WASHINGTON—The Obama administration is close to tapping Ron Bloom, who heads the White House's auto task force, to help develop policies to assist the beleaguered U.S. manufacturing industry, according to people familiar with the matter.

The job hasn't been finalized but the administration wants to create a new position that would allow the White House to coordinate and craft policies of importance to the manufacturing industry. Mr. Bloom would work with different agencies on a range of issues, such as trade, labor and tax policy.

Mr. Bloom has spent the past several months helping to restructure two of the nation's largest auto makers, ushering General Motors Co. and Chrysler LLC through bankruptcy proceedings. But that role is largely finished and the administration, which has been impressed with Mr. Bloom, wants to find a new position for him, people familiar with the matter said.

The new position would be housed within the National Economic Council, with Mr. Bloom reporting to Lawrence Summers, the president's top economic adviser.

The manufacturing sector has been hard hit during the recession, with auto makers and others slashing jobs. The administration has been looking for ways to help U.S. goods producers, whose recovery is key to helping overall economic growth. It recently started a "cash for clunkers" program, which is aimed at reviving slumping auto sales.

Mr. Bloom would be responsible for reaching out to companies, unions and others to help the administration determine effective policy. He wouldn't engage in so-called industrial policy, such as dictating how much a factory should produce or the types of products it should make.

Instead, the administration "wants someone who wakes up thinking about manufacturing policy," said a person familiar with the matter.

A White House spokesman declined to comment or to make Mr. Bloom available for comment.

Mr. Bloom's possible appointment was earlier reported by Bloomberg News.

The White House has been discussing installing Mr. Bloom for some time and considered naming him earlier this month, when Steven Rattner, the head of the auto task force, stepped down.

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