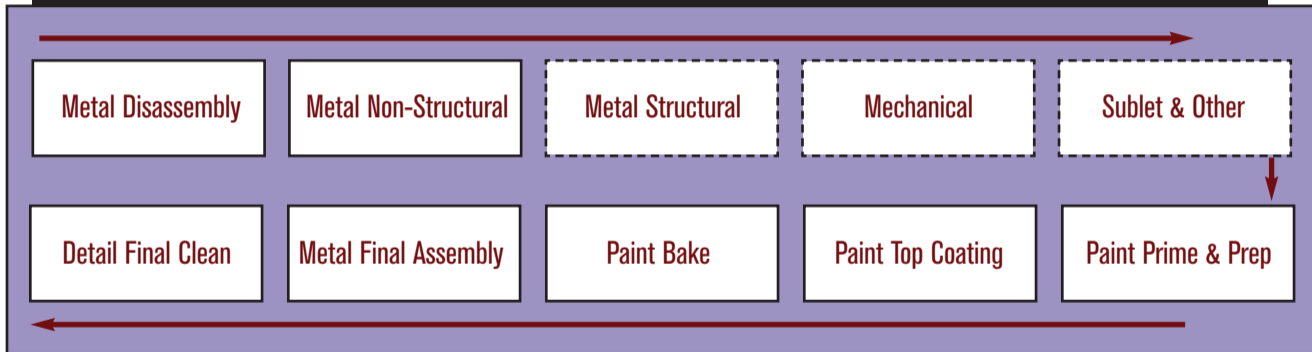


**Figure 1: Metal Department Repair-Process Map**



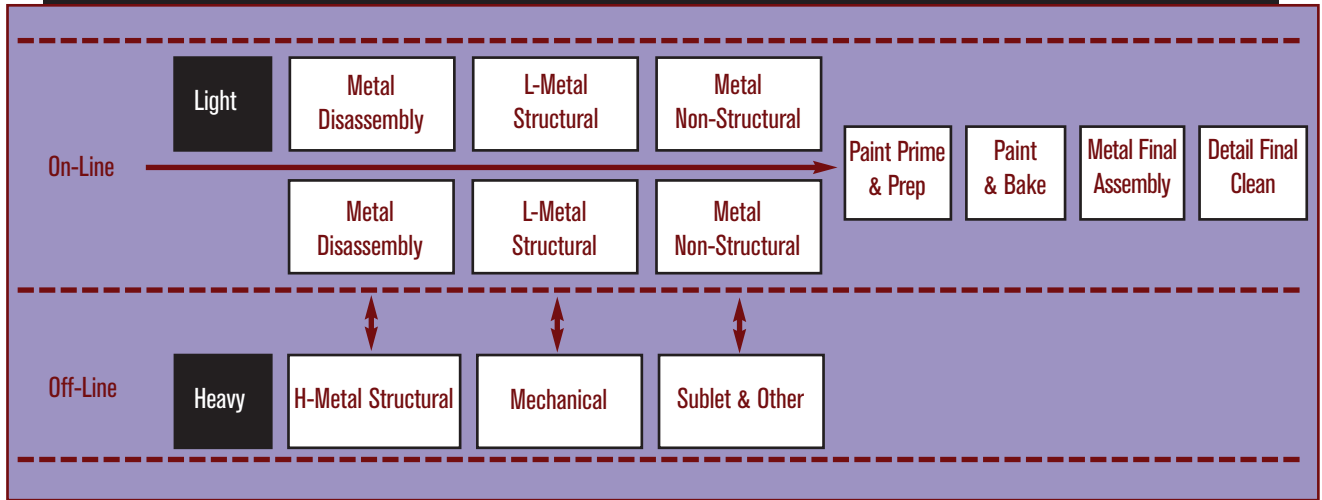
We understand the basic processing flow of a well-run paint department. We need the same understanding for the metal department. To accomplish this, create your own process map of metal department steps and the work order in which the steps should be performed. The highlighted processes of Structural, Mechanical, Sublet & Other are the hardest to put in some type of consistent work order.

## Figure 2: Grouping Similar Repair Processes

Light	Metal Disassembly	Metal Non-Structural	Metal Structural	Mechanical	Sublet
Medium	Metal Disassembly	Metal Non-Structural	Metal Structural	Mechanical	Sublet
Heavy	Metal Disassembly	Metal Non-Structural	Metal Structural	Mechanical	Sublet

Group certain repair processes for different-sized jobs by similar processing actions. Look at the highlighted processes of Metal Structural, Mechanical and Sublet. In the “Light” job category, all three are highlighted since there’s a good chance that all three repair processes won’t be needed for light jobs. For “Heavy” jobs, sublet is the only repair process that likely won’t be needed regularly.

### Figure 3: Off-Line Repair Processing Steps

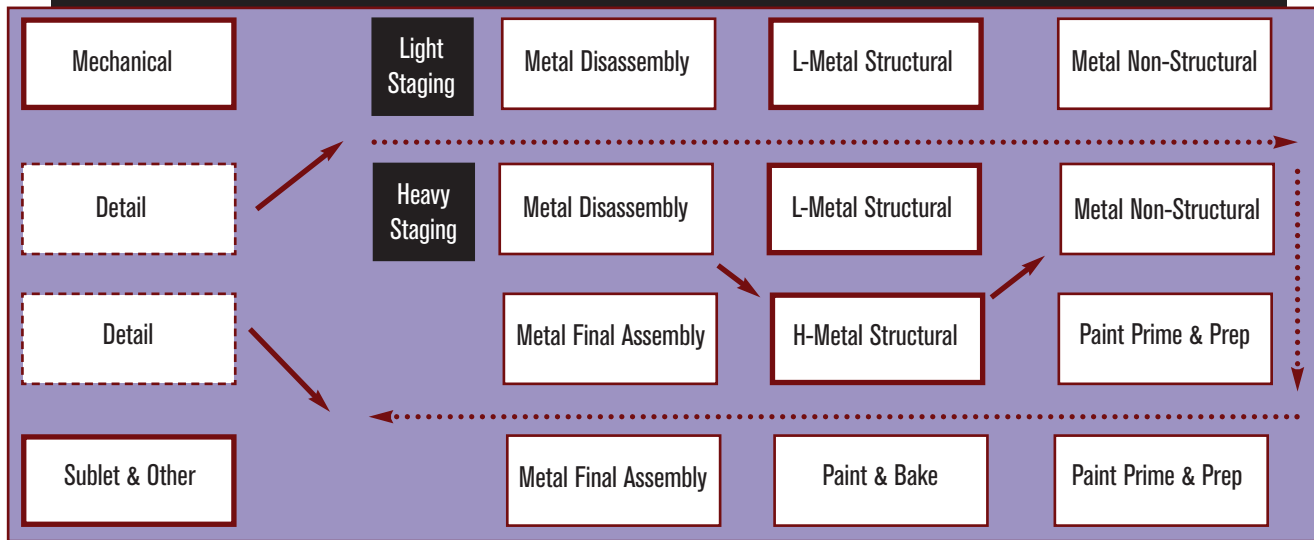


Here I created a map of the most common repair-process actions. I combined the three rows in Figure 2 into two “in-line” rows, one for “Light” jobs (which I’m categorizing as jobs not requiring welding and internal metal repair, prime and paint), and the other row for “Heavy” jobs (which includes jobs categorized as both medium and heavy).

On this map, the three repair-processing steps – Heavy Structural, Mechanical, Sublet & Other – are no longer in the normal linear flow of repair processing. They’re placed in an “Off-line” row because they need to be temporarily removed from the “Heavy” process flow to allow less complex jobs to pass through.

You should still expect the majority of jobs in “Heavy” to be completed within a designated time frame. If, however, the job has significant damage and requires major structural repairs, you’ll need to pull it off-line at a specific point in processing (i.e. after disassembly), perform the heavy structural work and insert the job back into the process flow of “Heavy.” The same off-line steps occur when mechanical or sublet work is needed.

**Figure 4: Grouped Steps for Work Teams**



I've moved around process steps to place similar ones near each other to identify where we could use work teams. If this were a single paint booth body shop that needed to repair five to seven cars daily, the following teams could be formed:

- Team 1: staging – disassembly – reassembly;
- Team 2: light and heavy structural – non-structural;

Or you could form teams across all metal-repair process steps based on “Light” and “Heavy.” Larger shops with multiple booths and higher job volume have even more flexibility in creating team workflow systems.