 63% of Americans believed third-class mail to be "useful or interesting," and 76% "...open, read, look at, or set [mail] aside for later reading."

Because of the rise in third-class rates, the direct mail industry says that the average household now receives less third-class mail today than in 1988. If a household is receiving more third-class mail today than several years ago, it is because that household is part of lists that are producing sales and repeat business.

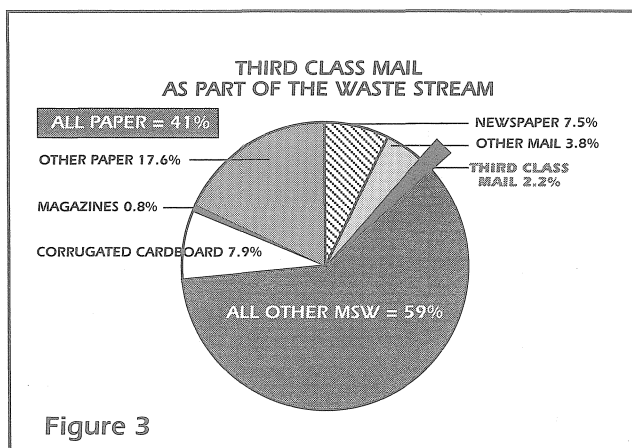
Detractors of third class mail point to the unending flood of envelopes and catalogs that cascade into the typical household each day, unsolicited and unwanted. The practice of selling mailing lists has led to householders

Environmental Organizations' Concerns

Over forty percent of the municipal solid waste stream is paper. Environmental organizations are concerned about the raw materials used in manufacturing third-class mail, the waste generated as the mail is discarded, and the by-products of manufacturing and printing the paper. But, despite avowed intentions to oppose overuse of natural resources and generation of pollution, many of these same organizations use third-class mail to collect money and motivate members.

One defense of bulk mailings by environmental organizations is that they helped "save" the whales and forced Heinz to sell "dolphin-safe" tuna. However, one of the founders of Greenpeace notes that the ban on whaling came about when all donations to the group were collected in coffee cans in supermarkets.

Greenpeace argues that since the average donation made by an American family to environmental organizations is only \$9 per year, as opposed to \$50 for human-services groups and \$350 for religious organizations, environmental organization must contact more supporters to get its equally important message out. The group also points to a



improves business efficiency and saves paper, to running an environmentally friendly home office and increasing the use of recyclable and recycled products for mailings and shipments.

The industry is also promoting the "avoided costs" analysis of shopping by catalogs.

In this analysis, catalog

self-commissioned poll that found 67% of all Greenpeace members received "just the right amount" of mail as further evidence of the correctness of its ways. Often the groups say that the mailings are educating the recipients, and could be motivating them to write letters to Congress, demonstrate, or otherwise become active in the issues discussed in the mailings, as well as providing the group with needed funding.

"Greener" third-class mail

Other environmentally conscious organizations that use direct mail are trying to "green up" their business practices. For example, Smith and Hawken is printing its catalogs with soy-based inks on recycled paper and planting two trees for every tree cut for its paper. The company is offering incentives for customers to report duplicate mailings, and asking that they choose from a list of specialized Smith and Hawken catalogs those that they would care to receive.

The company only mails new catalogs that have almost entirely new product lines and encourages customers to keep old catalogs, which remain usable longer since Smith and Hawken keeps items in stock for longer periods of time than is usual in the mail-order clothing industry. It also provides post cards to have names removed from mailing lists and uses recycled packaging.

In 1990 the Direct Marketing Association released a book filled with tips for mailers to increase their green consciousness. It covers all aspects of the business, from culling lists, which

sales are viewed as beneficial to the environment by avoiding the consumption of 100 million gallons of gasoline that would have been used to drive to stores, along with the associated car exhaust.

Is third-class mail part of the problem?

Six percent of all the nation's garbage in 1988 was estimated to be discarded mail. Discarded third-class mail weighed 3.8 million tons, or a little less than 2.2% of the waste stream in 1990 (Figure 3).

One-tenth of all third-class mail (by piece) is from non-profit organizations. One group of these, the environmental organizations, state that their contribution to the solid waste crisis is less than 1/4 of 1% of the waste stream. Third-class mailers point out that their contribution to the nation's solid waste stream pales when compared to that of newspapers, and that 2.2% of the waste stream is not likely to have a large effect on any aspect of the concerns involved in solid waste issues.

The paper industry often publicizes that trees are a renewable resource, yet the public is still concerned about the number of trees that must be harvested to create paper. The 12 billion catalogs produced in 1990 required harvesting 74,000 acres of trees. The paper industry's response is that forest growth has exceeded harvests since the 1940s, and now exceeds harvests by 37%.

It should be noted that recycled paper is seldom used by advertisers and bulk mailers. Coated paper, which has a

glossy finish and good printing qualities and cannot be made from recycled paper, is the favored paper for catalogs and third-class letters.

Third-class mail recycling programs

As of fall 1990, there were only five plants in the United States capable of recycling paper used in direct mail. For that year, 14.2% of all catalogs, direct mail, and newspaper inserts were recycled—primarily into tissue paper and linerboard. Most recycling programs collect newspapers only, which may skew the reported rate. For example, on Long Island where all fifteen municipalities have residential recycling programs, only five collect third-class mail. A pilot project begun in February 1992 at local post offices to recycle third-class mail received a great deal of publicity for its novelty.

Paper manufacturing by-products

The production of paper requires several refining stages, moving from crude wood chips into usable pulp. The process includes saturating wood in heated water and chemicals, pulverizing it, then washing the waste materials into a waterway (although Federal Clean Water Act regulations limit exactly what should end up in the water).

Much of the paper produced in the United States is "unblemished." To achieve this, chlorine is added to the pulp to whiten the paper. But chlorine produces dioxins through contact with wood phenols; in fact, some 1,000 chlorinated compounds are produced through industrial use of chlorine. Many of these are fat-soluble, and thus capable of being taken up in living tissues. This can lead to bioaccumulation in organisms, and many of these compounds have immediate toxic effects.

Some of these compounds find their way into the effluent from paper mills, while others adhere to the paper. Still others are found in paper mill sludges. If bleached paper is recycled, the recycling process releases the toxic substances again. Even if the wastes are prevented from entering effluents, they end up in the sludge, which then must be disposed.

Disposal of discarded bleached paper, whether by landfilling, composting, or incineration, has some associated problems. Landfilling bleached paper poses a risk in the release of chlorinated compounds through leachate. Recent studies of solid waste composting have revealed disturbing levels of toxic organic compounds in the end-product compost as well. Although the formation of dioxins during incineration of garbage apparently occurs in the smokestack, and no correlations have been found with variations in the solid waste stream, the presence of chlorine in the waste stream (attributable to bleached paper, among many other sources) has been a source of some concern.

Printing inks

There are an enormous variety of printing inks which differ in composition. All are essentially composed of pigments and other agents that sustain coloration. Metals, which used to be mainstays in many inks, especially brightly colored ones favored in advertising materials, can become incorporated into the waste stream or into water, through disposal or manufacturing processes.

Concerns about some metals used in inks have led to the use of other types of dyes in many cases. But many metals of concern, such as lead, cadmium, arsenic, antimony, and selenium, are still used for pigments, although their use is minimized where possible. The printing industry believes restrictions on these metals would cause the loss of certain pigments they believe are necessary.

Various chemicals are added to pigments to aid in preparation, opacity, viscosity, stability, resistance, and drying time. Some volatile organic compounds (VOCs), such as commonly used isopropyl alcohol and toluene, have been associated with health concerns and general pollution problems. They are released to the atmosphere by the drying process associated with heat-set printing. While VOC-free formulations are being developed, these mostly depend on ethylene glycol ethers, which have caused birth defects in rats.

Soy-based inks, which many companies are now choosing, are easier to de-

ink for recycling. But these inks use oxidative printing processes, which trap or retain VOCs in the inks, fixatives, or paper. These VOCs may be released during degradation, recycling, or incineration. Thus, a switch to soy-based inks from petroleum-based inks may not improve the environment generally, but only change the location of pollution.

The phased-in replacement of metals, while certainly removing suspected health hazards from inks and printing, may not remove all dangers to health and the environment. Most chemical compounds in general use today, including metal-ink replacements, have not been widely tested for toxicity or carcinogenesis. This is especially so for compound forms used with other substances, as in printing.

Contaminants from disposal of third-class mail

Despite all industry claims to the contrary, Tom Bradley, former mayor of Los Angeles, said that "junk mail" was the leading cause of his city's solid waste crisis. Mayor Bradley's hyperbole aside, third class mail is a recognizable portion of paper wastes.

Landfilling accounts for some 75% of solid waste disposal in the U.S. Studies on Long Island have investigated groundwater impacts due to leachate releases. Results show that metals and VOCs in low concentrations from leachate are contaminating aquifers on Long Island. As discussed earlier, discarded third class mail is a source of metals, and perhaps VOCs, in solid waste. Another little discussed effect of leachate is thermal pollution of the groundwater (by as much as 16° C at one Long Island landfill). Elevated groundwater temperatures can cause increased microbial and bacterial activity, alteration of electrical conductivity, viscosity, and density characteristics of groundwater, and depletion of dissolved oxygen.

No other disposal means seem to be "pure," however. Incineration, while offering some benefits in energy return, concentrates metals, such as lead, present in some inks used in third-class mail, and also tends to form dioxins.

Composting also concentrates metals, and the composting process does not create temperatures high enough to decompose harmful organic compounds, such as VOCs.

Recycling third-class mail

Recycling paper, because of components such as metals, volatile organic compounds, and chlorine, is not a "clean" process either. Making recycled paper creates sludges, which, if they contain chlorinated hydrocarbons and other contaminants, present a serious disposal problem. The large amounts of waste water from the recycling process also could contaminate public waters.

Summary

Third-class mail is important for the USPS, businesses, charitable groups, and environmental groups, for varying reasons, and seems to have become part of the American consumer process. While not growing in volume as quickly today as it did in the past decade, the present volume produced and discarded does pose a threat to the environment.

Although paper is made from a renewable resource and is recyclable, its manufacture requires massive cuttings of trees. The clear-cut methods used by American loggers raise such issues as habitat loss, erosion, and depletion of water resources. Replacing acres of mature forests with stands of seedlings does not compensate for the loss of mature trees.

Only 5% of all paper used in the U.S. is third-class mail. But this does account for a massive amount of paper (4 million tons per year). The disposal of brightly printed, bleached paper, by any means, creates threats to groundwater, streams, air, and soil.

Part of the concern about third-class mailers' solid waste production is not only the quantity, but the quality of the waste so produced. Although the paper industry can point to some counterexamples, it has not made a general commitment to the use of inks and paper that produce fewer substances of environmental concern, and the use of recycled materials in third-class mail, while increasing, is not widespread.

Suggested Classroom Activities

1. Find out if your community has a program to recycle third-class mail. If so, where does it go? How is it recycled?
2. Have all students collect, weigh, and measure the volume of third-class mail delivered to their homes during a period of one month. Have the students find the average weight/volume of the class, and calculate the yearly weight/volume.
3. Make separate lists of catalog companies that do and those that do not use recycled paper. Hold a write-in campaign to those catalog companies that do not use recycled paper to encourage them to do so.
4. Distribute the address for having your name removed from catalog mailing lists to the community.
Assess any changes in the volume or weight of mail after removing your name from the mailing lists.
5. Create a questionnaire that assesses the appeal of third-class mail.
6. Determine the percent of junk mail you are not even inclined to open.

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It is ironic, perhaps, that many of the country's most outspoken and well-known environmental organizations find themselves in the middle of this issue. On the one hand, some of these groups have been accused of having no regard for the economic concerns of this country in their pursuit of a more pristine environment. However, this issue strikes close to the economic concerns of the groups themselves, and many of them find themselves defending interests for which environmentalists usually have no sympathy or understanding.

Although the use of data bases in third-class mail should allow lists to be kept up-to-date, free of duplications, and increasingly accurate in their focus, most of the contribution of modern computers to direct mail seems to be to give marketers the ability to create more frequent and massive mailings. Anecdotal information suggests that it is more expensive to cull a large list of duplications than to pay for the excess mailings.

The direct mail industry has realized that its image is one of producing unneeded solid waste and it is making efforts to change that image. Whether or not it will reduce its solid waste production through these efforts is unclear. In the final analysis, waste prevention is perhaps the key to helping reduce the quantity of unwanted third-class mail. Assuring that it takes place may ultimately reside with the individual, by trying to reduce excess mailings and those that don't meet individual needs.

To remove your name from mailing lists in general, contact:

Mail Preference Service
c/o Direct Marketing Association
11 West 42nd. St.
New York, NY 10163-3861
(212) 768-7277.

To remove your name from one particular list only, you will have to contact the mailer directly. You may also request at the time of ordering from a catalog that the company exclude your name from any mailing lists that it may sell to other companies.

Suggested Reading List

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