

# JOHN DAY GREENHOUSE PROJECT UPDATE

MARCH 2021

# Facility Background

- 6,000 sf hydroponic greenhouse
- Three bays (production, leafy greens, vine crops)
- Financed with \$350,000 SPWF loan from Business Oregon
- Construction completed September 9, 2019



# Product Line

Greenhouse currently offers ~~18 products~~ <sup>24 products</sup>: tomatoes, cucumbers, leafy greens, fruit, herbs, and a salad pack

## Orange Cherry Tomatoes

Super sweet and juicy cherry tomatoes, vine ripened for exceptional flavor.

**\$4.00 / pt** *Low stock*



## Cherry Tomatoes

The pictures don't lie - these are the best Cherry Tomatoes you'll ever eat. Vine ripened, they are harvested year...

**\$4.00 / pt**



## Purple Bumble Bee Cherry...

Beautiful eye catching cherry tomato, sweet and meaty, a perfect addition to your salads.

**\$4.00 / pt** *Low stock*



## Thai Basil (whole plant)

Our Thai basil plants are sold with the roots intact and taste delicious. Thai basil is native to Southeast Asia and ha...

**\$3.00** *Out of stock*



## Basil (Whole Plant)

Our basil is grown until just before seeding, ensuring optimal taste and fragrance. We sell our herbs as living...

**\$3.00**



## Cilantro (Bunch)

Grown fresh weekly - you won't need nearly as much as store-bought with our fresh hydroponic cilantro. Price per...

**\$1.50** *Low stock*



# Product Line

Greenhouse currently offers ~~18 products~~ <sup>24 products</sup>: tomatoes, cucumbers, leafy greens, fruit, herbs, and a salad pack

## Corinto Cucumber

These babies are delicious. Our Corinto cukes are left on the vine until peak freshness. They are 7-8" and make gre...

**\$1.00**



## Socrates Cucumber

Socrates cukes are dark green, thin-skinned, 7-8" fruits. This is one of the BEST cucumbers on the market today....

**\$1.00**



## Small Snacking Cucumber

Small snacking cucumbers are great for snacking or adding to your favorite beverage! Almost seedless and super...

**\$0.50**



## Orange Slicer Tomatoes

Orange beefsteak tomato, low in acid and good flavor and texture. Try this on your next burger!

**\$2.99** *Out of stock*



## Slicer Tomatoes

Big, fat and juicy. These jaw droppers are left on the vine till they can't take it any more. Love me some slicers in BLT's, o...

**\$2.99 / lb** *Out of stock*



## Cantaloupe (Eastern)

These Eastern (deeply ribbed skin) melons are medium-sized. The texture and complexity of flavor of this variety...

**\$5.00** *Low stock*



# Product Line

24 products

Greenhouse currently offers ~~18 products~~: tomatoes, cucumbers, leafy greens, fruit, herbs, and a salad pack

## Cantaloupe (Sugarcube)

These softball-sized melons are a smaller hybrid variety of American cantaloupe with orange flesh and a cor...

**\$3.00** *Out of stock*



## Red Bell Pepper

Sweet and crunchy! Perfect for snacking or add to your next meal of fajitas or Gumbo!

**\$2.00** *Out of stock*



## Salad Pack

Our salad pack includes 2 butterhead lettuces, 1 lb of slicer tomatoes, and a cucumber. Taste the difference in fresh...

**\$7.50** *Out of stock*



## Butterhead lettuce

Butterhead lettuces have soft, buttery-textured leaves that form very loose "heads". They boast a mild, sweet and...

**\$2.25** *Out of stock*



## Red Romaine

Our hydroponic mini-Red Romaine lettuce is beautiful and delicious in Caesar or Garden salads. It is decorate,...

**\$2.25** *Out of stock*



## Green Romaine

Our hydroponic Green Romaine is perfect for salads. It has a sweet, mild flavor and is harvested when perfectly...

**\$2.25** *Out of stock*



# Product Line

24 products

Greenhouse currently offers ~~18 products~~: tomatoes, cucumbers, leafy greens, fruit, herbs, and a salad pack

## Red Oakleaf Lettuce

Beautiful Pom-pom style lettuce head, the red twin to our green oakleaf, this lettuce has fine lobed oakleaf shaped...

\$2.25



## Green Oakleaf Lettuce

These beautiful lettuce heads look like pom-poms and will have your family cheering for salad!! Leaves are fine lobe...

\$2.25



## Yellow Bell Pepper

\$2.00 *Out of stock*



## Red Bell Pepper

Sweet and crunchy! Perfect for snacking or add to your next meal of fajitas or Gumbo!

\$2.00 *Out of stock*



## Sweet Orange Peppers

Sweet orange peppers are small but full of flavor! Average size is 3.5 inches

\$1.50 *Out of stock*



## Asian Micro Greens

Add a little spice and nutritional value to your everyday Salad! This super food is loaded with vitamin C, beta-carotene, B...

\$1.50 *Out of stock*



# Square e-Commerce Platform

- Produce distributed via a two-sided business model
  - Direct-to-Consumer (D2C)
  - Business-to-Business (B2B)
- Sales managed via Square application
- Orders processed at

[www.johndaygreenhouse.com](http://www.johndaygreenhouse.com)



# Order Processing

1. Orders submitted online (or invoiced via the app)
2. Payment submitted (or invoice generated)
3. Customer picks up produce at the greenhouse
4. Staff update order as filled



*Customer order baskets*

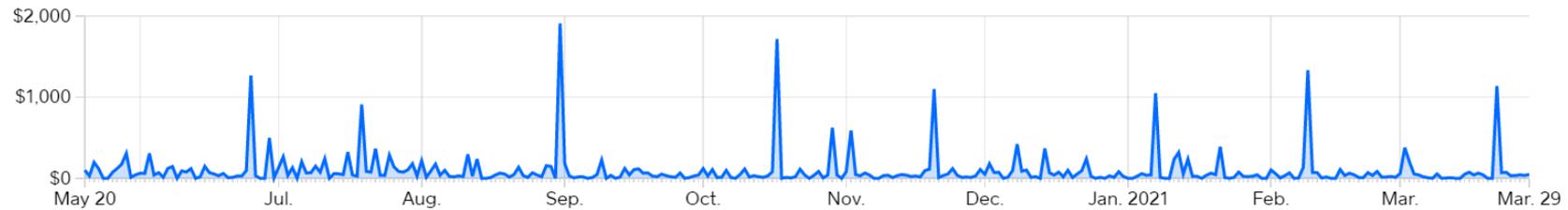


# Online Sales (thru March 29, 2021)

- Online sales began May 20, 2020
- \$31,072.40 gross sales
- \$25,751.04 net sales (less B2B discounts & fees)

## May 20, 2020–Mar. 29, 2021

05/20/2020–03/29/2021



### DAY OF WEEK

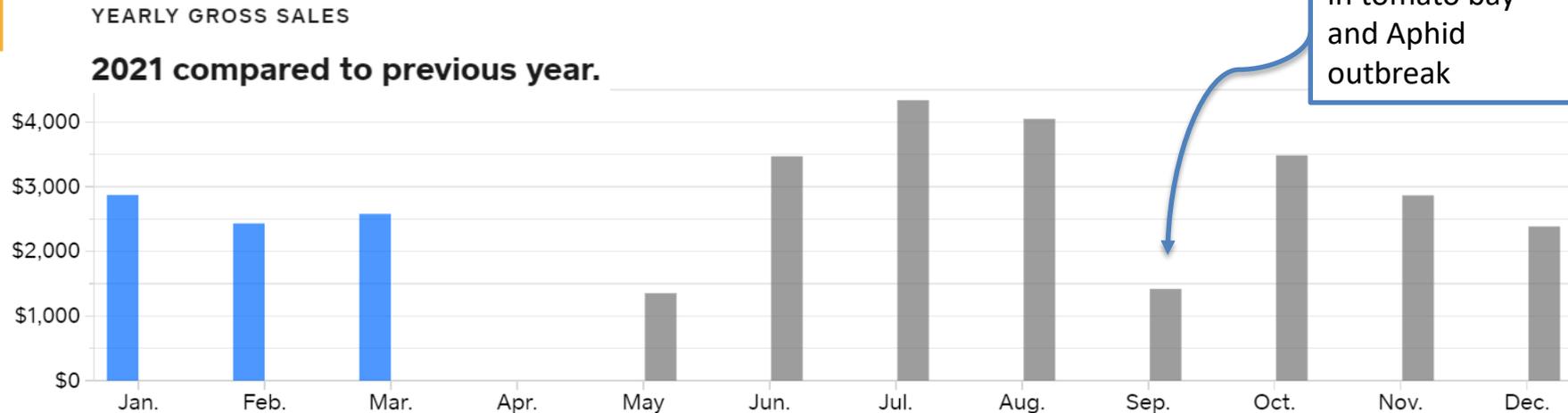


### TIME OF DAY

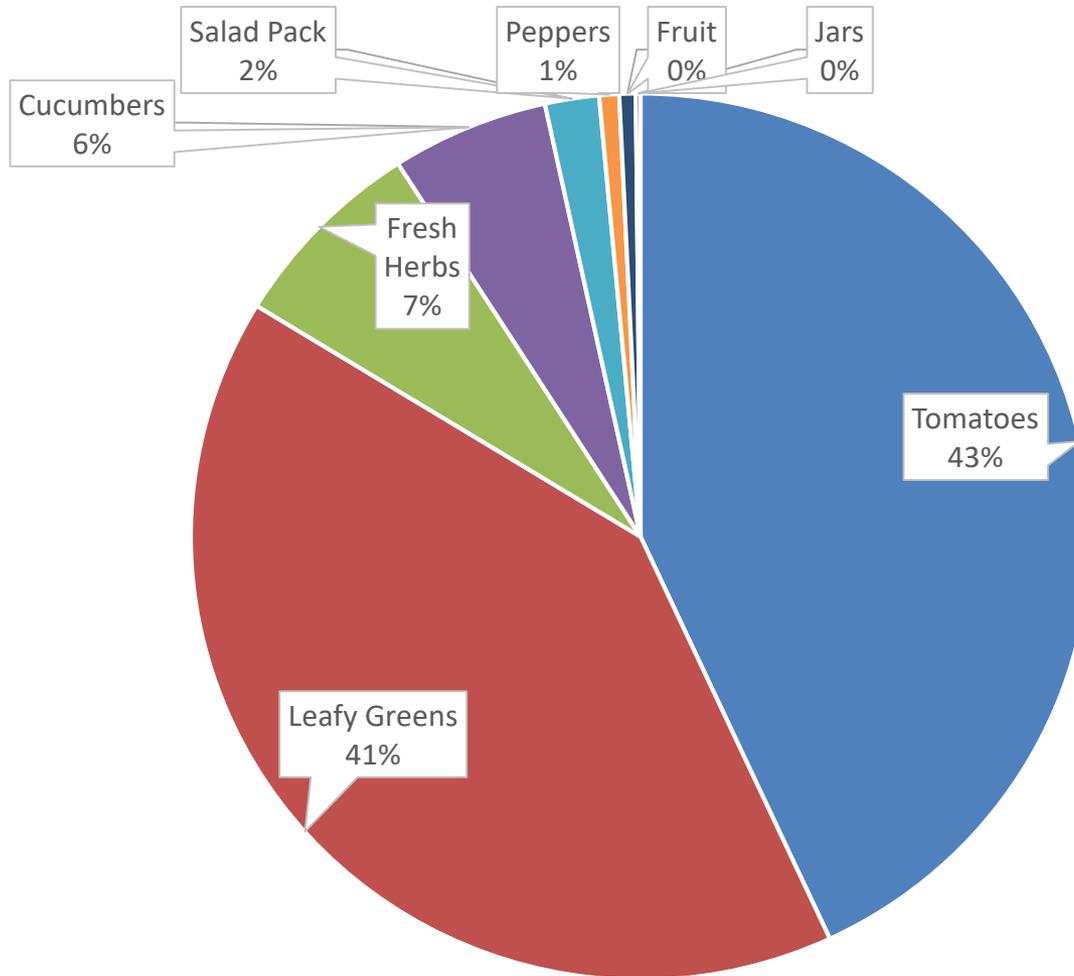


# Gross Sales by Month

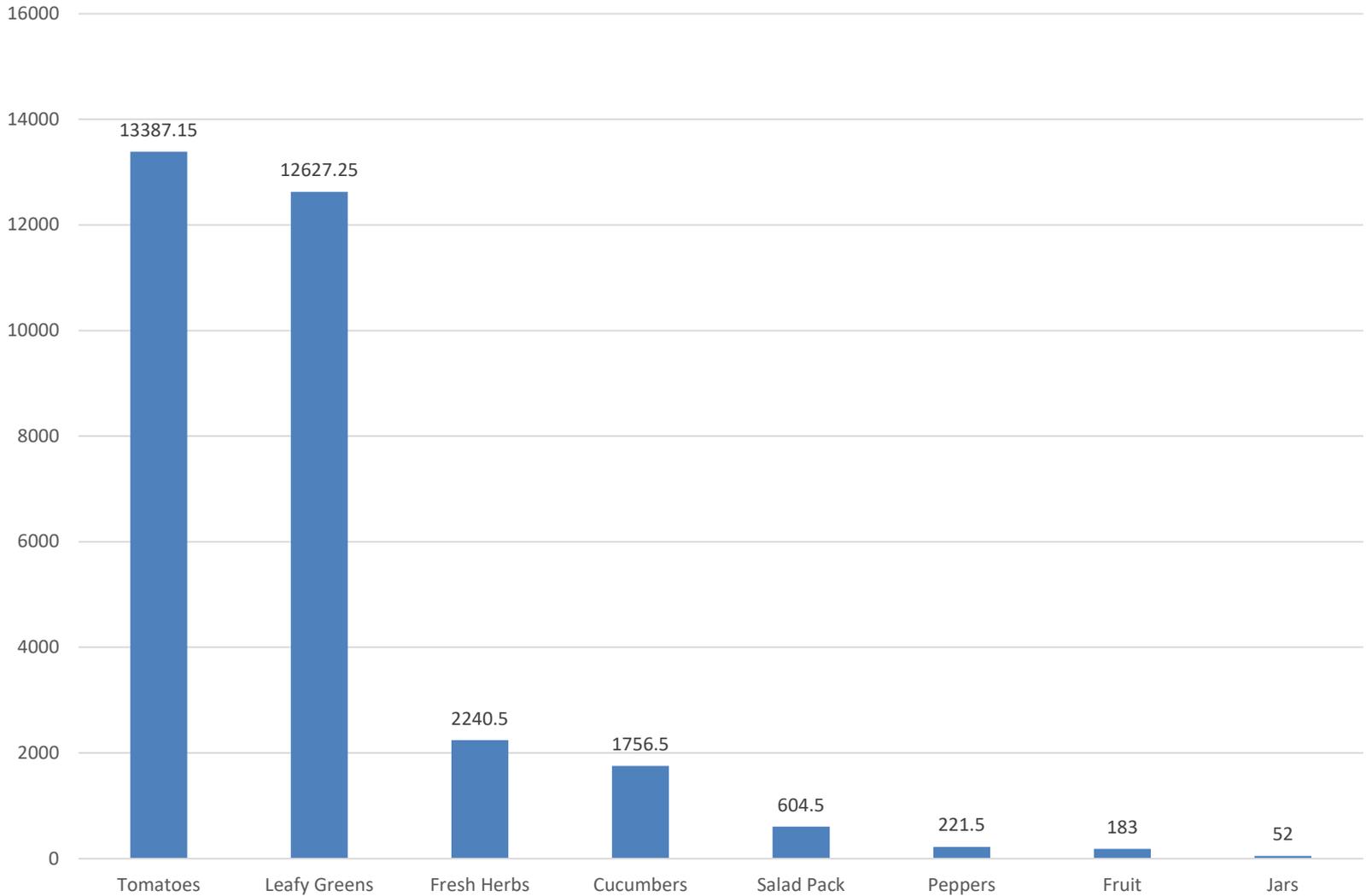
- Online sales through the e-Commerce platform
- Average revenue during COVID-19 pandemic = \$2,500 net sales per month
- Excess produce is donated to the food bank



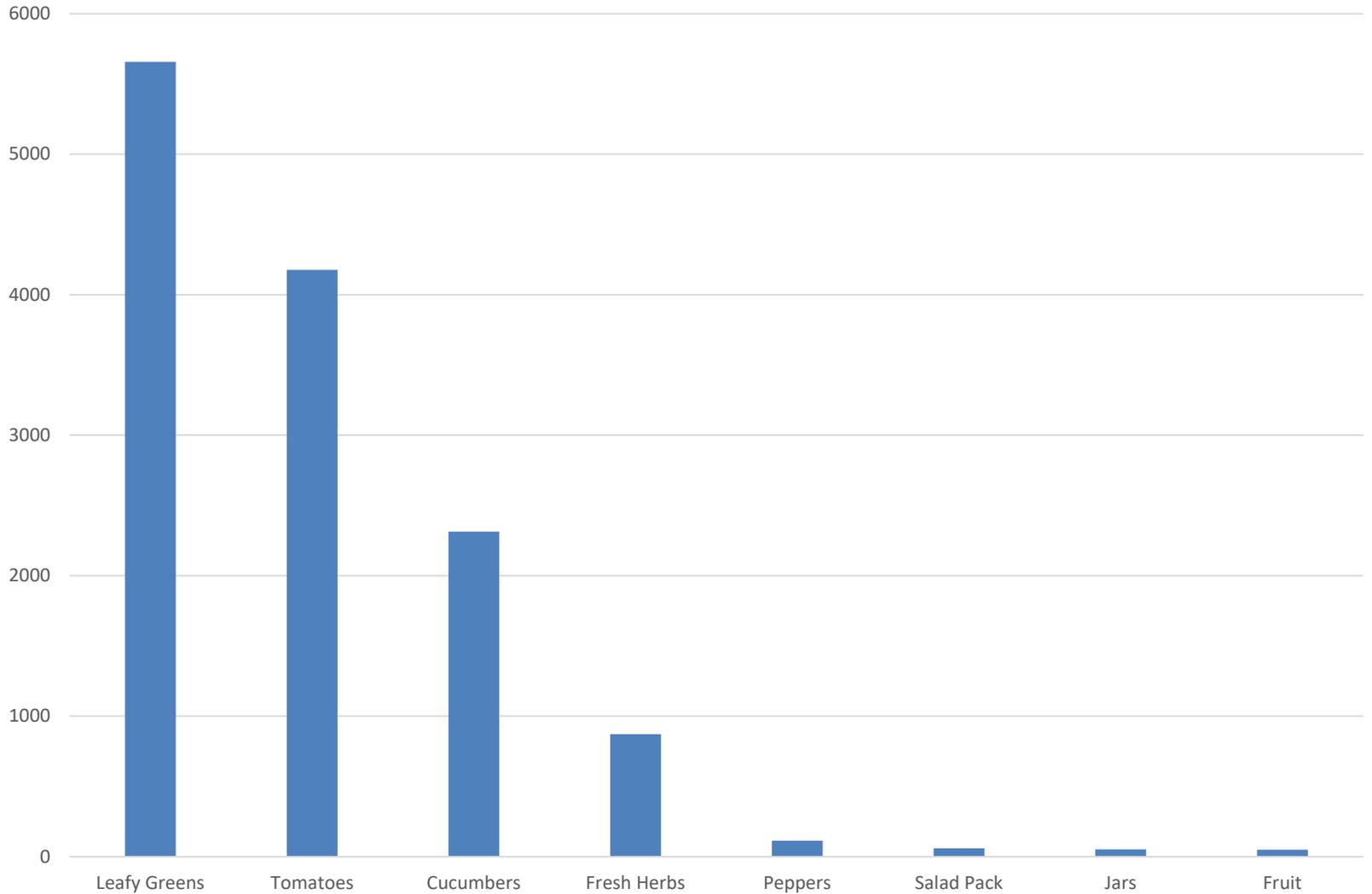
# Gross Sales (%) by Category



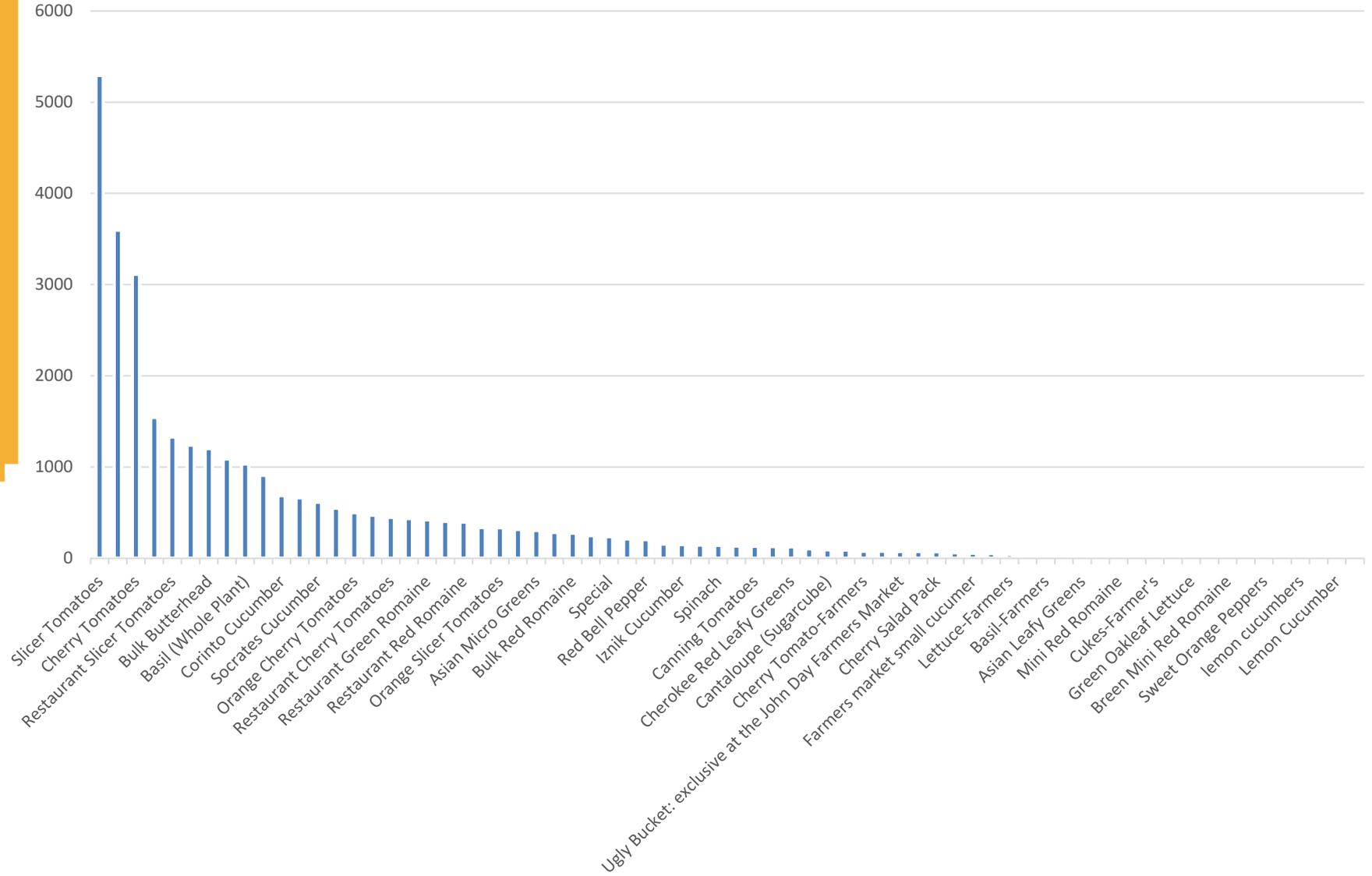
# Gross Sales (\$) by Category



# Gross Sales by Units Sold (Volume)



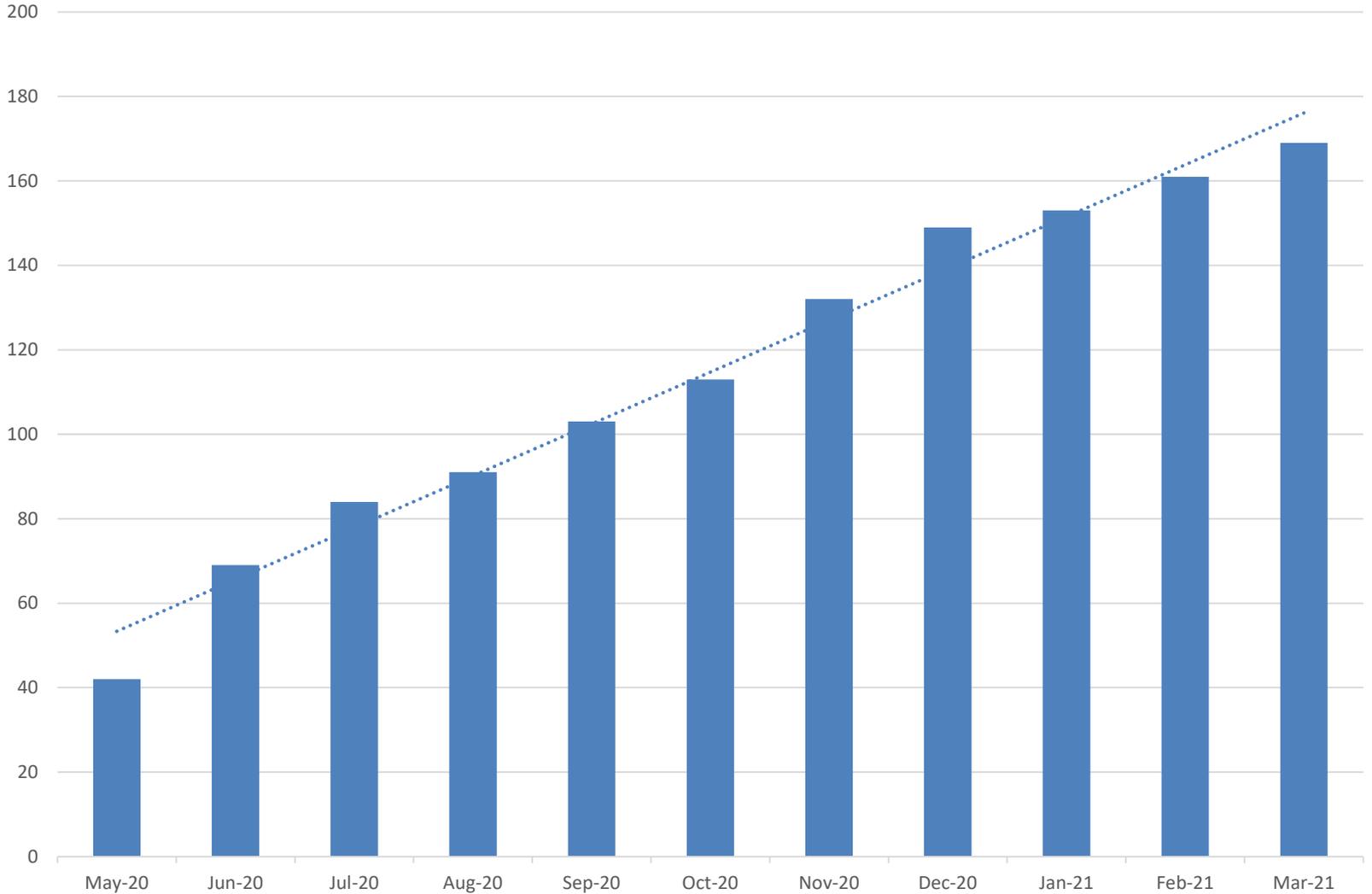
# Gross Sales (\$) By Item Sold



# Customer Acquisition

(261 total customers)

Averaging 22 new  
customers per  
month



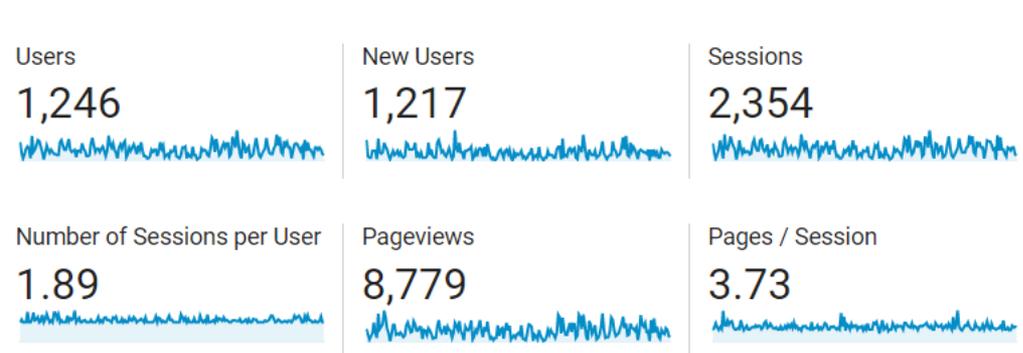
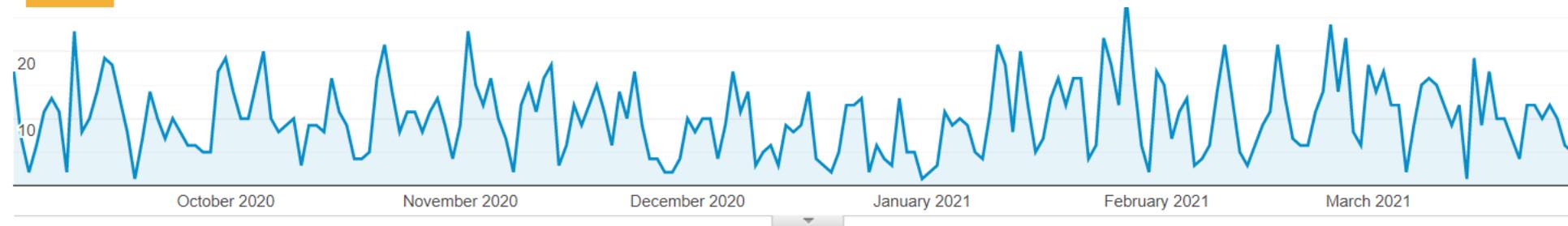
# Customer Retention

- 261 Total Customers (Year-to-Date)
  - One-third are new customer acquisitions
  - Two-thirds are repeat customers
  - Over one in five are lifetime customers (have shopped more than 7 times in 10 months)
- Average customer spent \$96.16 over past 9 months

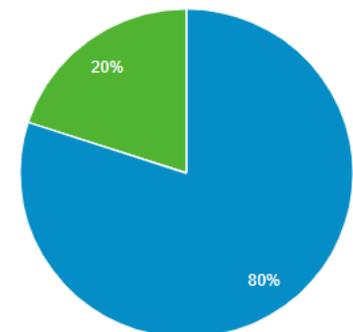
	Tier 1 “D2C”	Tier 2 “B2B”	Tier 3 “Wholesale”
Type	Direct-to-Consumer	Business-to-Business	Wholesale Outlets
Discount	None	20%	40%
Sales	\$10,721.46	\$11,931.61	\$2,445.00
Percent of Sales	43%	48%	10%

# Site Analytics

- 3,401 unique visitors in 10 months
  - 2,156 unique visitors through September 2020 (20 visitors per day)
  - 1,246 additional visitors from October 2020 through March 2021 (7 visitors per day)
- 80% of website traffic is from new visitors

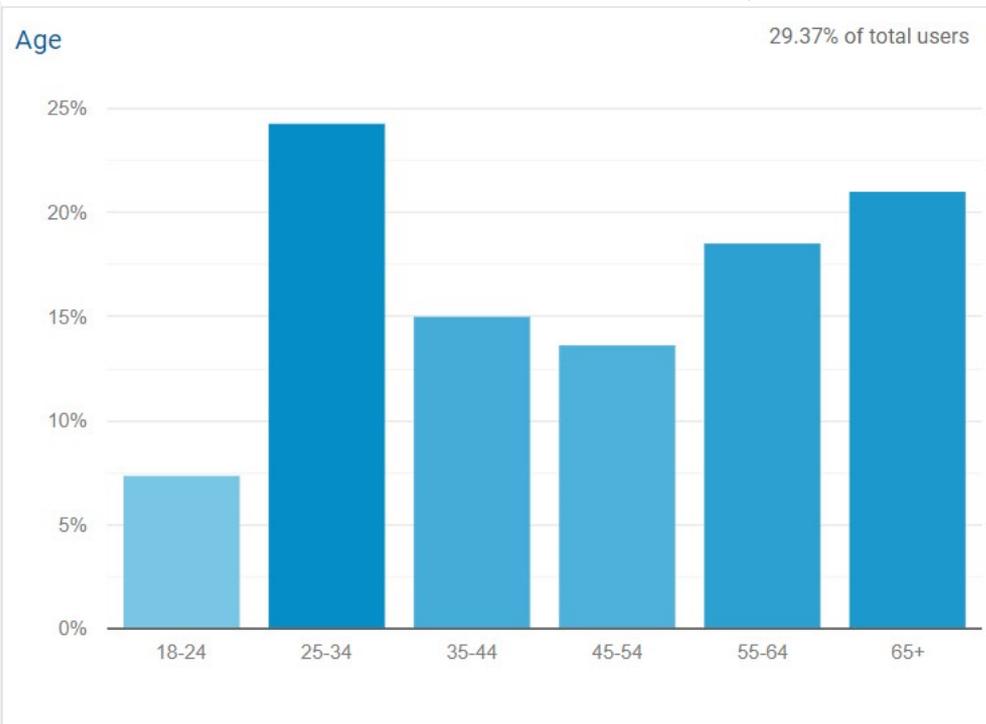


■ New Visitor ■ Returning Visitor



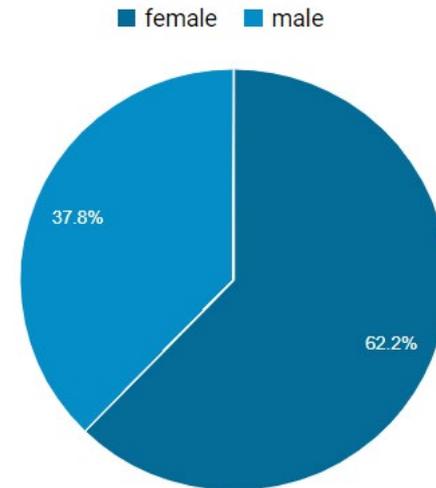
# Audience Demographics

Largest cohort is 25-35 years in age  
2/3 of visitors are female



Gender

27.85% of total user:



# Customer Acquisition by Source

2/3 of our customers come from direct search (via google or by typing in [www.johndaygreenhouse.com](http://www.johndaygreenhouse.com))

1/5 are referred from the city website ([www.cityofjohnday.com](http://www.cityofjohnday.com))

1/10 are referrals from social media (Facebook, Instagram, etc.)

1.	(direct) / (none)	427	32.92%
2.	google / organic	399	30.76%
3.	cityofjohnday.com / referral	274	21.13%
4.	m.facebook.com / referral	51	3.93%
5.	facebook.com / referral	35	2.70%
6.	l.facebook.com / referral	35	2.70%
7.	bing / organic	25	1.93%
8.	yahoo / organic	17	1.31%
9.	l.instagram.com / referral	12	0.93%
10.	duckduckgo / organic	8	0.62%

# Earned Media

Articles talking about the greenhouse / innovation gateway

- Other Side of the Hill video: <https://vimeo.com/450634863>
- “What’s Growing in John Day” Oregon Humanities article: <https://www.oregonhumanities.org/rll/magazine/feed-fallwinter-2020/whats-growing-in-john-day/>
- “Recreation and Revitalization in John Day” Western Planner article: <https://www.westernplanner.org/2020articles/2020/7/15/recreation-and-revitalization-in-john-day>
- “Fertile Future” Oregon Business article: <https://www.oregonbusiness.com/article/tech/item/18734-fertile-future>
- 2019 LOC Award Press Release: [https://www.orcities.org/application/files/4315/7005/1284/2019\\_Excellence\\_Award\\_News\\_Release-FINAL-2.pdf](https://www.orcities.org/application/files/4315/7005/1284/2019_Excellence_Award_News_Release-FINAL-2.pdf)
- “Rethinking the River” Oregon Business article: <https://www.oregonbusiness.com/article/real-estate/item/18542-rethinking-the-river>
- “Desert Prospector” Oregon Business article: <https://www.oregonbusiness.com/article/economy/item/18385-this-is-not-your-grandaddy-s-government>

# Marketing Value for Agritourism

Emails sent resulting from earned media

*Hi, Nick,*

*I'm not sure how to write this inasmuch as it's sort of a fan letter. I just read the article in Oregon Humanities, and now I'm waiting for the pandemic to subside so I can visit John Day, and hopefully get a glimpse of the greenhouses.*

*You've done an amazing thing in that little town.*

*I sincerely hope that the totality of your Innovation Gateway plan is realized.*

*I've lived in Oregon for 8 years, not long enough to have a native's grasp of the area. **John Day has been on my list to visit, just because of the fossil beds. The article added new dimension to the town for me, sliding John Day to the top of the list.***

*Sincerely,*

*Fran H.*

# Marketing Value for Agritourism

Emails sent resulting from earned media

*Hi, I'm a retired horticulturist and have only recently learned about your greenhouse project through an article in the Oregon Humanities Magazine.*

*I would love to tour your operation sometime though I'm sure with COVID now that may not be possible. While I am no longer involved professionally in the field I do still write articles which I post in my blog, Garden Riots and have recently become involved with the formative Portland Botanical Gardens. My wife and I will be in your area in later April, wild flowering on NPS land. We cross the mountains frequently to visit family and friends. Thanks for your consideration.*

*Lance W.*

# 2020 Internship

First intern – Zachary Ostberg (August 2020)



# 2021 Internship

Jesse Douglas



# 2021 Academic Opportunities

EOA / REV Partnership Agreement



- Academic partnerships
- Student learning opportunities
- Case studies
- Capstone projects
- Summer internships



# Building & Design Improvements

Louvres for climate control



# Building & Design Improvements

Sealing building penetrations



# Building & Design Improvements

Pond re-design to increase efficiency / maximize space utilization



# Building & Design Improvements

Pond re-design to reduce manpower (cleaning)



# Building & Design Improvements

Pond re-design to reduce manpower (cleaning)



# Building & Design Improvements

Pond re-design to reduce manpower (cleaning)



# Ongoing Challenges

Integrated Pest Management – White Flies



# Ongoing Challenges

Integrated Pest Management – Aphids



# Supply and Demand Challenges

Email from customer

*I've been trying to order tomatoes for weeks, every time I check it says **out of stock** and then I hear that the new organic food store is buying all of your tomatoes and reselling at a higher price. That's not ok.*

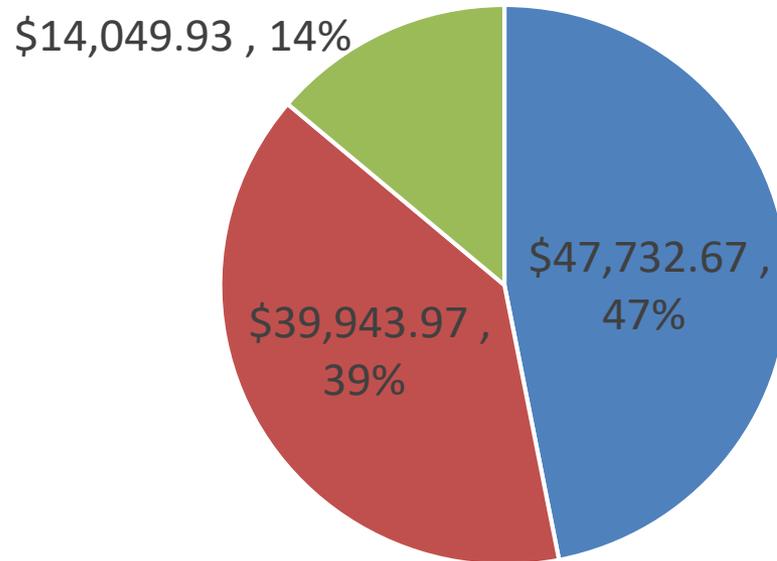
*-- Jeremy B.*



# Ongoing Challenges

Financial ROI at the pilot scale

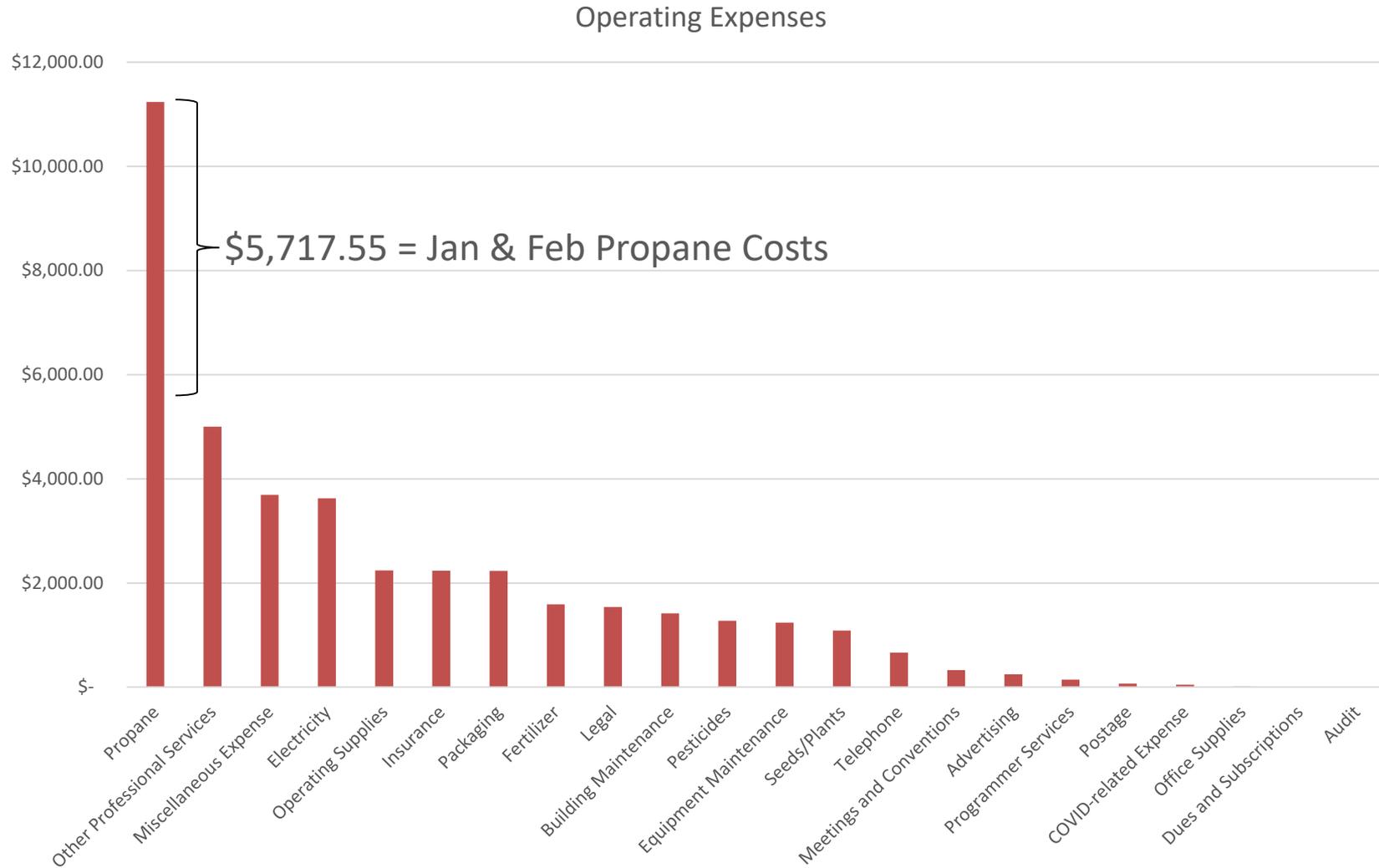
Expense Distribution



■ Personnel (8 mo.) ■ Operating Expenses (8 mo.) ■ Debt Service (8 mo.)

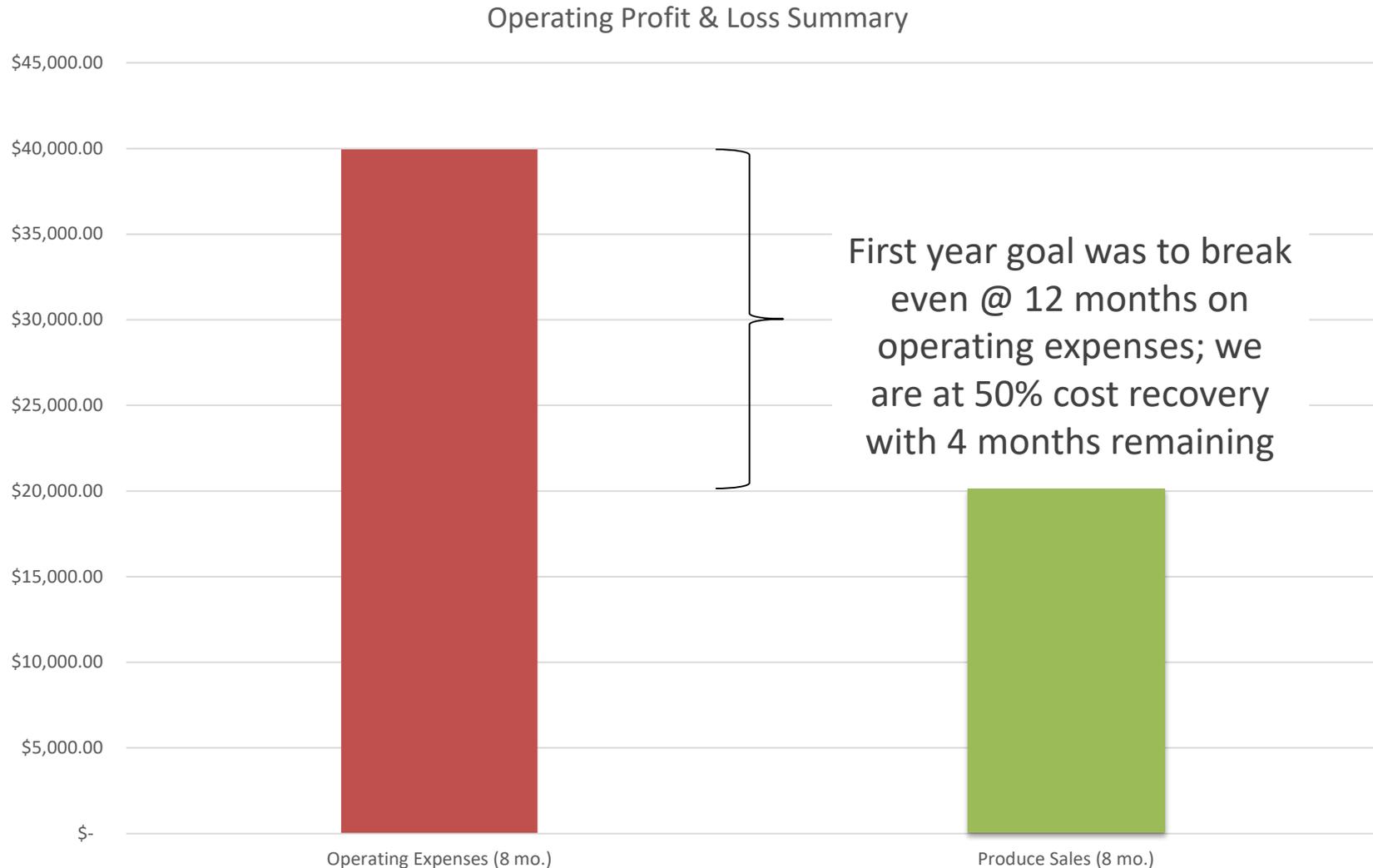
# Operating Expense Summary

8-months of operating expenditures



# Operating Expenses vs. Income

Expenditures vs. Produce Sales (July '20 – Feb '21)



# COVID Impacts & Revenue Offsets

- Restaurant closures and reduced occupancy led to decreased demand for produce
- Took time (lost sales) to scale up the e-Commerce platform, which launched two months into the pandemic
- Finding the right product-market fit when our core customers are closed or at reduced capacity
- CARES Act did not allow for cost recovery due to lost revenue by public agencies, only direct expenses
- American Rescue Plan does allow for revenue cost recovery and we can use this to offset losses for this year and the next three years
- Additional grant opportunities open for revenue/funding

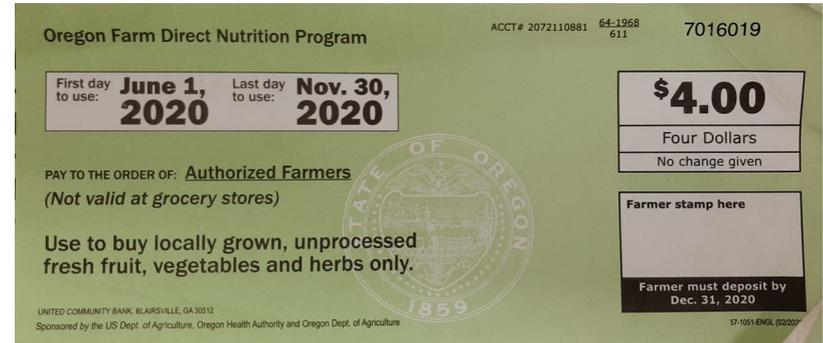
# Lessons Learned

- “Test, Validate, Scale” approach is working to refine our processes and procedures
- Integrated pest management is essential and challenging to achieve
- Scaling production to meet ever-changing demand
- pH and fertigation techniques are improving
- Adjusting pollination strategies and techniques
- Changing configuration of equipment and materials
- Overcoming design faults; rebuilding
- Learning different growth rates/strategies depending on season and climate (i.e. fresh herbs in different seasons require significantly different approaches)

# Food Security Programs

City is participating in multiple food security programs

- John Day Farmers Market
- Oregon Farm Direct Nutrition Program (applied)
- USDA SNAP (approved)



	<b>U.S. Department of Agriculture - Food and Nutrition Service</b>	
	<b>SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM PERMIT</b>	
<b>FNS NUMBER: 0725212</b>		<b>Authorization Effective Date: 08/20/2020</b>
<b>Store Name:</b> John Day Greenhouse <b>Location Address:</b> 480 Nw Johnson Drive John Day, OR 97845		<b>Mailing Address:</b> 450 E Main St John Day, OR 97845-1238
<b>Owner/Officer Name(s):</b> City of John Day		
<p>This permit certifies that the owner(s)/officer(s) and business location listed above are hereby granted approval to accept and redeem Supplemental Nutrition Assistance Program (SNAP) benefits on the condition that the acceptance and redemption of all SNAP benefits shall be in accordance with the rules and regulations governing the SNAP.</p>		
<b>THIS PERMIT IS VALID ONLY FOR THE OWNER(S)/OFFICER(S) LISTED AND OPERATING AT THE LOCATION ABOVE</b>		
<p>Any changes in the ownership, location, or name of business, and/or civil or criminal conviction of the owner(s)/officer(s) or loss of other business licenses due to violations may void this permit. <b>FAILURE TO REPORT SUCH CHANGES IMMEDIATELY TO USDA MAY RESULT IN SUBSTANTIAL FINES AND ADMINISTRATIVE SANCTIONS.</b> Call 1-877-823-4369 to report changes.</p>		
<p>Keep this permit for your records; <b>do not post</b> it in the store. If the store moves, is sold/closed or wishes to voluntarily withdraw from SNAP, contact USDA at 1-877-823-4369.</p>		
Date of Issue: 08/20/2020		