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Janet Fierson* (fierson@lasalle.edu), Dept. of Mathematics and Computer Science, La Salle University, 1900 W. Olney Ave., Philadelphia, PA 19046. *Reconfiguration graphs of vertex problems*. Preliminary report.

Constructing a reconfiguration graph requires the selection of a problem, a base graph on which to solve the problem, and a reconfiguration rule that defines adjacency of solutions. Each solution is represented by a vertex in the reconfiguration graph, and vertices representing adjacent solutions are joined by edges. A 2018 introductory survey by Nishimura emphasizes that it “does not attempt to catalog all research results that can be categorized as reconfiguration, but instead focuses on demonstrating the main themes in the area, the scope of the approach, and promising directions for the future.” We share additional work on reconfiguration graphs, specifically reconfiguration graphs of vertex problems. This includes the application of reconfiguration graphs to problems not addressed in the survey, further results for problems that do appear, and manipulation of reconfiguration rules to produce reconfiguration graphs with particular structural characteristics. (Received July 31, 2018)