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Boris Goldfarb* (bgoldfarb@albany.edu) and **Jonathan Grossman**. *Regular coarse coherence of metric spaces and groups.*

We introduce a property of metric spaces and, specifically, finitely generated groups with word metrics which we call "coarse coherence". This is a geometric counterpart of the classical notion of coherence in homological algebra and the regular coherence property of groups defined and studied by Waldhausen. The new property is defined in the general context of coarse metric geometry and is a coarse invariant. It is in fact a weakening of Waldhausen's regular coherence but can be used as effectively in K-theory computations. We show that this property is satisfied by a very large class of groups containing all groups with finite decomposition complexity. The new framework allows to prove structural results by developing permanence properties for coarse coherence. (Received January 16, 2019)