Application of AI to planning document development

**Challenge statement**: The U.S. Department of Commerce’s Economic Development Administration (EDA) issues hundreds of millions of dollars in economic development grant funding throughout the U.S. each year. For projects that implement physical projects or programs, a comprehensive economic development strategy (CEDS) is required. In addition, EDA recognizes and substantially funds over 400 economic development districts (EDDs) each year. EDDs are multi-county districts and are required to create and periodically update their CEDS in order to obtain and retain EDD status and be eligible for grant funding. Importantly, the CEDS is viewed as integral receiving implementation grant funding regardless of whether grant applicant is an EDD or “stand alone” community.

For many EDDs, as well as other communities not in an EDD but applying for economic development funding, resource constraints prevent them from building effective, compelling strategies that can lead to more grant funding and more effective economic development. This is where AI may be able to assist these communities – many existing in either rural areas, tribal lands, or inner cities.

An EDA CEDS follows a proscribed format, which is outlined below. They rely on the use and analysis of multiple data, which are available from several public sources. A potential advantage of AI is the ability to make insights using this data that would not be readily recognized by individuals tasked with this work, and then draw logical, well-structured conclusions and potentially compelling economic development stories from the data, which meets EDA criteria. A better CEDS may lead to more federal funding, as well as better use of local resources to achieve higher levels of economic growth over history.

**Project proposal**: Use AI to evaluate relevant data and construct a CEDS that can be compared to existing CEDS (available from EDA or the Indiana Business Research Center CEDS library) to determine whether AI can produce better strategy and planning documents, particularly for resource constrained communities. Producing three to five test CEDS across differing geographic and economic areas may provide preliminary evidence of the potential of AI to assist in development of prescribed strategies and plans.

**Long term success**: The results of this prototype project could be shared with EDA as a potential national technical assistance project that, if validated, could be shared with EDDs and other communities, as well as providing ongoing technical assistance in how AI might be beneficial to the economic development planning process. Further, other federal agencies also require differing types of proscribed planning documents. A successful project may also reveal potential for AI-enabled planning to be adopted at other federal agencies, as well as state agencies.

**Summary of CEDS requirements from EDA website** <https://www.eda.gov/resources/comprehensive-economic-development-strategy?q=/grant-resources/tools/comprehensive-economic-development-strategy>

* [*Summary Background*](https://www.eda.gov/resources/comprehensive-economic-development-strategy/content/summary): A summary background of the economic conditions of the region;
* [*SWOT Analysis*](https://www.eda.gov/resources/comprehensive-economic-development-strategy/content/swot-analysis): An in-depth analysis of regional strengths, weaknesses, opportunities and threats (commonly known as a “SWOT” analysis);
* [*Strategic Direction/Action Plan*](https://www.eda.gov/resources/comprehensive-economic-development-strategy/content/action-plan): The strategic direction and action plan should build on findings from the SWOT analysis and incorporate/integrate elements from other regional plans (e.g., land use and transportation From the regulations governing the CEDS (see 13 C.F.R. § 303.7), the following sections *must* be included in the CEDS document:, workforce development, etc.) where appropriate as determined by the EDD or community/region engaged in development of the CEDS. The action plan should also identify the stakeholder(s) responsible for implementation, timetables, and opportunities for the integrated use of other local, state, and federal funds;
* [*Evaluation Framework*](https://www.eda.gov/resources/comprehensive-economic-development-strategy/content/evaluation-framework): Performance measures used to evaluate the organization’s implementation of the CEDS and impact on the regional economy.

**Possible CEDS-related AI questions**

Some initial questions to pose to AI engine(s) based on the CEDS guidelines at EDA.  The first five questions directly correlate to major areas of the CEDS EDA wishes to be addressed.

The last question is more about the summary story (which may be used in a grant proposal).

1. What would be the best strategy for developing a regional economy located in the (insert a specific MSA, specified multi-county region, or economic area), that has the following key industries and predominant employee skills (insert LQ-based industries and labor professions).
2. What infrastructure would be most effective in supporting the development of a regional economy located in the (insert a specific MSA, specified multi-county region, or economic area), that has the following key industries and predominant employee skills (insert LQ-based industries and labor professions).
3. What would be the economic strengths, weaknesses, opportunities, and threats for an economy located in the (insert a specific MSA, specified multi-county region, or economic area), that has the following key industries and predominant employee skills (insert LQ-based industries and labor professions).
4. What are the most important industries needed to supply an economy that has the following key industries and predominant employee skills (insert LQ-based industries and labor professions).
5. Which of the following, economic shifts, natural disasters, or the impacts of climate change are the most significant external threats to a regional economy located in the (insert a specific MSA, specified multi-county region, or economic area)
6. Write a compelling appeal to a business CEO who is considering expanding her business in the (insert a specific MSA, specified multi-county region, or economic area), that has the following key industries and predominant employee skills (insert LQ-based industries and labor professions).

Using the above questions, applied to and Indiana EDD

Possible CEDS-related AI questions for Southeastern Indiana Regional Planning Commission

1. What would be the best strategy for developing a regional economy covering the following counties in Indiana: Dearborn, Decatur, Franklin, Jefferson, Jennings, Ohio, Ripley, Shelby,  Switzerland, and has the following key industries and predominant employee skills (insert LQ-based industries and labor professions)?
2. What infrastructure would be most effective in supporting the development of a regional economy located in the following counties in Indiana: Dearborn, Decatur, Franklin, Jefferson, Jennings, Ohio, Ripley, Shelby,  Switzerland, that has the following key industries and predominant employee skills (insert LQ-based industries and labor professions)?
3. What would be the economic strengths, weaknesses, opportunities, and threats for an economy located in the following counties in Indiana: Dearborn, Decatur, Franklin, Jefferson, Jennings, Ohio, Ripley, Shelby,  Switzerland, that has the following key industries and predominant employee skills (insert LQ-based industries and labor professions)?
4. What are the most important industries needed to supply an economy that has the following key industries and predominant employee skills (insert LQ-based industries and labor professions)?
5. Which of the following, economic shifts, natural disasters, or the impacts of climate change are the most significant external threats to a regional economy located in the following counties in Indiana: Dearborn, Decatur, Franklin, Jefferson, Jennings, Ohio, Ripley, Shelby,  Switzerland?
6. Write a compelling appeal to a business CEO who is considering expanding her business in any one of the following counties in Indiana: Dearborn, Decatur, Franklin, Jefferson, Jennings, Ohio, Ripley, Shelby,  Switzerland, that has the following key regional industries and predominant employee skills (insert LQ-based industries and labor professions).

**Immediate next steps**

I think the next steps are to refine the questions and apply them to one or two EDDs, perhaps a smaller ones in a rural area like Southeast Indiana EDD and see how the narrative of ChatGPT (or Bard, etc) compares with the real CEDS narrative.