BEYOND

THE CURB

An overview of the Meridian Library District's development and implementation of a library Home Delivery service.

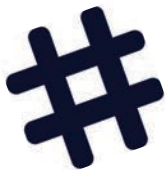# meridian library district

🌐	**Website**	www.mld.org
✉️	**E-mail**	homedelivery@mld.org
#	**Social Media**	@MeridianLibrary
		f 🐦 📷
		#myMLD
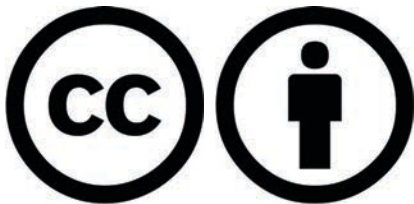
INTRODUCTION

WHY HOME DELIVERY?

For many years, one of our strategic goals has been to find ways to create connections and decrease barriers to the library for our community. With a focus on inclusion, we started to build and expand our Senior Outreach Service in 2015. We focused on increasing access to the members of our community who otherwise wouldn't have been able to easily connect to their library.

In March of 2020, we found ourselves in the midst of a pandemic, faced with the problem that our community could not physically access the library in the way they were used to. By repurposing some of our resources, however, we had the capacity to bring the library to them. Seizing this opportunity, we expanded our Senior Outreach Service model and created what is now our Home Delivery Service.
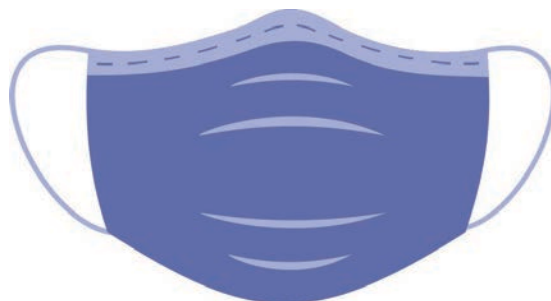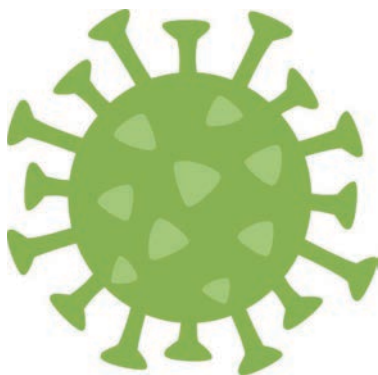
INTRODUCTION

SERVICE AT A GLANCE

Library Catalog

Place Hold
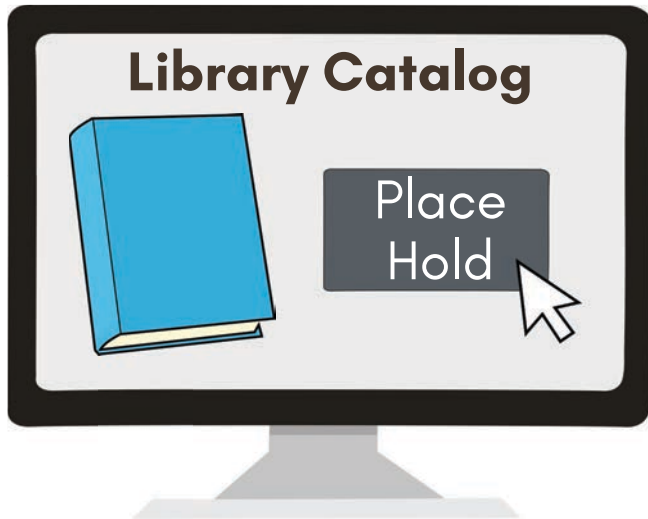
Patron places holds in the library catalog and selects Home Delivery as the pickup library

Holds are checked out, packaged, and added to a delivery route by staff

meridian library district

Drivers deliver packages to the patron's front door

INTRODUCTION

WHERE DO I START?
QUESTIONS TO CONSIDER

✓ Materials

How will patrons indicate they'd like their materials to be delivered?
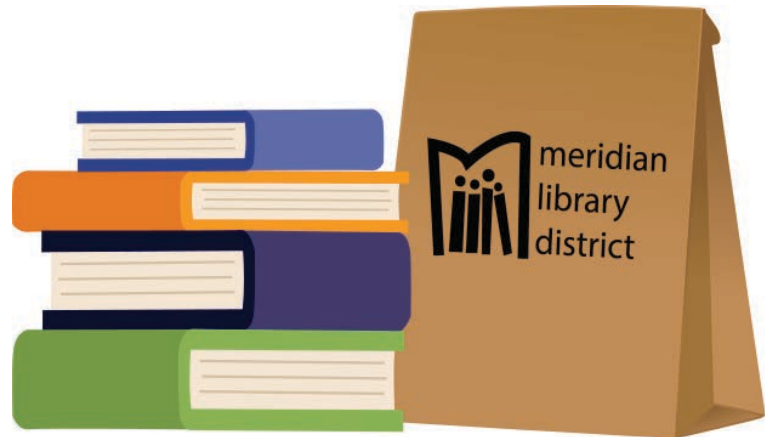
Which types of materials are eligible for delivery?

Is this service only for delivering, or will it include a return service as well?

✓ Technology and software

How will staff track materials through the delivery process?

Can your desired tracking system be supported by your ILS?

How will the delivery schedule be managed?

✓ Vehicles

Which vehicles will staff use to complete deliveries?

Is the library prepared to insure drivers?

What vehicle space setup is necessary to accommodate deliveries?

✓ Routing

How will your library define their delivery area?

How will staff build efficient routes for drivers?

What software (if any) is needed to build delivery routes?

✓ Staff

How many staff hours are needed to run the service?

What duties and responsibilities need to be carried out by staff?

What training is needed?

✓ Space

Where will staff work and prepare items for delivery?

How much space is needed to organize packaged materials into routes for drivers?

Is a separate work area necessary for organizing packaged materials?

✓ Equipment and supplies

What technology and equipment are needed for staff workspaces and drivers?

What packaging materials and other supplies are needed?

How will the program be funded?

INTRODUCTION

WORK IT OUT:
ENVISION YOUR SERVICE

Who do you want to reach with your service?

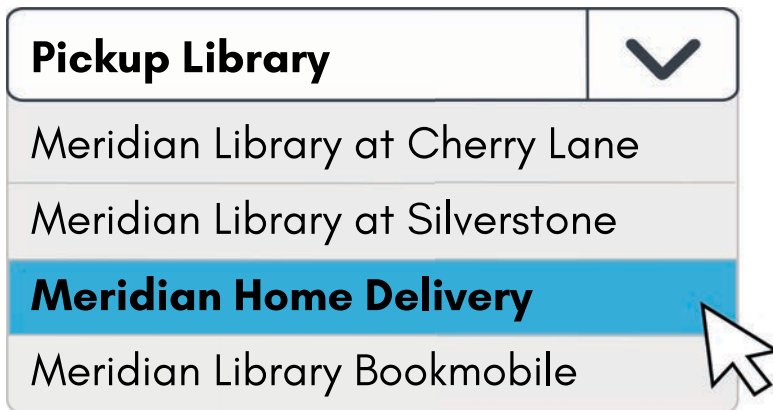What resources do you have available?

Other ideas! Think it through – what is important to your community?

TECH AND SOFTWARE

INTEGRATING OUR ILS

In order to create a sustainable service, it was important to streamline our process for both patrons and staff.

We determined the best method was to set up our system in a way that staff and patrons were already familiar with: by selecting Home Delivery as the "pickup library" in the catalog when placing holds.

Pickup Library ⌄
Meridian Library at Cherry Lane
Meridian Library at Silverstone
Meridian Home Delivery
Meridian Library Bookmobile

However, MLD is part of a large consortium of libraries, so we had to limit our service to the geographical area within MLD's tax district. With this limitation, only Meridian resident cardholders could view our Home Delivery option in the catalog.

Early Days

Our service began as an Airtable request form that patrons had to fill out. This process wasn't user-friendly, as patrons had to go through a multi-step process involving the catalog and website.

Staff also had to check accounts to match requests. So we began investigating options for incorporating Home Delivery as part of our ILS.

TECH AND SOFTWARE

DELIVERY MANAGEMENT SOFTWARE

Our ILS is not set up to track items through a Home Delivery process, so we use **Airtable**--an application for creating custom, collaborative databases--to create and organize order records.

Database Collaboration

One of the reasons we chose Airtable is that it offers the ability to communicate with other Airtable databases. Utilizing this feature, we collaborate with our unBound library (who already use Airtable) to offer delivery for 3D printed items.

Using Airtable's customization options, we created the statuses we needed to 1) track items through the Home Delivery process, and 2) flag orders that need additional action.

Home Delivery Database

Orders	Staff	Delivery Schedule

VIEWS — Processor Grid — 1 Filter — Name contains: Doe — Sorted by: Status

Find a view

- Processor 1 Grid ✓
- Processor 2 Grid
- Open Orders
- Holds Being Transferred
- More Action Required
- Master List

	Name	Status	More Action Required	Temp ID	Street Address
	DOE, JOHN	Open		7001	1234 Main St.
2	DOE, JOHN	Ready for Delivery		2042	1234 Main St.
3	DOE, JOHN	Delivered		3021	1234 Main St.
4	DOE, JOHN	Delivered		7015	1234 Main St.
5	DOE, JOHN	Delivered		3013	1234 Main St.
6	DOE, JANE	Delivered		3013	1234 Main St.
7	DOE, JOHN	Canceled		1003	1234 Main St.
8	DOE, JANE	Canceled		1003	1234 Main St.

Expand record

TECH AND SOFTWARE

DELIVERY MANAGEMENT SOFTWARE

Choosing software starts with looking at what you have the ability to do with your ILS and then identifying the gaps that need to be bridged. We needed:

- ✓ Customization of workflow tracking

- ✓ Tracking editing in records

- ✓ Ability to communicate with other databases for further projects

- ✓ Small learning curve for use

- ✓ Filters and "find" feature

- ✓ Ability to "tag" staff in records and notify them if a record needs review

- ✓ Ease of viewing (aesthetic on the screen)

- ✓ Accessibility from multiple platforms

Future Automation

Airtable does have the ability to connect with the API of our ILS system. We do not currently have this set up because it would require a software developer, so all of our data entry is done manually by staff. We hope to be able to automate this step in the future.

Airtable: try it yourself!

We have created a mock data version of our Airtable database for you to explore and experiment with. Access it with the link below:

https://tinyurl.com/yjjc6ld8

TECH AND SOFTWARE

ROUTING SOFTWARE

Drivers need to know where to deliver packages, so a map or set of driving instructions (a "route") must be created for them. There are software options that can do this for you. We sought out a system which met the following needs:

1 **Ability to route quickly**
We wanted a routing method that would be easy and sustainable. Other options, such as Google Maps, required us to manually route. This was time-consuming for staff and not viable.

2 **Customization options for notifications**
We wanted to be able to notify patrons about when to expect their delivery.

3 **Driver flexibility and navigation**
We wanted to be able to easily change drivers' schedules and routes. We also wanted a software that either provided navigation or was compatible with an up-to-date navigation system.

We selected a software called Routific. With it, we can quickly and efficiently upload and download data, create multiple driving routes, send notifications to patrons, and integrate with Google Maps to provide navigation. Routific also offers a user-friendly app for drivers.

We recommend researching different routing software systems to determine which option best suits your service.
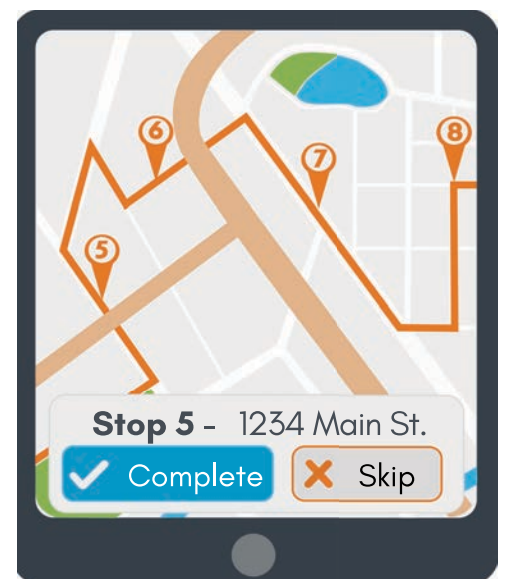
TECH AND SOFTWARE

ROUTING SOFTWARE:
FINDING WHAT WORKED FOR US

We originally employed a system where we divided Meridian into "zones" and built routes using Google Maps. We had used Google Maps for past programs, so it was familiar--and free! Drivers would grab a route for a specific part of Meridian for the day and then complete the deliveries in that area.

However, the free version of Google Maps only allows a max of 10 stops per route. As we grew to accommodate about 80+ deliveries per day, the routing process became tedious and bulky. We began our research and found a routing software that would meet our needs.
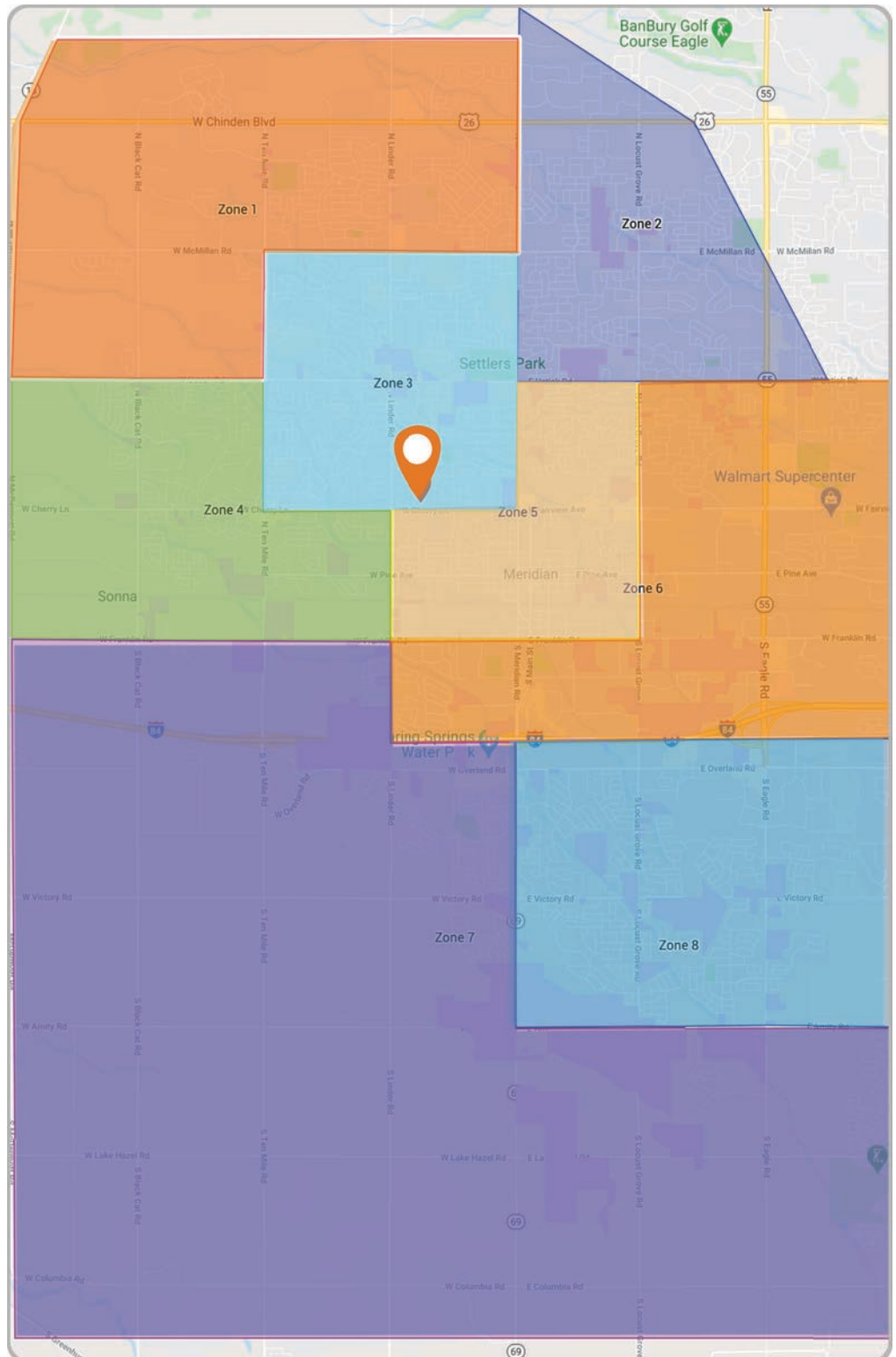
TECH AND SOFTWARE

WORK IT OUT:
FIND YOUR SOFTWARE

How will you track and manage your delivery requests?

How will you create routes for your drivers?

What do you need in your routing software, if applicable?

TECH AND SOFTWARE

WORK IT OUT: WHAT TECHNOLOGY IS NECESSARY?

Computers – Will you need new workstations, or use existing ones?

Tablets – How will drivers access their route information?

Driver communication tools – What technology do drivers need so they can contact patrons or staff?

Contacting Home Delivery – How will patrons reach Home Delivery?

PROCESSING

PROCESS OVERVIEW

Patron Name

Jane Doe

Status

Open

More Action Required

Call Patron

Library Card Number

11234567890

Street Address

1234 Main St.

Phone Number

123-456-789

Email

janedoe@mail.com

# of Items for Delivery

3

Items for Delivery

☐ Invisible Man
☐ The Great Gatsby
☐ The Art of War

When an item arrives at Home Delivery, we process the order with the following basic steps:

1 Items are checked in at Home Delivery and "Held" for a patron.

2 We go through the Request Manager feature in our ILS and create records in Airtable for each individual patron, listing the items held.

3 Using various statuses, we follow the patron's record through their holds arriving; checking out items to their account in the ILS; packaging their materials; and finally--delivering their order.

PROCESSING

DELIVERY STATUSES

As briefly mentioned in Tech & Software, our ILS is not currently enabled with the status tracking necessary for our Home Delivery service. We created the following statuses in Airtable to track and control items:

Primary:
package's location in delivery process

Open
The patron has items on hold in Home Delivery; is ready for packaging

In Progress
The patron's items have been checked out and packaged

Ready for Delivery
The patron's package(s) have been routed and prepared for the next day's delivery

Out for Delivery
The patron's package(s) are being delivered that day

Delivered
The patron's package(s) have been delivered

Canceled
The patron's items for Home Delivery were canceled, due to the reason provided in the notes

Secondary:
additional action required before packaging

Holds Being Transferred
Patron has items on the way to Home Delivery. We wait until all items have arrived or the patron has 5 items on the shelf before delivering

New Hold for In Progress Order
We've already packaged this patron's order, but another hold has come in for them that we can add

Patron Account Problem
Something is wrong with the patron's account; expired card, fines, outside district, etc.

Other
A reason we don't have a proper tag for; going on vacation and won't be home, etc.

3D Print Delivery
The way we collaborate with our unBound's 3D printing service

PROCESSING

PACKAGING PREPARATION

After the holds are checked out to the patron, we package the items for delivery in paper bags. In order to identify materials after packaging, each bag is given a tag with the following information:

- ID number for routing
- Patron name
- Patron address

Since we aren't able to guarantee next day delivery, we needed a way to keep track of which day each bag was packed. So, we use an ID numbering system. The ID numbers are assigned according to which day a bag is packed.

For example, orders packed on Sundays begin with the number 1000. The first bag packed is assigned 1001, then the second bag 1002, etc. On Mondays, the first bag packed is 2001, and so on. We can reuse the numbers each week because all orders are delivered well within a week of being packed.

ID: 7007

Doe, Jane

1234 MAIN STREET, MERIDIAN ID 83642

Packaging Material

We are committed to reducing our plastic waste, so we opted for paper bags. We then purchased a stamp with our library logo so we could brand the bags ourselves.

PROCESSING

ROUTING

Your routing process will be dependent on the routing software that you choose. The main goal is to have a way to create a delivery schedule for your driver(s).

Driver	8:00	8:30	9:00	**Stop 5** 1234 Main St.		10:30	11:00	11:30	12:00
John L.	🚗	1	2	3	4	5	6	7	8	🚩

In our process, records that indicate the package is ready for delivery are pulled from the tracking software in Airtable. We then upload that data to the routing software, Routific, which builds the delivery route. Once addresses have been routed, we can manually make adjustments as needed to make the route as efficient as possible.

Routific will automatically track the driver throughout the route and will notify patrons of their incoming delivery.

We also operate an internal courier system between MLD branches. On weekdays, those branches are included in the route so drivers can pick up and drop off items between locations.
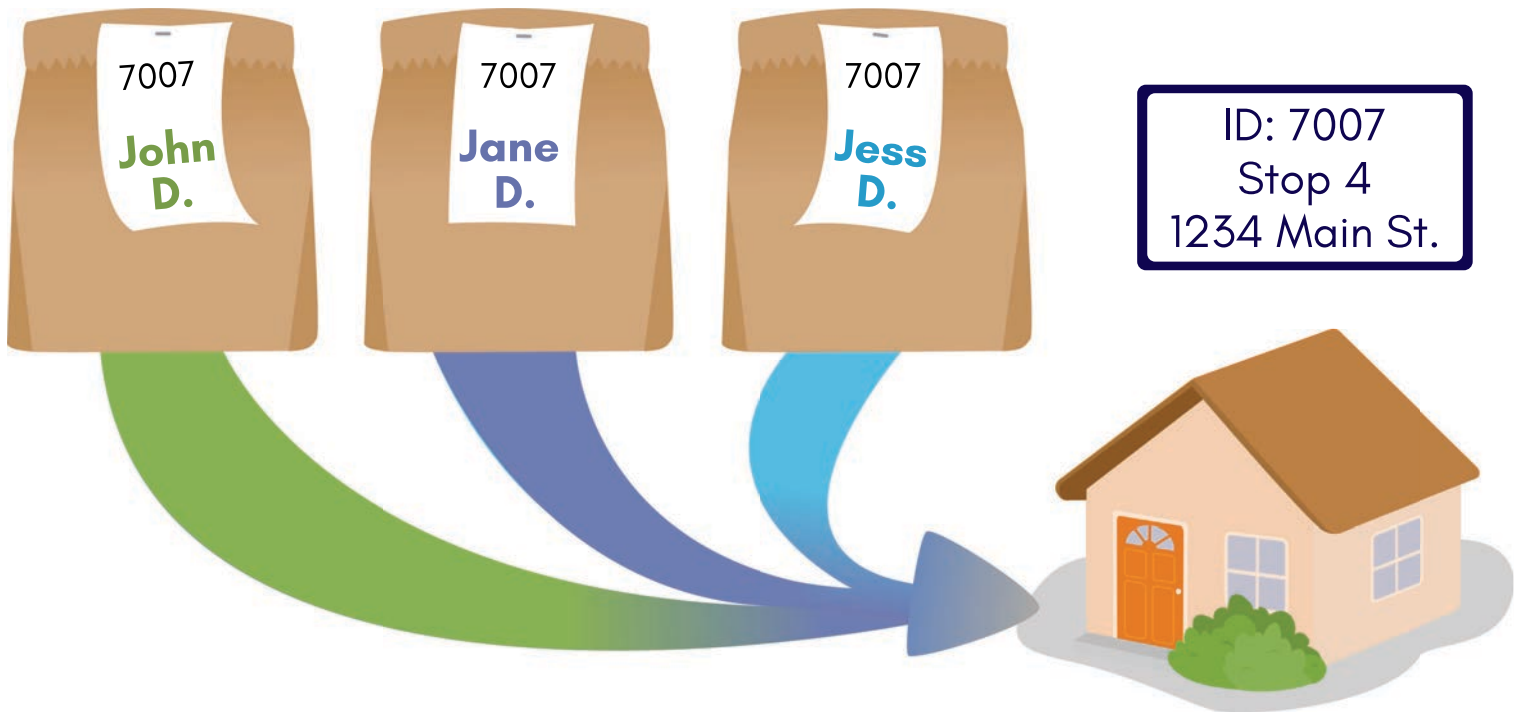
PROCESSING

DELIVERY PREP AND PATRON PRIVACY

Once the packages have been routed they are securely stapled shut, manually marked with a stop number, and laid out for the driver to pick up and deliver.

Save on Staples

Delivery tags are initially attached to the bag using a paper clip during packing so we can easily add additional holds if more items arrive before the bag is routed for delivery.

To protect patron privacy, items are packed in bags according to patron account. If multiple patrons share the same address, all of their bags will share the same ID number but maintain each individual's name. With this system, we can route multiple bags for one stop when necessary.

7007
John D.

7007
Jane D.

7007
Jess D.

ID: 7007
Stop 4
1234 Main St.

Example: There's a household of 3. Each individual household member has their own bag with their name on it. In order to keep track of all 3 bags going to the same address, each bag will share the same ID number, 7007.

PROCESSING

PHYSICAL SPACE IN YOUR LIBRARY

Adding a new service requires space! We needed 2 staff workstations. Each has:

- ✓ 1 computer
  - ✓ Access to ILS (internet)
  - ✓ Microsoft programs
- ✓ 2 monitors
- ✓ Receipt printer

- ✓ Barcode scanner
- ✓ Space/Shelving for holds and materials waiting to be processed
- ✓ Table space for packaging items
- ✓ Space for delivery and route prep

Our space has gone through several iterations in order for us to find the layout that works the best for our process.

Our initial set up was in an open part of the library while we were closed during our state's lockdown. We moved to new spaces and reconfigured to fit our needs as we grew and reopened to the public.

PROCESSING

WORK IT OUT:
TRACKING AND PACKAGING

What status options do you need to track patron records?

What sort of packaging material will you use?

How will you mark and lay out routed packages for drivers?

PROCESSING

WORK IT OUT:
ENVISION YOUR SPACE

Anticipated usage – How much space might you need to set up and prepare the packages for the number of deliveries you expect?

Staff workstations – Where will your staff work? What materials and equipment will they need and where will it be stored?

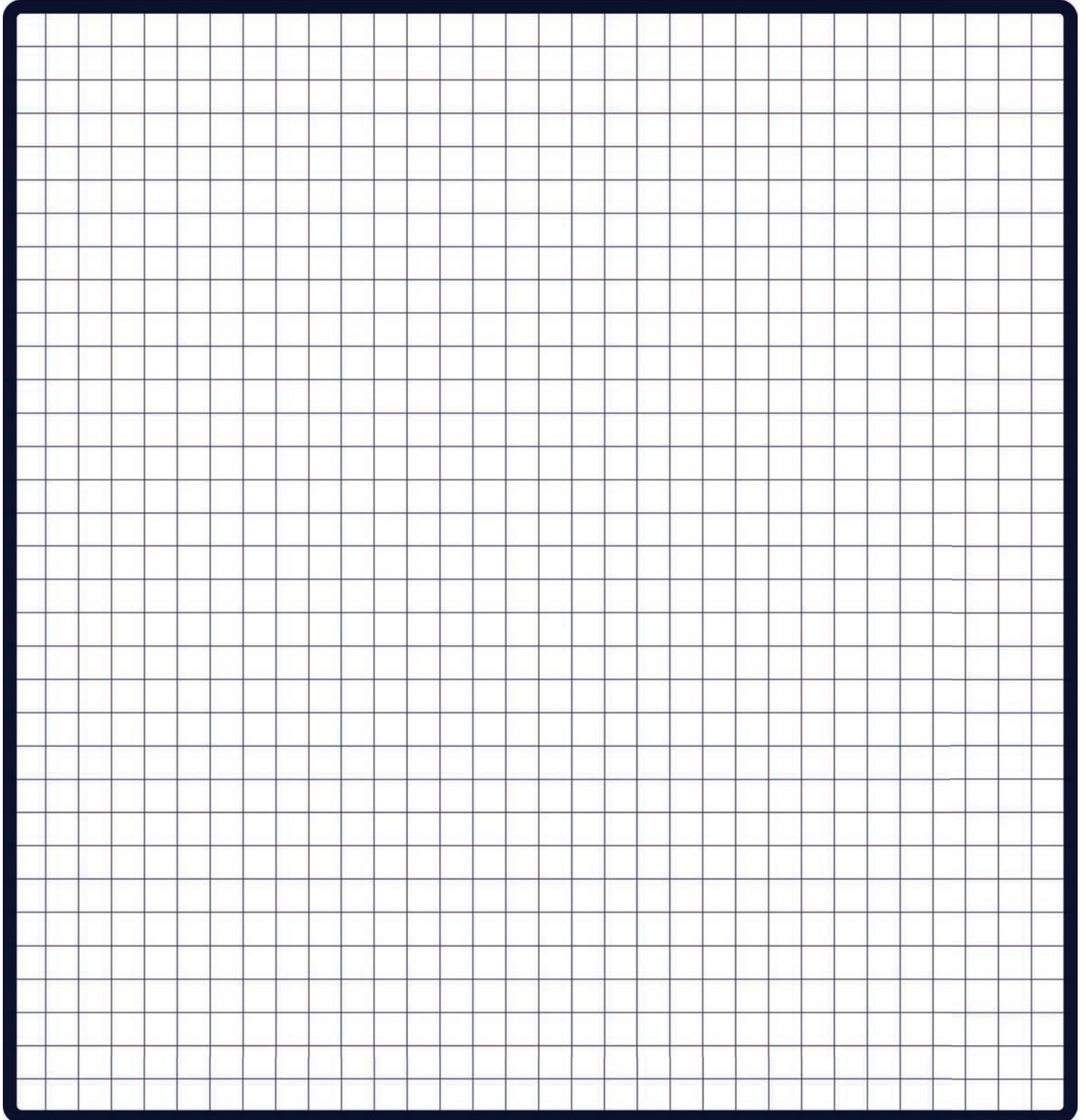**Holds storage –** Where will you store the books and other materials awaiting packaging?

Packaging and routing space – Where will you store bags that have been filled? How will you organize routes?

Driver loading – How will drivers move through the space to load bags into vehicles?

PROCESSING

WORK IT OUT:
PICTURE YOUR SETUP

DELIVERING

DELIVERY VEHICLES

Meridian has a service population of approx. 114,161 spread over a wide area, so in order to reach our users within our delivery area, we needed delivery vehicles. We were fortunate enough to already have a fleet of vehicles, including 2 minivans, that could be utilized for delivery.

We did consider allowing staff to drive their own vehicles. However, after reviewing our insurance coverage, having staff drive library-owned vehicles was the best option for our library and our staff.

Choosing a GPS Mount

Certain styles of GPS mounts are not legal in some states. If setting up a GPS system for your drivers, make sure to research which mounts are legal in your state.

Vehicle setup and looking forward

To set the vans up for delivery, we removed the back seats to maximize the amount of space available for delivery packages. Each van also has a GPS mount installed to safely hold the tablet with the route and directions.

The vans currently in use are not big enough to hold a full day's route. We are considering obtaining a customized delivery vehicle with plenty of shelving installed. This would allow us to take an entire route in one trip and help keep delivery packages from sliding and being crushed.

DELIVERING

DELIVERY DRIVERS

Determining how many packages your drivers can deliver per route will depend on your library's capacity and the needs of your community. This is what a typical day for one of our delivery drivers looks like:

1 Arrive for work

2 Grab keys, tablet with route, and other necessary supplies

3 Load vehicle with prepared packages

4 Dispatch route in Routific

5 Start route

6 Arrive at stop

7 Walk package(s) to door and place on porch or near door

8 Return to vehicle

9 Mark package(s) as "delivered" in Routific and proceed to the next stop

Driver Wanted

After evaluating the demand for the service and researching delivery trends in our area, we hired a full time (40hr/wk) driver.

DELIVERING

COMMON PROBLEMS AND FIXES

From time to time, things go wrong while drivers are delivering. Here are some fixes to problems that our drivers most commonly run into.

A driver is unable to find an address

If a driver is unable to find an address, they can contact the patron for more detailed instructions or call onsite staff for extra help. If an address cannot be found and the patron cannot be reached, the routing software allows the driver to skip the stop. Once the issue is fixed, the stop can be added to a new route.

A patron's address was incorrect in the system at the time of delivery

If a patron's address was incorrect in the system and this is discovered after delivery to the old or incorrect address, a special pick-up will be routed for the driver to retrieve the package.

A package is stolen after delivery

Patrons are not held responsible for stolen items. Stolen materials are removed from the patron's account and added to a "lost" or "claims" list. Because we are in a consortium, if another library's materials are stolen or lost, we offer to cover the cost of the item.

DELIVERING

WORK IT OUT:
DELIVERING AND STAFF

What mode of transportation will your staff use to deliver packages?

How much driving time is needed to cover your delivery area?

What training will your drivers/delivery staff need?

EVALUATING RESULTS

SETTING PARAMETERS: OUR SERVICE'S CURRENT SCOPE

Our Home Delivery service is continuing to grow and change as we respond to our community's needs. We have many plans for the future, but this is the current format of our service.

We do not advertise as a next day service

We aim to deliver all holds within 1-3 days. If a patron has multiple holds in transit, we'll wait up to 3 days for all items to arrive so they can be consolidated into fewer packages. With less trips to one address, our delivery efficiency improves.

There is no additional delivery charge

Home Delivery is included in our library services, so we do not charge a delivery fee. We also do not limit patrons to a certain number of deliveries or items.

It is a contactless delivery service

Although we sometimes have interactions with patrons, to quickly and efficiently complete routes, we focus on keeping our service contactless. We also do not currently include pick up for returns.
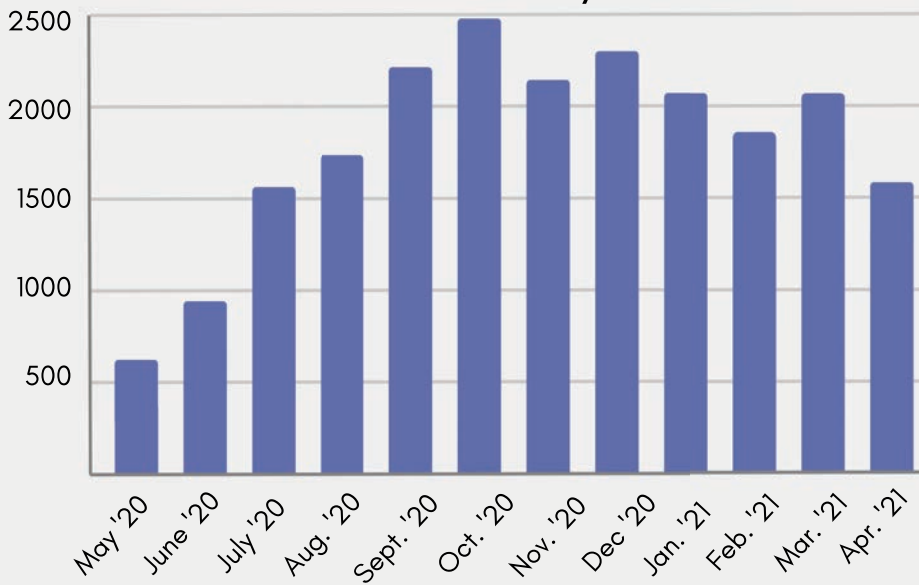
EVALUATING RESULTS

RESULTS AND STATISTICS

Although initially launched as a pilot program, our Home Delivery service became wildly popular with our community: within the first year of being launched, our user count nearly doubled.
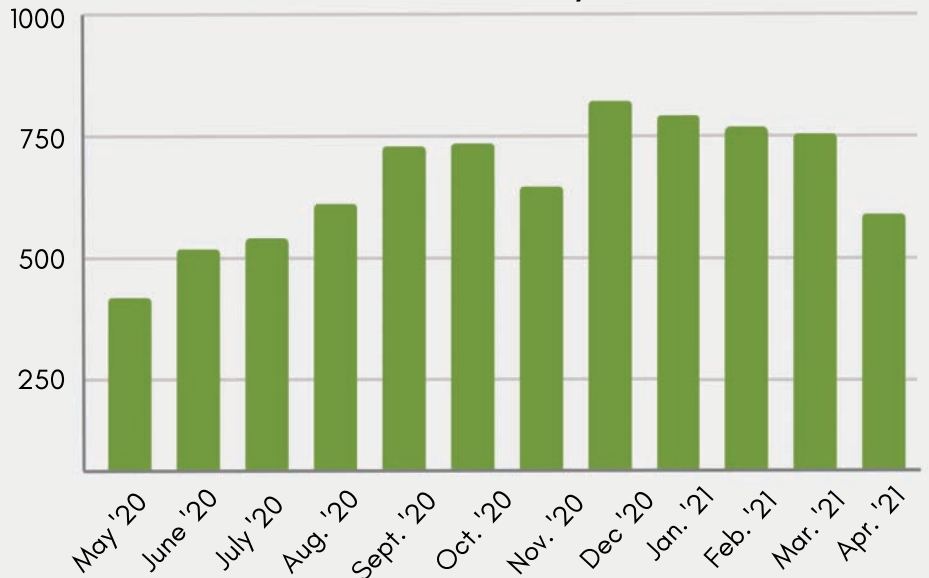
Orders Delivered by Month

21,587
Total number of orders delivered over the course of a year

300-800
Monthly user growth over the course of a year

Patrons Served by Month

EVALUATING RESULTS

STORIES FROM PATRONS

Lifelong learning

An elderly patron called Home Delivery; she and her husband wanted to do a home improvement project and needed resources to learn how. We conducted an RA interview over the phone and were able to send several options out to them. The patron expressed her gratitude and relief at the help.

Building community

A parent, driving a minivan full of kids, called out his window, "Is that the library?" at the sight of our delivery vehicle. He pumped his fist out of the window and said, "We love the library!" It's been wonderful to see patrons' excited reactions when we're spotted in the community.

Safe readers, happy readers

Patrons have shared that they were grateful to still be able to read while staying safe at home in response to the pandemic. One patron called the library, concerned about how to get library materials. When we shared that our Home Delivery service was available, her concern dissipated and she replied, "Oh, I had no idea! I'm so excited you have a delivery service!" She thanked us for providing an alternative way to obtain library materials that supported her safety and needs.

Early literacy

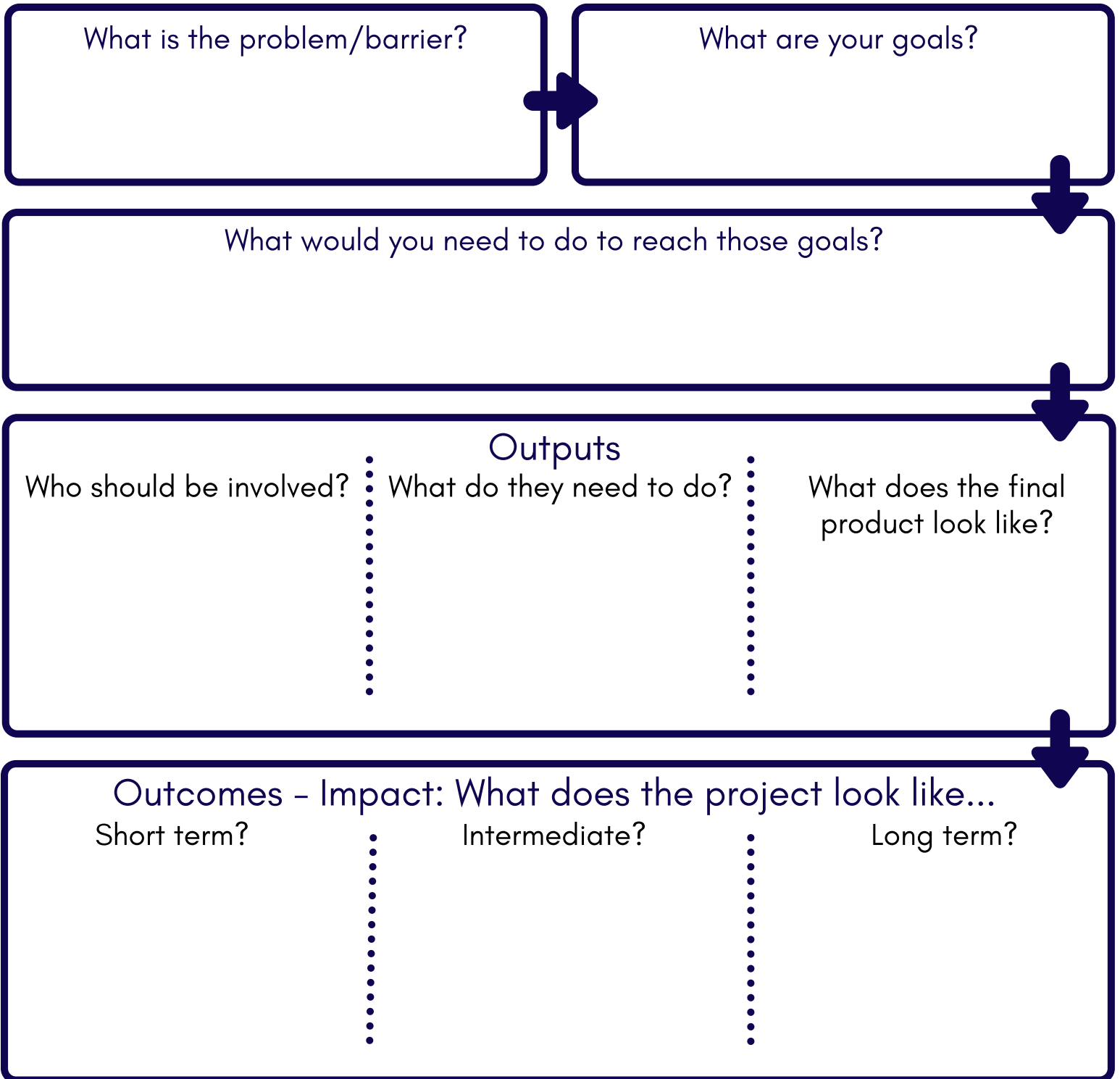Our drivers have frequently overheard parents and children shout, "Yay, it's the library!" when the van pulls up. A driver shared, "One little girl opened the door even before I had knocked and said she had been watching for me all morning." That day's delivery clearly meant a lot to this reader, and we were happy that this service could support her early literacy development even during a pandemic.

APPENDIX

LOGIC MODEL

Logic models can be incredibly helpful to determine whether or not to pursue a project by mapping out if it will have a high enough impact and return. Try working out how you envision your delivery service using the logic model below:

What is the problem/barrier?	What are your goals?

What would you need to do to reach those goals?

Outputs

Who should be involved?	What do they need to do?	What does the final product look like?

Outcomes – Impact: What does the project look like...

Short term?	Intermediate?	Long term?

BUDGET

The hardest part of putting together a budget is outlining all your anticipated costs. We recommend using the worksheets from each of the toolkit sections to outline what materials and resources are needed for your service. Then, compile them in the worksheet on the next page to create a comprehensive budget for your service.

The biggest expenditure of creating a new product or service is the startup costs. We were able to cut several of these costs by utilizing or repurposing things we already had, or by asking for donations or partnerships for materials and resources we needed. What opportunities in your community may provide funding or partnerships for this project?

It's Worth Asking

We had a lot of support while initially building our service. Our first set of packaging was donated to us from a grocery store in our community. We also had some of our software donated to us for the first year for free.

Depending on what is available in your area, there may be local businesses interested in supporting your project. It's worth asking!

APPENDIX

BUDGET

Supplies	Cost per month	Annual cost
packaging material		
routing software		
Total:		

Capital costs	Cost per item	Total cost
driver iPads/tablets		
Total:		

APPENDIX

GLOSSARY

Airtable:
An online application for creating custom, collaborative databases.

Delivery tag:
A slip of paper that contains the relevant information to route and deliver the patron's order; placed on the patron's package(s).

ID number:
A unique number used to track a patron's order throughout the process online and the physical delivery; on the delivery tag.

Order:
A patron's request for Home Delivery.

Record:
A patron's unique set of data that includes their delivery and order information in Airtable.

Route:
A list of stops for the driver to go to, complete with addresses and names.

Routific:
An online application for creating custom routes.

Status:
Defines where a delivery order is in the process.

Stop number:
A unique number used to define when a patron's order will be delivered on a route; on the delivery tag.

(City of) Meridian, Idaho:

Located in Ada County about 10 miles west of Boise, Idaho's state capital. Population estimates in 2020 were 119,350. It is the second-largest city in Idaho and has remained the fastest-growing since 1994, more than doubling in population from 2000-2007. https://meridiancity.org/

Meridian Library District:

Started by the Occident Club in 1924 and established as the Meridian Free Library District in 1975, MLD is a publicly funded library that supports its community by enriching lives, igniting curiosity, and cultivating connections.
Current operations include:
- **Cherry Lane:** main location, opened in 1997.
- **Outreach**: operates a bookmobile and sprinter van, visiting schools, retirement facilities, home, neighborhoods, and community events year-round.
- **Silverstone**: small full-service branch location, leased and opened in 2007.
- **Tiny Library:** materials for ages 0-5 and their caregivers, opened in 2018.
- **unBound:** technology branch based in downtown Meridian, opened in 2015.
Learn more at www.mld.org

ACKNOWLEDGEMENTS

Meridian Library District Staff & Trustees

It is not an exaggeration to state that every member of our staff contributed to the success of the Home Delivery initiative in one way or another. From the initial planning stages during the pandemic, to the successful development of a sustainable process, our Home Delivery service grew exponentially and helped meet community needs during a difficult time. A huge thank you to our staff for their collaboration, flexibility, and teamwork to make this service possible.

We're also grateful to the Library Board of Trustees who supported this idea and helped it become a reality.

Airtable and Routific

Special thanks to the Airtable and Routific teams for their support on this project.

Toolkit Design

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Thank you!