962-22-1043 **Jillian E McLeod*** (mcleod@hope.edu), Jillian McLeod, Hope College, Mathematics Department, 27 Graves Place, Holland, MI 49423. *Notions of Size in Partial Semigroups*. Preliminary report.

There is an emerging interest in the study of partial operations as a separate area of algebra. Partial operations are investigated frequently in connection to the theory of composition of mappings, category theory, coding theory, and information theory, as well as other areas of mathematics. Often it is difficult, if not impossible, to make direct transfers of results from total operations, (operations that are everywhere defined), to partial operations. Thus, it sometimes becomes necessary to modify the "usual" definition or characterization of a notion for the partial operation. This can produce new and interesting questions that are specific to the partial case. We give an overview of some questions related to partial operations in the context of compact right topological semigroups. (Received October 01, 2000)