Commentary: Michigan still means manufacturing

BY DAVID E. COLE 0 COMMENTS

We have been through the "Valley of the Shadow of Death" in the past few years here in Michigan but the rumors of manufacturing's demise were, fortunately, premature. In fact, manufacturing is coming back with a vengeance and will remain a critical centerpiece of our economy for the foreseeable future. While the auto industry is clearly the most important part of our manufacturing endowment, it is really only a part of manufacturing in Michigan.

We are finally beginning to see manufacturing get just a bit of respect as we realize how important it is as a job creator and a foundation of our economy. We had become overly enamored with what many viewed as the new pillars: tech, finance and service.

Don't get me wrong, these sectors are important, but not as fundamentally important as making things. The economic multiplier of a job at an auto manufacturer is now about 10. This means that for every employee at a GM, Ford or Chrysler there are nine other jobs in auto suppliers and spin-off jobs in our communities. On the other hand, a Wall Street job has a multiplier of about two. The Obama administration in Washington is becoming aware of...
this; that's the reason for its new love of manufacturing. Incidentally, it is imperative that manufacturing not become a political "football." We must make sure both parties fully embrace the importance of manufacturing and develop appropriate policies to ensure a bright future.

We are once again beginning to accelerate manufacturing-related hiring in Michigan. But the total work force will never approach the numbers of the past because manufacturing has been changing rapidly due to software and advanced technology.

This has led to a productivity improvement that is really quite astounding. For example, if you were to assemble a car in China at zero labor cost, the cost of transportation and the value of the finished product in shipment would exceed the labor cost advantage. This dramatic productivity improvement has been impressive but requires a much more highly educated workforce than in the past.

An assembly line worker today requires the equivalent of a 2-year community college degree rather than just being a high school drop-out. Today's engineers are also using highly-sophisticated simulation tools which dramatically improve their productivity as well.

We have recently been developing a new software tool called AutoHarvest, available at autoharvest.org, which is an Internet-based marketplace to speed innovation in the auto industry. This should be operational by the end of the year. The site will function as a sort of Facebook for auto technology to bring together intellectual property buyers, sellers and collaborators.

Manufacturing is coming back, but we face some potential "choke points." We are already running near capacity in the auto industry and may not be able to increase production even as the market expands. There is another problem that is more insidious and potentially damaging: the availability of an appropriately-educated workforce. Even today in our state we are witnessing a growing shortage of talent from the shop floor to the engineering departments. There is much work to do.

We have created a not-for-profit organization called Building America's Tomorrow to bring the message of manufacturing careers to our K-12 students who rarely see a future in manufacturing related jobs.

There is a link on the AutoHarvest website to a video featuring Ford CEO Alan Mulally. A significant part of the effort will be to give scale to some terrific programs developed by organizations like the Society of Automotive Engineers and the Society of Manufacturing Engineers. Presently, they are only available in a small fraction of our schools and are aimed at the full range of K-12 students.

Clearly manufacturing and Michigan are back in the game. We are moving forward in a very positive way but there are tough challenges ahead of us. If Michigan is to be the Michigan we want it to be, we still have work to do, but the future is bright even as storm clouds gather on the horizon.

David E. Cole is chairman of AutoHarvest, based in Ann Arbor.