Los Angeles Textile Recovery Pilot
PHASE 2:
FINAL REPORT SUMMARY

Executive Summary

Renowned as the home of the Fashion District, Los Angeles sees opportunities for better materials management and promotion of textile reuse and repair in addition to establishing a value chain for end-of-life products. The effort to manage textile waste in Los Angeles aligns with objectives from **LA's Green New Deal**, **Comprehensive Plastics Reduction Program**, and **LA City's Textile Policy Goal**.

Phase 1 (2020-2022)

01 Textile Handlers' Map
Started mapping local diversion champions in California

02 Data Collection
Collected City of LA Commercial Textile Waste Totals

03 Textile Recovery
Sent materials for upcycling, recycling, and composting

Formed a working group of experts

Phase 2 (2022-2024)

01 Textile Hub
Expanded the Hub database and map and find more processors

02 Fiber identification
Tested different NIR sorting devices on the market

03 Closing the loop in LA
Diverted discarded textiles into final products for the City of LA

To demonstrate the concept of closing the textile loop as close to the city as feasible, Phase 2 collaborated with partners and sorted more than 2,000 pounds of cotton and cotton-poly blends within LA, for subsequent local and regional processing. Then, the pilot successfully connected processors with the end market. As a result, new products will be made by using the recycled materials sourced from LA for the local market by Outerknown, a California-based clothing brand that focuses on sustainability using eco-friendly materials. Read the full report to learn more about challenges and next steps for the City to consider.

PHASE 2 ACCOMPLISHMENTS

3 recyclers & 4 upcyclers

7 Fiber sorting and 1 education events

2000+lbs sorted at Homeboy Threads

1000+lbs processed & made into new products

Processing LA Textile Waste

RECYCLING

The pilot phase 2 successfully sorted & processed 1,000+ pounds of cotton & cotton-poly blends through mechanical processes.

LE MARCHE' luna lab

Sent 816 lbs of recycled yarns to LA based mills to be made into new fabrics.

LAGUNA FABRICS

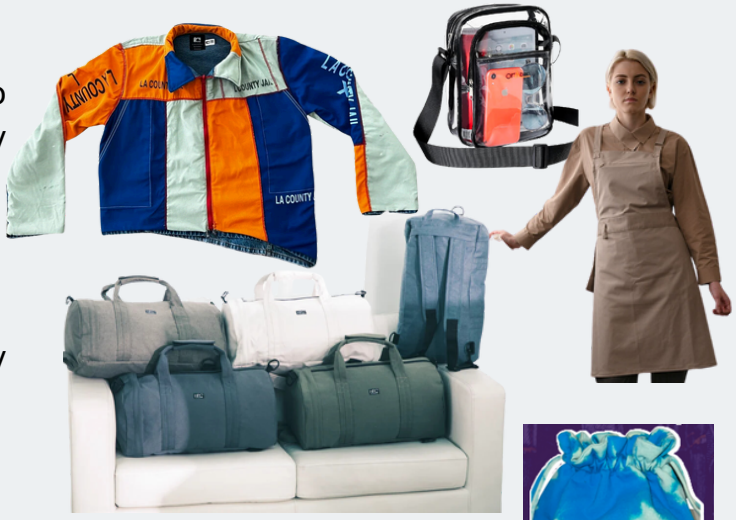
VARIANT 3D

100% cotton waste was turned into yarn, then back into a garment, for a textile-to-textile model.

UPCYCLING

The pilot project partnered with local upcyclers in LA to repurpose discarded textiles into innovative high-quality new products. Featured products included

- aprons crafted by Eorte,
- bags by Hamilton Perkins,
- denim jacket by Threadhaus,
- clear bags and Denim Repair Kits developed by Circular Fashion LA.



CIRCULAR FASHION LA

Eorte

HPC HAMILTONPERKINS

THREAD HAUS

Gaps in the Market

SORTING

A significant challenge in the textile recycling process is the absence of efficient sorting systems on a large scale. Currently, sorting discarded textiles is mostly done manually, relying on garment tags or handheld/tabletop fiber identification devices. This manual process not only compromises accuracy, but also adds to the costs of preparing feedstocks for recycling. Better high-capacity sorting is needed.

SPINNING

In California's textile manufacturing infrastructure, the biggest gap lies in spinning fibers into usable yarns to then weave or knit into fabrics. There are three fabric mills in LA, and zero yarn spinners in the state. We must support the existing fabric mills.

TESTING

Another gap lies in the absence of testing facilities for recycled yarns. These facilities are crucial for ensuring the quality and performance of recycled textile products. There are several academic and trade schools with little cohesive collaboration.

Estimation of Job Employment

Creating a textile hub with infrastructure for collecting, sorting, and recycling textiles can boost domestic manufacturing and job opportunities. To estimate job creation potential, full-time equivalents (FTEs) for textiles are calculated by applying the FTE/Ton metrics to the textile waste tonnage reported at the local and state levels.

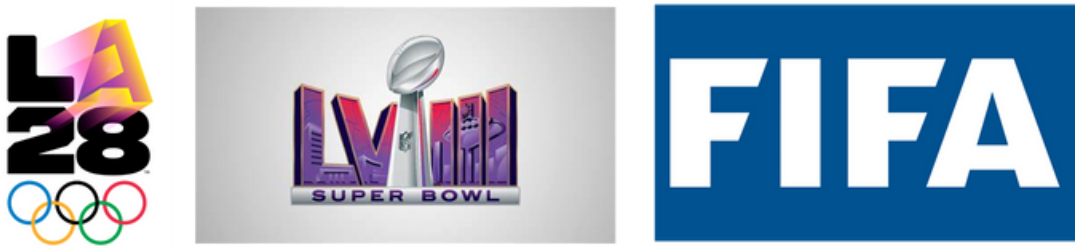
Projections from existing programs and references in the calculations presented in the full report, a Textile program would create 1,070 jobs in Los Angeles, and 17,086 jobs Statewide.

Estimation of GHG Impact

The LA textile recovery pilot aims to reduce waste going into landfill or incineration by enabling material reuse and recycling. Throughout the pilot, efforts have been made to estimate greenhouse gas (GHG) emissions, providing insights into the carbon footprint associated with textile recycling and emission reduction opportunities. The calculation of GHG emissions associated with the Phase 2 activities is attached in Appendix B. With the working group's feedback considered in the calculation, the **GHG reduction for the volume of textiles diverted in Phase 2 is 39.23 MTCO2, equivalent to 8.7 gas powered cars driven for one year for the 1,000 lbs of textile waste recycled.** The impact is significantly higher, if diverting more of the 75,137 tons of commercially generated textile waste in the City annually.

Next Steps

The LA Textile project is awaiting approval to progress into Phase 3 (2025-2028) and recruiting sponsors and co-funders, including applications to private and federal grants. Scope of Phase 3 includes the following objectives in preparation for the upcoming global events. Textiles are expected to constitute a significant portion of the waste stream during the preparation and implementation phases of these events.



MAINTAIN LA TEXTILE WORKING GROUP

Foster dialogue and strategy development for the textile hub alongside promoting textile sustainability ahead of global sports events: FIFA World Cup 26, Super Bowl LXI (2027) and Olympics LA28.

ESTABLISH A LOCAL TEXTILE PROGRAM PRIOR TO LA28

Initiate political levers via contracts, permits, ordinance, or executive order to establish a local textile program to divert textile waste into circular supply systems and create green jobs.

COORDINATE ACADEMIC AND VOCATIONAL TRAINING PROGRAMS

Create webinars, repair workshops, collaboration opportunities, and curriculum development for textile education. Also, access to lab testing.

START THE PHYSICAL AND VIRTUAL HUB

Assess requirements and recommendations for building and operating a textile hub owned by the City of Los Angeles. Expand website functionality.