



2025 LEAN IN DESIGN FORUM
APRIL 30–MAY 1, 2025

#LCIDesign25

LEAN DESIGN: UNLOCKING
NEW POSSIBILITIES

Use Value Stream Mapping
to Reduce Bumps in the
Design Road



P2SL

Robin Anderson, Steve Mumm, Tony Sullivan

May 1, 2025



Road trip!

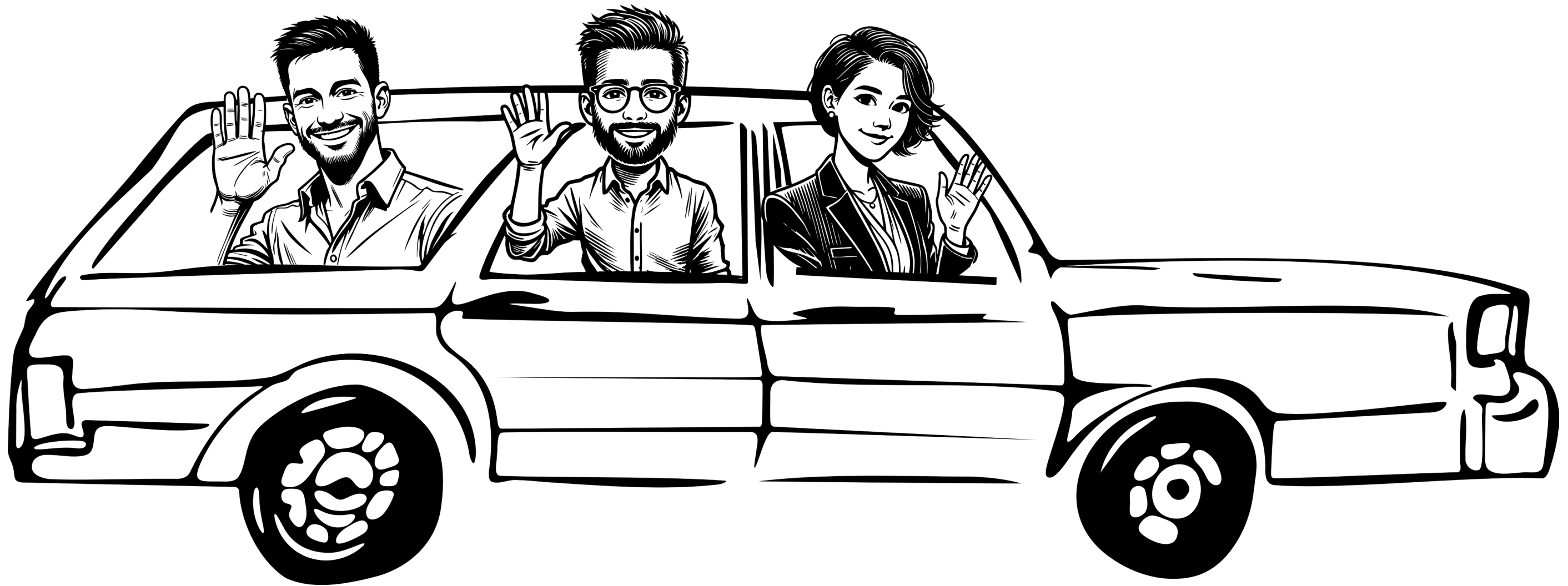


Road trip!

- Let's avoid a road trip that ends like this!



Your Speakers



Your Speakers



Tony Sullivan, CDT

Director Project Management/Healthcare

J.H. Findorff and Sons, Inc. - Madison, WI



Steve Mumm, LEED AP BD+C

Manager – Planning, Design & Construction

UW Health - Madison, WI



Robin Anderson, ACHA, AIA, LEED AP BC+C

Senior Healthcare Planner

Zimmerman Architectural Studios - Milwaukee, WI

Trip Itinerary

- Value Stream Mapping introduction
- Project Case Study
- Value Stream Mapping Exercise
- Q & A
- Plus/Delta





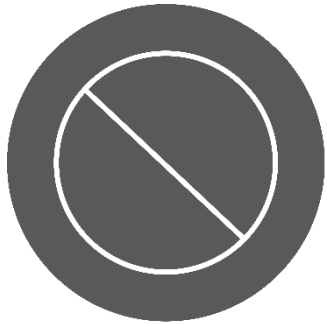
“How can we improve a process if we aren’t even aligned on what works today? Value stream mapping gave us a shared lens. It allowed every stakeholder to walk through their contributions and clearly see the roadblocks, bottlenecks, rework, and duplicate efforts that slow us down. Improvement doesn’t start with solutions. It starts with clarity. And that begins with seeing the current state—together.”

Jennifer Lacy – Robins & Morton

- Specify value from the viewpoint of the customer
- Customer is anyone that we make a promise to
- Customer must be willing to pay for product/service



Non-Value Added (forms of waste)



Defects

Efforts caused by rework, scrap, and incorrect information



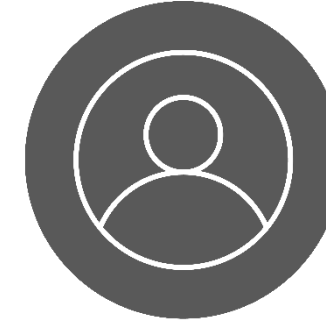
Overproduction

Production that is more than needed or before it is needed.



Waiting

Wasted time waiting for the next step in a process



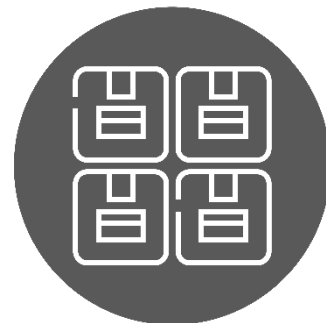
Non-utilized Talent

Underutilizing people's talents, skills & knowledge



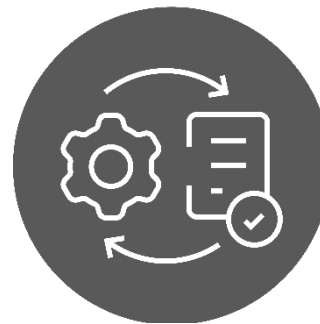
Transportation

Unnecessary movements of products & materials



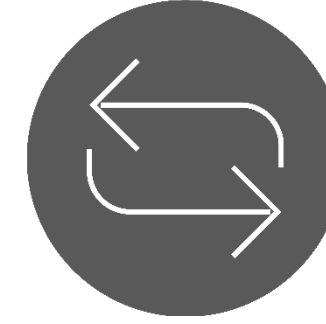
Inventory

Excess products and materials being processed



Motion

Unnecessary movements by people (e.g. walking)

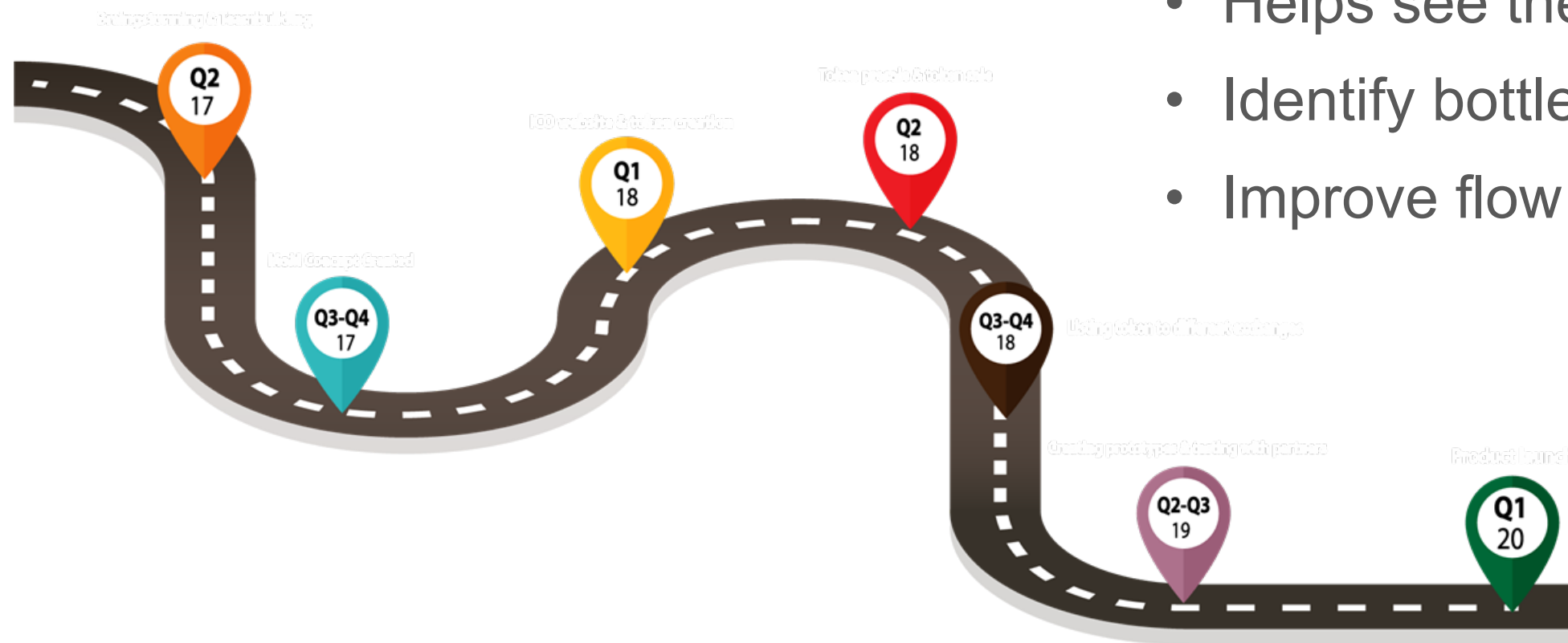


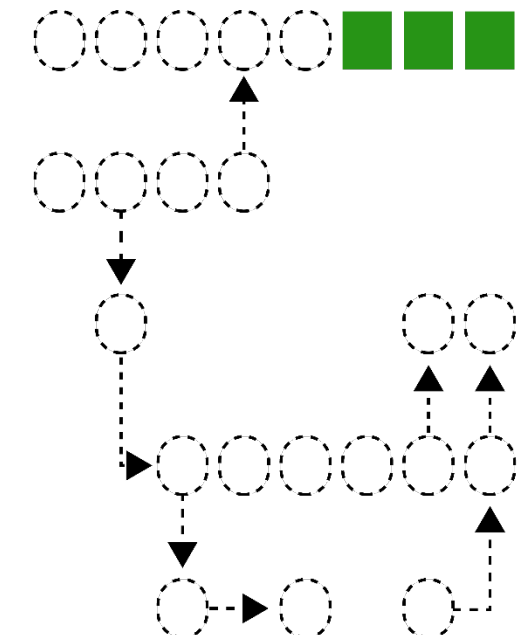
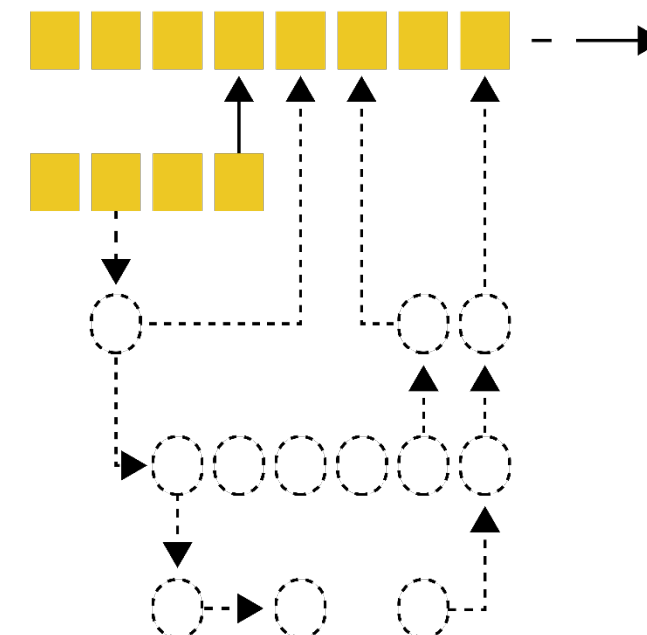
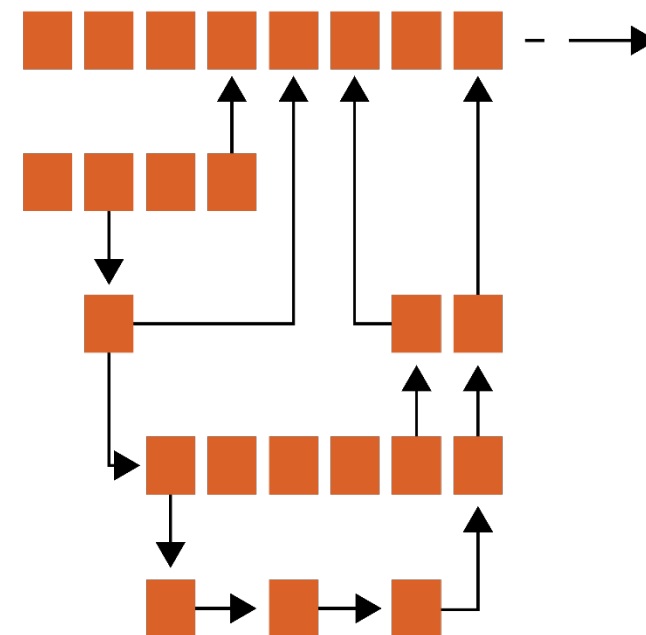
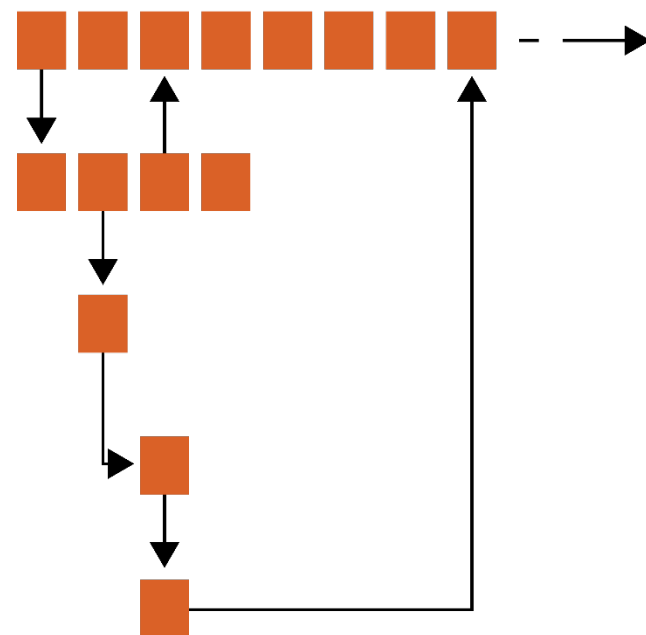
Extra-Processing

More work or higher quality than is required by the customer

Value Stream Mapping

- Analyze flow required to bring product/service to the customer
- Helps see the whole picture
- Identify bottlenecks and constraints
- Improve flow and cycle times





Value Stream Mapping

- When should we do a VSM?
- Map any process at any time!
- Early in the design process:
 - Gemba Walk/Go and See
 - Voice of the Customer
 - **Value Stream Mapping**
 - Gameboarding/Puzzle Play
 - Flow Diagrams



How to Value Stream Map

- In person or with a virtual whiteboard
- Map the current state: identify bottlenecks, waiting, cycle time
- Map the ideal future state: incorporate opportunities for improvement



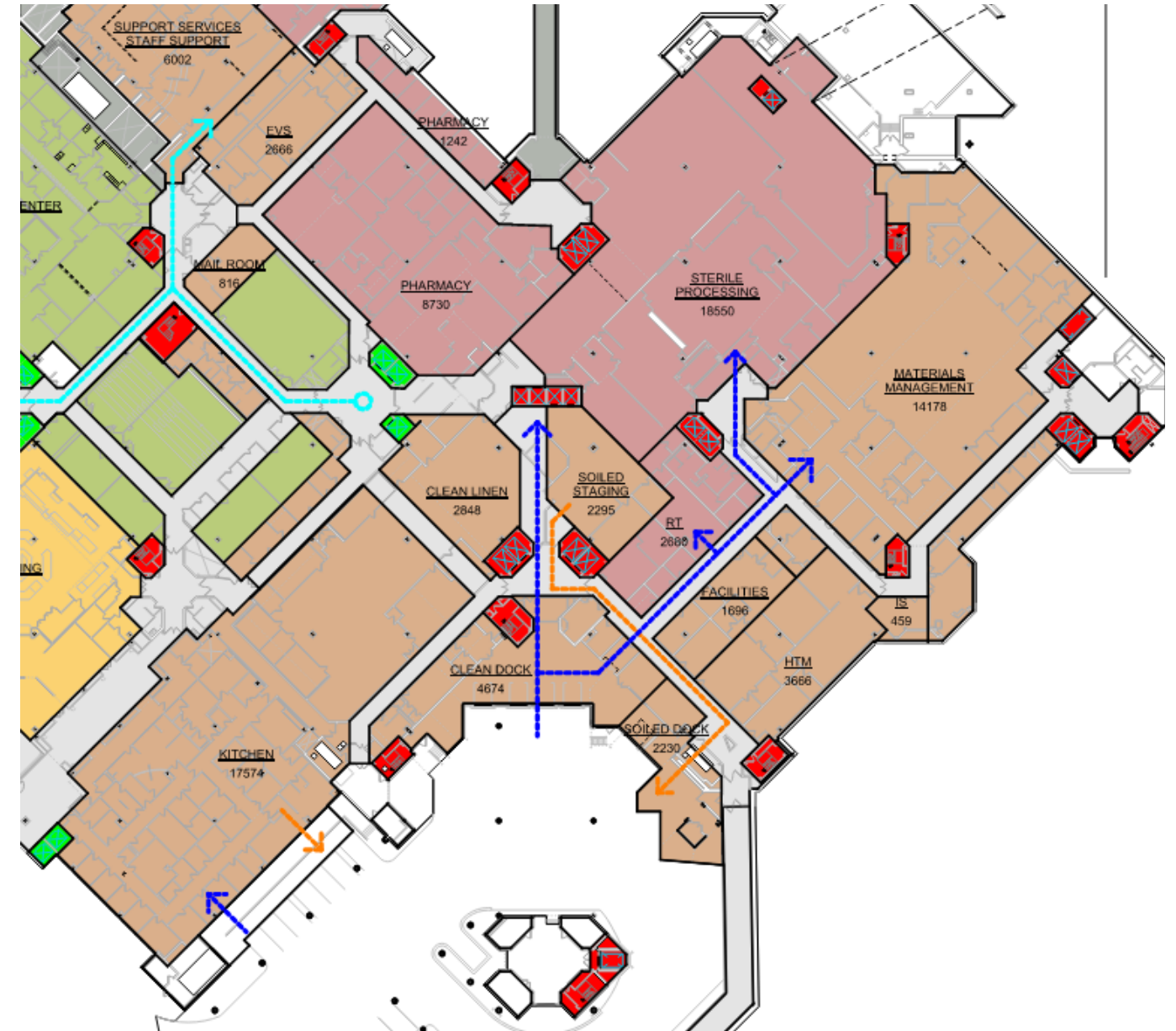
Case Study: SPD Renovation

- UW Health – University Hospital
Madison, WI
- 505-bed hospital and academic medical center
- Sterile Processing Department (SPD) cleans and sterilizes instruments and equipment.
- SPD supports many hospital departments, clinics and research labs.



Case Study: SPD Renovation

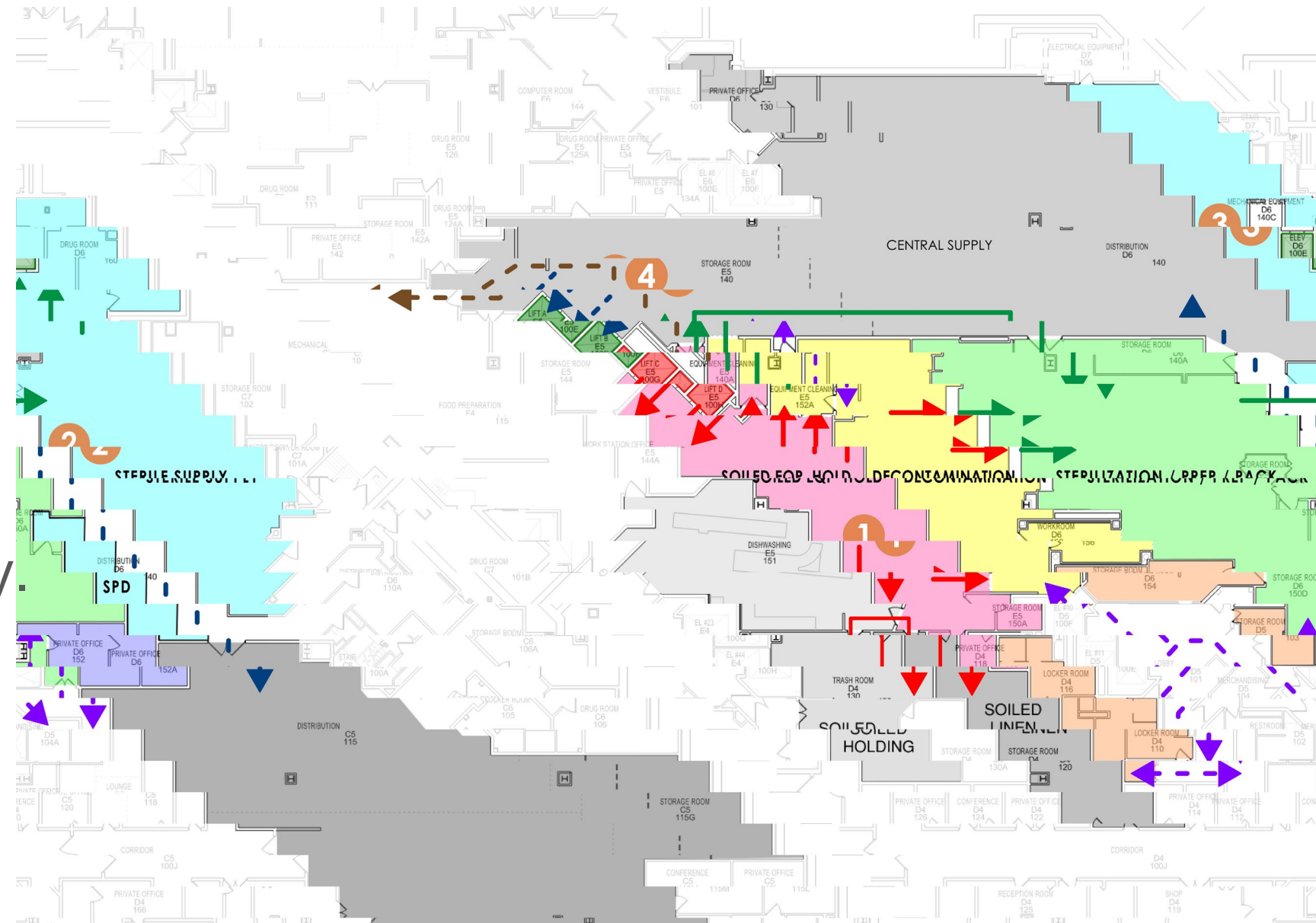
- First Floor Masterplan goals:
 - Properly size departments
 - Improve flow of staff and materials
 - Centralize staff support functions



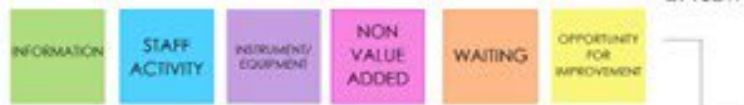
Case Study: SPD Renovation

Current State Challenges:

1. Area is congested.
2. Sterile traffic crosses a corridor.
3. Existing elevator is slow.
4. Clean carts go thru Central Supply

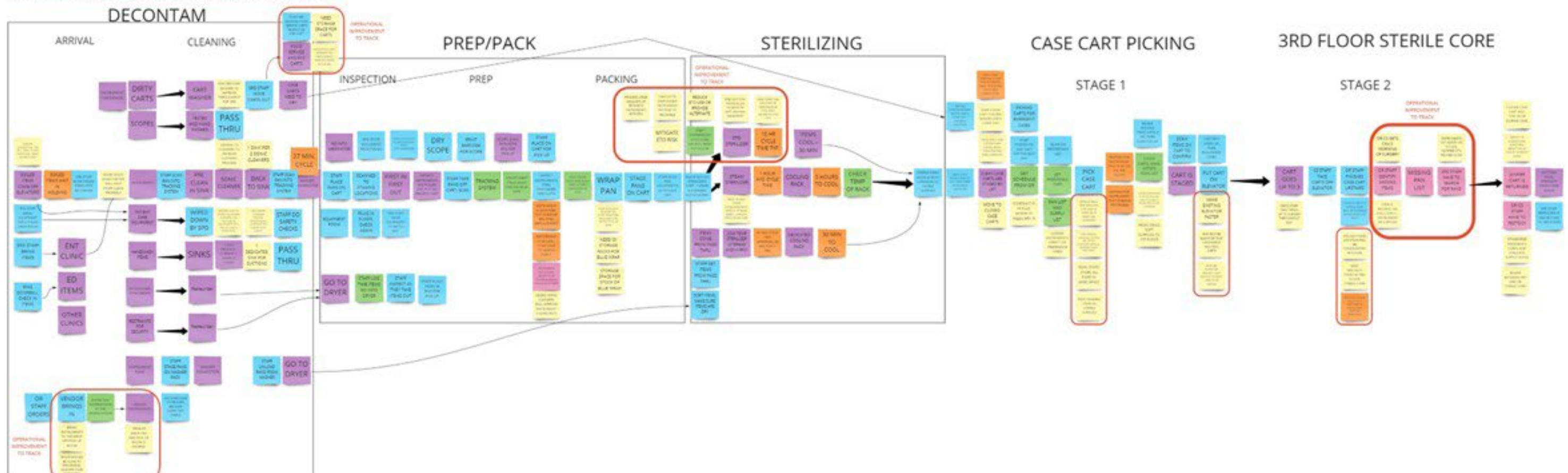


Future State Value Stream Map (VSM)



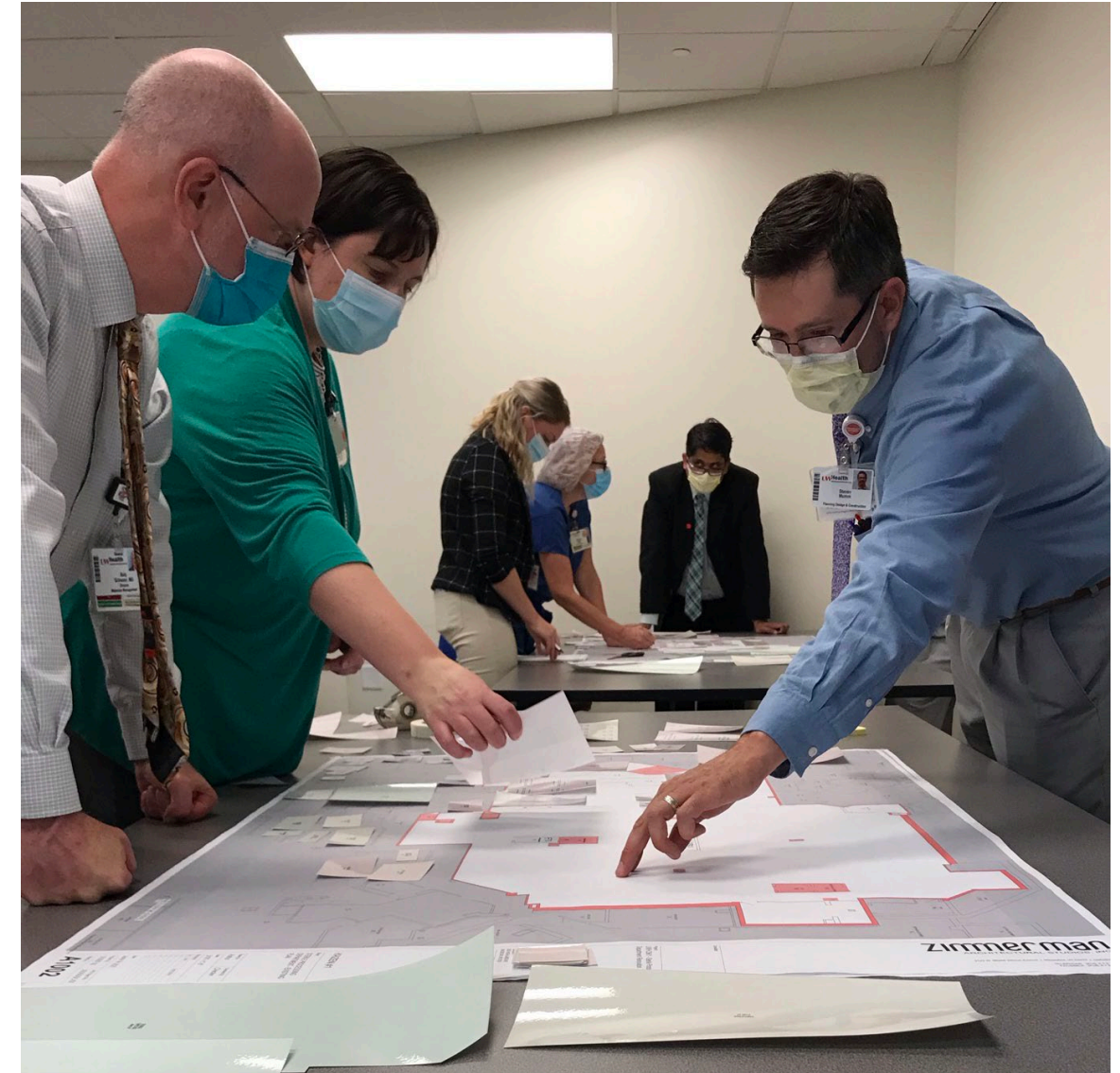
PROCESS STEPS TO REVIEW FOR FUTURE STATE:
VENDOR INSTRUMENT DROP OFF
CLINIC DROP OFF
ETO STERILIZERS - OTHER OPTIONS?
EQUIPMENT CLEANING - SEPARATE THE FLOW FROM OTHER SOILED ITEMS?

OPERATIONAL ITEMS FOR FUTURE STATE:
COMMUNICATION BETWEEN SPD AND SURGERY - WHEN INSTRUMENTS ARE NEEDED, UNUSED SUPPLIES RETURNED
WHICH INSTRUMENTS CAN MOVE TO 1ST FLOOR FOR STORAGE?



Value Stream Mapping Outcomes

- Identified bottlenecks:
 - Vendor traffic
 - Slow elevator
 - Access to ETO sterilizer throughout construction



Future State: New Workflows

1. Separate flow of soiled and clean items
2. New vendor drop off room
3. New staff support spaces
4. Better access to ETO Sterilizers
5. Add second elevator to improve flow
6. New staff support spaces
7. Improved flow to elevators
8. Maintain access to mechanical space
9. Future corridor connection
10. AHU replacement



- Added a second elevator
 - Improves flow
 - Reduces cycle time
 - Provides redundancy
 - Schedule and budget impact



Construction Phasing

- Understanding workflows was key to keeping department operational
 - Maintained access to ETO sterilizers and soiled elevators





Let's Map!

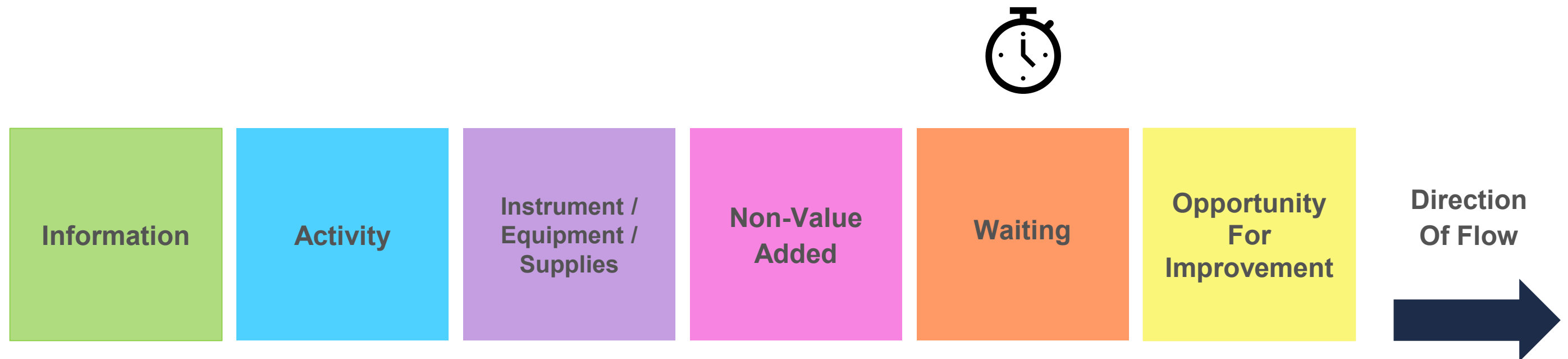


Value Stream Mapping Exercise

- Map a successful road trip using the templates on your table
- Map the current state and identify opportunities for improvement
- Map the ideal future state
- Group needs to agree on the starting and end point of the map



Value Stream Mapping Symbols



Wrap Up – Q & A





Plus/Delta



Thank you!

