## Delivery Report for SCLS Board of Trustees July, 2024 Prepared by: Corey Baumann - Delivery Services Coordinator

## **Staffing:**

Our staffing efforts beginning back in February as we filled numerous vacancies has yielded outstanding results. In an effort to relieve the pressure on staffing routes while adhering to our budget of \$41,000 per pay period, we can highlight these achievements:

- Since the first full pay period of the year back in January, we are 100% below budget for each of the 13 pay periods. Each pay period has averaged over \$1500 below budget.
- The Delivery department has not had a pay period with overtime paid for 4 intervals
- There has been a total of 11 overtime hours since April 1<sup>st</sup>. (before that time, we were averaging over 30 overtime hours per pay period)

All of this has been achieved with our staffing efforts to add our 3 supervisors, 2 full-time drivers, and a host of new part-time drivers.

Most recently, we added part-time staff member Salvatore Schiro to the team. He is joining us for the summer to allow for greater flexibility during high vacation usage by our staff.

## Sort Audit:

Back in April, I began a project to evaluate our process to evaluate exactly what we do as it relates to sorting and a future automated sorting system in the delivery facility.

This project includes evaluations on (1) how accurately we sort, (2) how much we produce per hour in terms of materials sorted, (3) the impact of transitioning to an automated sorter, and (4) any ergonomic factors that we employ in sorting

With the help of Doug Wilson, I am providing an early picture of what we will report on formally.

- 1. After conducting 2,708 accuracy audits on sorted items, only 4 errors were discovered. This puts our team at a significant 99.85% accuracy percentage. Going off of standard acceptance for human errors in such functions of 1%, this cannot be understated as an excellent evaluation of our team. Especially accounting for the number of new members we have on our team that sort significant quantities.
- 2. As we evaluate our efficiency, we have discovered that we have two styles and zones of sorting which produce different efficiency results. In our general sorting areas (not Madison Public), we achieve 15 to 18 bins sorted per hour per individual sorter. In our Madison Public area, we achieve 25-30 bins sorted per hour per individual sorter. When we sort, we produce completed and ready-to-ship bins. The task is complete once the book hits the bin, in other words. In a brief sample that we tried to replicate Madison sorting on the sorter located at Fitchburg, we were able to break down 6 bins in 8 minutes. The materials were sorted into bins that would need

straightening to be ready to ship. Also, approximately 2% of the materials went into an error bin that required further investigation as to why it did not sort properly. Most of the time, it was due to a lack of an RFID tag, but it can also mean that the dedicated bin is full. At that pace, a single induction point would need a 16 hour window (uninterrupted) to run through our 750 incoming bin count on a typical Monday. We currently sort in an 8 hour window, largely. More induction points would be needed, but the pace for each goes down due to conveyor conflict as multiple inductors would be used. This would likely close the sorting window down to about 10 hours.

- 3. The implementation of an automated sorter would come with service interruption. We would expect that an install process would occupy a significant portion of our existing floor space and allow us little flexibility to conduct normal operations while installation takes place. We believe that it would be a 2-week process minimally (clearing space, hardwiring electrical and other infrastructure, conveyor installation, testing, and training). After training, we would expect a progression that may take up to an additional month to iron our bugs and achieve acceptable service levels libraries have come to expect. All of this would likely come with an expanded floor schedule to accommodate the system, but may be a stressor for our staff if they are changed to a later shift than they desire.
- 4. Ergonomically, we would expect a sorter to have some advantages while also giving back some. It is unknown yet what that might look like. As we investigate vendors, we will pay keen attention to ergonomic benefits compared to what we do today manually.

## **Equipment Update:**

We are in the early stages of working with a fabricating and welding instructor at Madison College. Heather Wolf has taken interest in our business as she is a user of our shared materials as a patron. She is excited to provide her students with opportunities to repair (weld) broken carts for us. We would assemble a batch of carts that are in need of welding repairs to get them back into service for us rather than discarding them.

Also, as she looked at the greater operation and the cost of replacing carts, she offered that they could help there too. With students buying their own materials to perform projects, she said that we could replicate a project for the students that achieve standards like squaring at minimal or no cost to us.

As we spit-balled other ideas, we thought there might be an opportunity to pilot new forms of material transport that allow us to reduce lifts while moving more items at greater quantities. This could involve an engineering and design program at Madison College to evaluate materials need for such pilots.

Exciting news with more to come, hopefully.