## **2023-24 Topics**



Check out <u>this video</u> introducing the 2023-24 topics, as well as Suggested Readings to kickstart your research!

#### **Practice Problem 1: Tourism**

Tourism not only benefits host locales but those on holiday. Travel enriches their lives, expands their understanding of people and cultures, while also serving as a respite from daily life. The economic stability of such destinations depends on the sustainability of their tourist trade. As the popularity of such destinations grows, international corporations and developers typically flock to these growing places, trying to capitalize on the financial possibilities. There is money to be made in building hotels, restaurants, and in developing an area's growing tourism industry. As outside groups seek to attract tourists and the revenue they generate, locals often



struggle to maintain their location's unique appeal and ability to support local venues. As this build-up occurs, local people can have their cultures exploited, lands destroyed, and their local businesses put in jeopardy. As the tourism sector grows and expands, we are seeing the expansion of the Special Interest (SIT) market - tourists wishing to match their vacations with their interests (e.g., ecotourism, wellness tourism, event tourism, ancestry tourism, etc.).

How will changing forms and trends of tourism impact tourists and hosts alike? How can the advantages of expanding tourism be balanced with the protection of destinations?

#### **Practice Problem 2: Urbanization**

Today nearly half the world's population lives in an urban area. By 2050, that number is expected to reach 70% due to this increase in Urbanization. Urban areas and their large populations often hold power over governance, economic development, and international connectivity beyond their immediate regions. With proper planning, urban centers can provide educational and economic opportunities to residents not found elsewhere. However, they can also easily give rise to slums and increase income inequality. With growing footprints, cities are also struggling to provide basic needs, essential services, and safety. Future urban planners must



address tough questions: What qualities in society should be valued most? What is fair and equitable? Whose interests will be served first? Planners must balance the speed of decision-making with the need for thoughtful, well-considered programs for development. As urban areas expand, how can we develop areas that are efficient, resilient, and inclusive?

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### **Qualifying Problem: Antarctica**

Antarctica, the highest, driest, coldest continent, has no permanent population and is governed by a collection of agreements between fifty-four countries. The Antarctic Treaty System designates the entire continent and surrounding waters for scientific endeavors, bans military activity, and promotes environmental research and preservation. Although Antarctica remains the most remote place on Earth, it is highly regulated and heavily impacted by activities around the globe. Parts of the continent are polluted by sewage, discarded machinery, fuel products, and rubbish. Antarctica is thought to be rich in minerals and resources,



though an 'indefinite' ban on mining is in place through 2048. Antarctica also holds over 60% of the Earth's fresh water in an ice sheet that contains 90% of the Earth's total ice volume. As global temperatures rise, these are breaking apart and melting faster, endangering local wildlife and entire ecosystems.

Without a consistent population or a sovereign state, Antarctica possesses a unique space within political, economic, and environmental crossroads. How can Antarctica be sustainably utilized yet simultaneously preserved to best benefit our global population?

### **Affiliate Bowl: Autonomous Transportation**

Our transport needs, desires, and realities are rapidly changing due to global growth and increased connectivity. As modes of transportation continue to evolve, increasing levels of complexity and efficiency are pursued. What role will autonomous vehicles, cars, airplanes, ships, etc., which operate without human intervention, play in this pursuit? Their development continues to increase exponentially with advancing technological capabilities. Since all scenarios are not programmable, autonomous vehicles must learn and react. They do this by surveying their environment with multiple sensors and utilizing artificial intelligence (AI) to



process vast amounts of data. Autonomous vehicles can deliver on demand, refuel, park, and store themselves. By creating a network of these vehicles, entire systems of transport could become autonomous, controlled by a central AI.

How will the efficiency of autonomous vehicles affect the development of transportation, on land and sea, in the air, and possibly space? How will autonomous transport cope with unexpected risk situations and ethical decisions? In what ways will autonomous transport impact jobs, industries, infrastructure, and lifestyles?