



PULTE INSTITUTE
FOR GLOBAL DEVELOPMENT

The Futures of Work in South Bend in 2035: A Participatory Foresight Study

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OVERVIEW

What will work look like in the City of South Bend in 2035? It is very difficult to answer this question. Indeed, the future of work is highly uncertain. The majority of studies on the future of work remain predictive in nature; often taking a bird's-eye view and depicting a most likely scenario on a global or national level, which overlooks the importance of local context.

Six scenario narratives of the futures of work are presented.¹ These emphasize stress-point events and phenomena in the larger social, political, technological, and economic environment, with a time horizon of 15 years (2035). The scenarios are geographically focused on South Bend, but with reference to the global situation. In the narratives, the long-term outcomes of the futures of work are weaved with potential short-term outcomes of the COVID-19 pandemic. We have used semi-structured interviews to gather key information to be used as building blocks of the scenarios.

Two key sources of concern have been uncovered in the interviews. These concerns frame the focus of the scenarios:

- Concerns over the skillset required by workers of the future locally
- Concerns over the future of local manufacturing industries

¹To create these scenario narratives, we have used the six scenario archetypes framework, see: Fergnani, A., & Song, Z. L. (2020). The six scenario archetypes framework: A systematic investigation of science fiction films set in the future. Manuscript under review.



FUTURES OF WORK SCENARIOS

- **Scenario 1 (Growth & Decay):** A future of heavy automation, more ubiquitous driver-less vehicles, and high unemployment. Compulsory online retraining programs reinstate part of the unemployed population in new sectors of the economy. Manufacturers pivot into driver-less vehicle production. Education invests in degrees in the management of automation.
- **Scenario 2 (Threats & New Hopes):** A future where disease prevention becomes part of policy arrangements and common individuals' daily routines, and new resilience is built. Manufacturers pivot into electronic face shield production. Start-ups exploit the new AR markets. Education launches programs in complexity, foresight, and epidemiology.
- **Scenario 3 (Wasteworlds):** A future where Trump's task force to combat the pandemic ignores scientists' recommendations, leading to a new wave of infections and deaths. The local economy is at sustenance level and crimes increase. The healthcare system is overwhelmed. Few industrial sectors are still active, e.g., sanitary products and food processing. A great majority of academic research shifts to Covid-19.
- **Scenario 4 (The Powers That Be):** A future where governments' tracking apps impose monetary fines to individuals who do not comply with orders of social distancing. Automated decision making at public and corporate levels, advanced holographic technologies, and 5G infrastructures are widespread. Manufacturers employ holograms extensively. Academia is heavily regulated by the public sector.
- **Scenario 5 (Inversion):** A future where the global pandemic forces individuals to rethink the human role in adversely impacting the planetary ecosystem, and a new value system on sustainability becomes widespread. The meat substitutes and artificial meat industries reach unprecedented market capitalization. Academic research zeroes in on plant-based food science research, food substitutes research, and wellbeing and spirituality.
- **Scenario 6 (Disarray):** A future where cyberwarfare tensions between China and the USA escalate following mutual accusations during the global pandemic. Raw materials are in shortage due to decreases in bilateral trade. Wholesale prices increase. The public sector and the United States Armed Forces absorb the great majority of the young workforce.

Futures of Work Scenarios presented in this policy brief have been published at [sciencedirect.com](https://www.sciencedirect.com).



RECOMMENDATIONS: USING SCENARIOS TO BUILD RESILIENCE



RECOMMENDATION 1: THE WIND TUNNELING TECHNIQUE

These scenarios are to be used to build resilience in advance, both in policymaking and business practice. The first way this can be done is via a wind tunneling technique² following this step-by-step procedure:

- **Step 1:** Placing current strategies/policies against each scenario using a cross-impact table as in Figure 1.
- **Step 2:** Asking whether the strategies/policies (rows) are robust to possible future scenarios (columns).
- **Step 3:** Identifying the most enduring strategies/policies, and indicating this on the table with a V sign; identifying those that require some form of change, indicating this on the table with a C sign; and identifying those that require a complete overhaul, indicating this on the table with an X sign.
- **Step 4:** Developing a roadmap for strategic/policy changes given the required modification uncovered in C and V cells in the table as in step 3 above.

Figure 1. Wind Tunneling Template

Current strategies/policies	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Strategy/policy 1						
Strategy/policy 2						
Strategy/policy 3						

²van der Heijden, K. (1996). Scenarios: the art of strategic conversation. Chichester, England: John Wiley & Sons.

A second way to derive strategic/policy guidelines from the set of scenarios is by looking for common implications that are recurring in one or more scenario narratives, and building resilience based on those elements. Across the scenarios presented, two implications appear most commonly:



RECOMMENDATION 2: BUILDING LONG-TERM PARTNERSHIPS BETWEEN ACADEMIA AND PRACTICE/ THE PUBLIC SECTOR

The outlines of the scenario narratives show that when stress-point situations in the environment are present, long-term partnerships between public institutions/private corporations and educational institutions to set up a new range of university degrees make new skillsets easily attainable. The scenarios also give suggestions on what particular professions of the future are plausible. The partnerships narrated in the scenarios serve to envision and actively create professions of the future. These proactive measures appear more able to withstand adverse conditions of the social, political and economic environment (Growth & Decay, Threats & New Hopes, The Powers That Be, and Inversion scenarios) rather than more reactive approaches (Wasteworlds and Disarray scenarios). Local universities, having seen this as a salient implication of the scenario narratives, could start planning to enact policies along this line in the very present.



RECOMMENDATION 3: PIVOTING MANUFACTURING INTO EMERGING LINES OF BUSINESS

From the scenario narratives, it appears that manufacturing companies appear to be successful in the futures when they pivot into substantially different lines of products while maintaining some core expertise (Growth & Decay, Threats & New Hopes, The Powers That Be, and Inversion scenarios). This element might prod some visionary entrepreneurs and managers to start researching possible business pivoting opportunities in the technological environment in the very present. Indeed, it was noted to us during the interviews that discretionary vehicle sales went up during the global pandemic. This is an unexpected positive event. It is equally plausible that unexpected negative events will occur. Acting now in view of common wake-up-call elements to more than one scenario would in part ward off currently leading manufacturers against an excessively dire impact of changing business environment conditions on their competitive advantage.

POLICY BRIEF TEAM



Alessandro Fergnani conducts research on corporate foresight, foresight methodologies, and the futures of work. His research has been published on the journals *Academy of Management Perspectives*, *Futures*, *Futures & Foresight Science*, *Foresight*, and *World Futures Review*, among others.

This brief was produced during Mr. Fergnani's residency as a Pulte Institute Policy and Practice Visiting Associate. For more information, visit: pulte.nd.edu/vap.



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