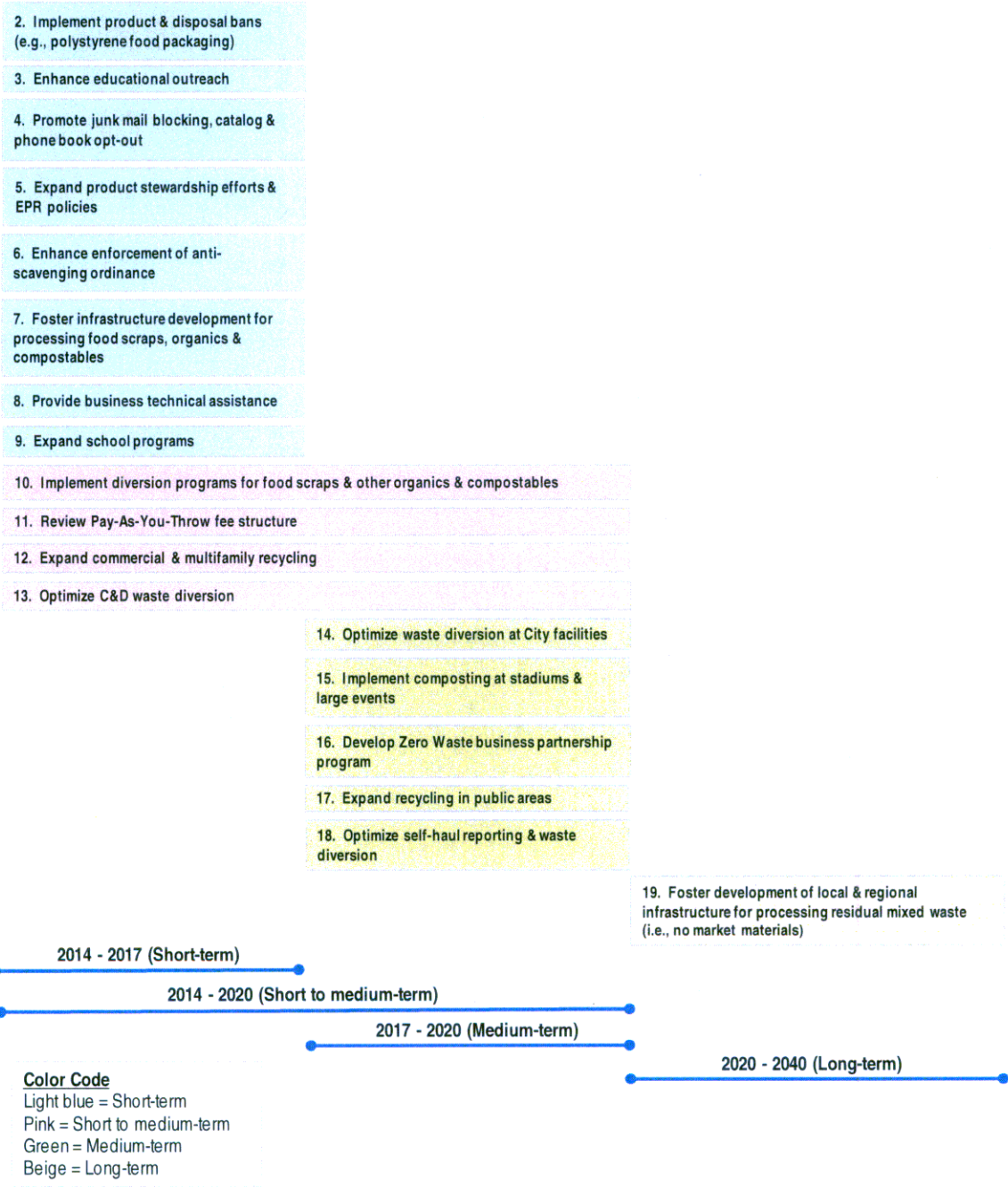




Zero Waste Plan Timeline

★ 1. Adopt Zero Waste Plan/resolution—2014



Zero Waste Initiatives

Note: High priority initiatives for the 2014 through 2017 implementation timeframe are indicated with a red flag symbol (). Those initiatives that may involve high cost strategies are indicated with the dollar sign symbol ().

1. **Adopt a Zero Waste Plan and Resolution**

Objective: Adopt a Zero Waste Plan and resolution that establishes the City's commitment to achieving Zero Waste by 2040.

Approach: The City will prepare a Zero Waste Plan and resolution for presentation to the City Council for consideration. The plan will outline the City's goals and objectives for achieving Zero Waste and will align with current City policies. The Zero Waste resolution would set the City's intentions for achieving Zero Waste by 2040 and its commitment to implementing the Zero Waste Plan.

Next Steps:

- Adopt Zero Waste Strategic Plan and Zero Waste Resolution.

Timeframe: 2014

2. **Implement product and disposal bans (e.g., polystyrene food packaging)**

Objective: Reduce the disposal of reusable, recyclable, organic and other compostable materials at landfills.

Approach: The City will support product and disposal bans for environmentally problematic materials by supporting legislation at the State level and implementing local bans and ordinances as appropriate.

Next Steps:

- Research other California cities that have successfully adopted polystyrene food packaging bans;
- Research compostable alternatives to polystyrene food containers and insure compatibility with current organics processing systems;
- Organize stakeholder meetings with local food vendor representatives, franchise haulers, Pasadena Public Health Department and other potentially affected parties to collaborate on eliminating the use of polystyrene food packaging and ensuring a smooth transition to compostable packaging replacements;
- Compile a list of appropriate compostable food packaging options and provide to local restaurants and food service establishments;
- Develop a draft ordinance banning food vendors' use of polystyrene food packaging;

- Prepare draft polystyrene food packaging ban ordinance for presentation to appropriate City committee(s) and the City Council for consideration;
- Upon adoption of the polystyrene food packaging ban ordinance, move forward with implementation, education, technical assistance to businesses and compliance monitoring; and
- Monitor State legislation regarding product and disposal bans and provide letters of support as appropriate.

Timeframe: 2014 – 2017

3. Enhance educational outreach

Objective: Increase community awareness and participation in Zero Waste efforts.

Approach: The City has a goal of increasing participation in existing diversion activities and improving marketing to targeted groups. The City will partner with community groups to increase the visibility of the recycling program and use social marketing techniques to reach populations that have not responded to traditional outreach methods.

Next Steps:

- Inventory existing educational outreach tools and programs and increase the types of outreach methods and frequency of distribution;
- Establish a regular schedule for updates, circulation, and announcements;
- Review needs/interests of stakeholders, including commercial businesses and restaurant groups;
- Develop a Zero Waste marketing plan to increase awareness of the Zero Waste Plan;
- Develop an information packet for new customers or residents;
- Increase usage of refuse truck signage for messaging;
- Explore existing neighborhood newsletters as outlets for publishing information about waste reduction initiatives;
- Explore additional outreach opportunities through community events;
- Enhance City website and explore increased use of social media;
- Increase English/Spanish bilingual outreach materials and explore the need for translation of materials into additional languages; and
- Utilize other resources for advertising such as the Arts buses, Metro buses, bus stops, billboards and other media opportunities.

Timeframe: 2014 – 2017

4. Promote junk mail blocking, catalog and phone book opt-out

Objective: Reduce the generation and disposal of junk mail, catalogs and phone books.

Approach: Expand awareness of methods to prevent the automatic delivery of junk mail, catalogs and phone books, such as the Catalog Choice mail preference service, by centralizing pertinent information on the City's website and increasing the availability of information on a regular basis.

Next Steps:

- Raise awareness of junk mail opt out program on City's website, City's Twitter messages, and e-mail news blasts; and
- Promote program through print ads in local newspaper and include in seasonal notifications.

Timeframe: 2014 – 2017

5. Expand product stewardship efforts and extended producer responsibility (EPR) policies

Objective: Implement policies for producers to take responsibility for the end of life management of products and packaging they generate and/or sell.

Approach: Develop EPR policies within Pasadena that build on the existing EPR resolution adopted by the City. Policies could include mandatory take back for problem products, such as pharmaceuticals, batteries, or fluorescent bulbs. Provide education and outreach to consumers on purchasing practices that support product stewardship. The City can support State and federal efforts to build the environmental and social costs into the price of products and packaging and then require manufacturers to take back products at the end of their useful life.

Next Steps:

- Keep City staff, elected officials and the community abreast of product stewardship legislation and support legislation as appropriate;
- Compile and publicize a list of all local retailers who are willing to take back items such as dry cleaner hangers, batteries, mattresses, carpet and paint; and
- Publish this list of retailers in City communications and on the City's website.

Timeframe: 2014 – 2017

6. Enhance enforcement of anti-scavenging ordinance

Objective: Reduce theft of recyclables from the City's carts and bins, receive full credit for diversion tonnage, and increase the revenue generated from the sale of the recyclables.

Approach: Public Works will commit staff resources and work with the Pasadena Police Department to identify and cite scavengers.

Next Steps:

- Review best practices for preventing scavenging throughout the State and across the country;
- Formulate strategies for reducing scavenging;
- Develop a scavenging prevention educational campaign targeted to residents; and
- Increase frequency of periodic, coordinated enforcement sweeps.

Timeframe: 2014 – 2017

7. Foster development of local and regional infrastructure for processing food scraps and other organic and compostable materials 🚩💰

Objective: Increase the diversion of organics and compostable materials, including yard trimmings and food scraps. Develop regional processing capacity for organics and compostable materials near Pasadena.

Approach: Using information from the waste characterization study on the types and quantities of organic and other compostable materials generated in Pasadena, identify needs and available processing capacity (compostable materials must be confirmed in writing as compostable by a certified processing facility). Consider partnering with neighboring municipalities that are pursuing facilities for compostable materials processing such as the Cities of Glendale and Los Angeles.

A portion of the material the City of Pasadena is currently diverting consists of green waste made up of tree trimmings, grass clippings and other landscaping materials that are used as alternative daily cover (ADC) at Scholl Canyon Landfill. Diversion credit for ADC is likely to be discontinued based on legislative trends and the City's diversion rate would be reduced by approximately three percent if this material is not diverted by other means such as composting.

Next Steps:

- Evaluate the potential for transporting materials to existing facilities and conduct a formal Request for Proposals;
- Support appropriate legislation that facilitates the development of local composting capacity;
- Stay abreast of developing technologies and facilities for food waste processing within the vicinity of Pasadena;
- Pursue partnerships with other jurisdictions as opportunities arise; and
- Explore funding opportunities for developing new or expanding existing organics processing infrastructure.

Timeframe: 2014 – 2017

8. Provide business technical assistance

Objective: Increase understanding of Zero Waste and the ability to reduce waste generation and increase reuse, recycling, and composting.

Approach: Offer free technical assistance to businesses to transition to new programs such as food waste composting and comply with potential mandatory measures such as a polystyrene food packaging ban. City staff will be available to visit businesses, assess existing conditions, provide training materials and make recommendations for enhancements to waste reduction, reuse, recycling, composting and other Zero Waste initiatives.

Next Steps:

- Develop an outreach plan to work collaboratively with businesses in developing new programs and to prepare for mandates such as food waste composting and a polystyrene food packaging ban;
- Develop a Zero Waste Pasadena website with information for businesses, schools and institutions to keep them informed of waste diversion options and new initiatives; and
- Promote the lending of City recycling equipment for all large business events.

Timeframe: 2014 – 2017

9. Expand school programs

Objective: Expand waste reduction, reuse, and recycling at Pasadena schools to help the City meet its Zero Waste goals.

Approach: The City and PUSD jointly created a curriculum and designed a school recycling program which are ongoing. The City will continue to monitor and support these programs and expand to other school campuses and additional activities such as composting.

Next Steps:

- Investigate the waste diversion efforts at private schools and college campuses and encourage the development of new programs and expansion of existing programs;
- Create “Go Zero” challenge for school campuses;
- In conjunction with the Pasadena Education Foundation, develop a Zero Waste course to add to the summer enrichment program; and
- Explore collaborative projects with local colleges to develop engaging Zero Waste videos tailored to students in specific age groups.

Timeframe: 2014 – 2017

10. Implement diversion programs for food scraps and other organic and compostable materials 🚩💰

Objective: Divert food scraps and other organic and compostable materials for beneficial use.

Approach: Currently there is limited local infrastructure and experience in food waste collection and processing, though there is some limited regional infrastructure. The approach will be to identify local processors, work out the collection logistics and identify and remove barriers to diverting this waste material. Investing in local infrastructure will reduce transportation and collection costs, increase the efficiency of City operations and reduce environmental impacts.

Next Steps:

- To encourage innovative food waste diversion efforts, open the franchise system to composting haulers;
- Investigate best practices for organics diversion and facilitate options for the collection and processing of food scraps and other organic and compostable materials generated by businesses and multifamily properties with five or more units;
- Keep City staff, elected officials and the community abreast of legislation concerning food waste diversion and support as appropriate;
- In anticipation that there will be State mandates for commercial food waste diversion in the near future, assess the feasibility of creating an exclusive restaurant and grocery store franchise zone;
- Provide technical assistance to the business community to optimize participation in commercial food waste diversion programs;
- Investigate alternatives to sending residential yard waste to the landfill to be used as alternative daily cover (ADC);
- Haul a limited number of residential yard waste loads over a three to six month timeframe to a composting facility in the region to assess feasibility and logistics;
- Assess the feasibility of commingling residential yard waste with food waste for transport to a composting facility in the region and potentially design a six month collection pilot; and
- Promote grass-cycling and backyard composting.

Timeframe: 2014 – 2020

11. Review Pay-As-You-Throw (PAYT) fee structure

Objective: Ensure the viability and effectiveness of the PAYT system.

Approach: Evaluate the current PAYT system and identify opportunities to improve diversion incentives while maintaining a rate structure that is fair and equitable to rate payers. Additionally, staff needs to consider whether the cost differential between the three cart sizes is adequate to incentivize residents to recycle more and move toward a smaller, less expensive mixed waste cart.

Next Steps:

- Compare rates and included services from other PAYT cities in California and across the country, particularly those cities providing residential food waste programs;
- Develop a Request for Proposals for a consultant/third party expert to perform a rate study and review of Pasadena's PAYT system, evaluate the cost differential between the mixed waste cart sizes and determine if changes will be needed to maintain incentives for the future; and
- Hire consultant to perform rate study and PAYT review.

Timeframe: 2014 – 2020

12. Expand commercial and multifamily recycling \$

Objective: Increase the diversion rate within the commercial and multifamily sector.

Approach: Encourage expansion of commercial and multifamily recycling for generators to increase participation and diversion. Some commercial generators in Pasadena fall below the State's mandatory recycling threshold of four cubic yards of waste generation per week. This initiative may extend recycling requirements to all commercial and multifamily generators.

Next Steps:

- Work through the franchise hauler system to identify the commercial and multifamily properties that generate less than four cubic yards of waste per week;
- Determine the amount of waste generated by Pasadena businesses that do not fall under the current commercial recycling mandate and the disposition of this waste stream;
- Investigate barriers to requiring source separated recycling at multifamily properties;
- Investigate the appropriateness of implementing mandatory measures such as recycling ordinances or modifications to the franchise hauler system; and
- Research existing commercial/multifamily recycling ordinances throughout the State and across the country to determine best practices.

Timeframe: 2014 – 2020

13. Optimize construction and demolition (C&D) waste diversion

Objective: Review and optimize the C&D diversion requirements in order to divert the maximum amount of C&D debris generated in Pasadena.

Approach: In 2014, the C&D Ordinance was amended to comply with the State's updated CalGreen requirements. Square footage thresholds of covered projects were lowered and the diversion requirements were increased to 75 percent in support of the City of Pasadena's Zero Waste goal. The City will continue to reevaluate administrative procedures and determine the optimum level of diversion that is achievable.

Next Steps:

- Evaluate future measures such as prohibiting direct disposal of C&D debris or mandatory processing of all C&D materials; and
- Stay current with C&D ordinances throughout the State and evaluate the applicability to Pasadena's conditions.

Timeframe: 2014 – 2020

14. Optimize waste diversion at City facilities

Objective: Expand waste reduction, reuse, and recycling at City facilities, establishing the City's leadership and commitment to meeting its Zero Waste goals.

Approach: Assess programs and policies currently in place at City facilities and identify opportunities to expand waste reduction, reuse, recycling and composting. Establish consistent waste reduction, recycling and composting programs for City facilities to implement, with provisions for monitoring and accountability.

Next Steps:

- Perform an audit of existing in-house recycling at all City facilities and parks;
- Recruit and train recycling coordinator for each City facility;
- Establish recycling programs at facilities lacking existing programs; and
- Establish guidelines for hosting Zero Waste events.

Timeframe: 2017 – 2020

15. Implement diversion of food scraps and other organic and compostable materials at stadiums and other public venues and events

Objective: Divert food scraps and other compostable materials for beneficial use.

Approach: Require Rose Bowl Stadium events including football games, concerts and other large events (greater than 2,000 persons per day or event) to implement diversion programs for food scraps and other compostable materials.

Next Steps:

- Continue to work with the Rose Bowl Operating Company toward transition from conventional food packaging to use of compostable products;
- Promote use of compostable products at all large venue events such as the Tournament of Roses Parade, runs, marathons, festivals and flea markets; and
- Develop Green Event Guidelines for events requiring City permits.

Timeframe: 2017 – 2020

16. Develop Zero Waste business partnership program

Objective: Expand the visibility of local businesses making significant strides toward eliminating waste to model and raise awareness of best waste reduction practices within the commercial sector.

Approach: Develop incentive programs to recognize businesses with exemplary waste diversion achievements.

Next Steps:

- Review green business programs being implemented locally, throughout the State and across the country and determine best practices;
- Develop a Zero Waste business partnership program;
- Collaborate with business owners and industry associations to identify businesses interested in participating in the Zero Waste business partnership program;
- Recognize business partners through methods such as publishing the names of partnering businesses on the City's website and running list ads in local publications;
- Enhance existing Green City Award program to recognize businesses that have made substantial progress toward achieving Zero Waste; and
- Explore implementing a "Go Zero" challenge for businesses and institutions.

Timeframe: 2017 – 2020

17. Expand recycling in public areas

Objective: Increase recovery of recyclables from high traffic public areas.

Approach: Provide collection receptacles for beverage containers and recyclable paper in public areas throughout Pasadena. Containers would be stationed in high traffic areas such as parks, shopping districts, libraries, museums, the Playhouse District, etc.

Next Steps:

- Identify recycling containers appropriate for Pasadena (preferably high-tech, environmentally friendly compactors), estimate the number of recycling containers needed and the cost to purchase the containers;
- Develop a budget line item for purchasing new containers over a five-year period;

- Pursue grant programs and other funding opportunities for purchasing recycling containers;
- Develop routes for servicing recycling containers; and
- Procure and install recycling containers.

Timeframe: 2017 – 2020

18. Optimize self-haul reporting and waste diversion

Objective: Increase accuracy of disposal reporting by self-haulers.

Approach: In order to reach diversion goals it is important to accurately account for the point of origin of waste. Based on the waste characterization study, an unrealistic amount of self-hauled waste is being reported as originating from Pasadena. The City of Pasadena will partner with local jurisdictions to develop more accurate accounting of self-haul waste origin, involving transfer stations, MRFs, and landfill operators.

Next Steps:

- Conduct survey of local landfills to determine the current practices for documenting waste origin (driver's license, commercial accounts);
- Obtain the records of the landfills and review the list of self-haulers (contractors, clean-up companies, commercial generators);
- Work with the Sanitation District to develop more stringent reporting requirements for self-haulers; and
- Support regional development of resource recovery parks at landfills and transfer stations for self-haulers to segregate their loads for recycling.

Timeframe: 2017 – 2020

19. Foster development of local and regional infrastructure for processing residual mixed waste (i.e., no market materials) \$

Objective: Develop appropriate options for diverting waste materials for which there are currently no markets.

Approach: Several nearby communities are investigating future development of mixed waste processing and are evaluating emerging technologies including anaerobic digestion, gasification and advanced thermal recycling (waste-to-energy). Pasadena may benefit from evaluating the initiatives being pursued by other communities and the private sector before actively engaging in the development of alternative technologies. The City will look for appropriate opportunities for partnerships and continue to monitor the technical and economic viability of emerging residual mixed waste processing technologies.

Next Steps:

- As opportunities arise, partner with Pasadena Water and Power and neighboring jurisdictions that are pursuing facilities for residual mixed waste processing, such as the City of Glendale, City of Los Angeles, and Los Angeles County.

Timeframe: 2020 – 2040