



Scenarios Workshop – Are We There Yet? Presentation Slide Notes

Slide 1

Cover slide that reads Scenario Workshop – Are We There Yet?

Slide 2

Instructions – 1: Introduce the topic. 2: List possible milestones. 3: Select your response. 4: See how everyone voted.

Slide 3

Slide title is Topic #1: Space Travel. When people think about the future, it almost invariably leads to thoughts of space travel.

Implications:

- Past missions to space have driven technological innovations.
- Autonomous robotics is one example of an area that may benefit. It's highly likely that any humans sent to the Red Planet would be preceded by robots capable of doing some of the groundwork. Unless there is a drastic leap in communications technology, robots on Mars cannot be controlled in real time, which means they have to be at least semi-autonomous.

Slide 4

Slide title is Topic #1: Space Travel. No notes.

Slide 5

Slide title is Audience Voting. The audience voting results presented here, if used, reflect responses generated for the year 2035, not 2030 (i.e., “By 2035, the United States...”).

Slide 6

Slide title is Topic #2: Hyperloop Technology.

- What is it? A proposed way of transporting people or freight that involves suspending transport capsules and moving them at high speeds through low pressure tubes.
- Implications: With speeds of 600-700 mph envisioned, people may be able to live far away from their work (housing affordability); just-in-time delivery of parts would be further facilitated; traffic congestion would be relieved
- Challenges: Maintaining vacuum within the tube; safety and affordability; regulation and certification; and securing rights of way and permitting

Slide 7

Slide title is Topic #2: Hyperloop Technology. No notes.

Slide 8

Slide titles is Audience Voting. The audience voting results presented here, if used, reflect responses generated for the year 2035, not 2030 (i.e., “By 2035, the United States...”).

Slide 9

Slide title is Topic #3: Zero Hunger.



Zero hunger is one of the United Nation's Sustainable Development Goals: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

An estimated 821 million people – approximately 1 in 9 people in the world – were undernourished in 2017, up from 784 million in 2015. This represents a worrying rise in world hunger for a third consecutive year after a prolonged decline.

Slide 10

Slide title is Topic #3: Zero Hunger. No notes.

Slide 11

Slide title is Audience Voting. The audience voting results presented here, if used, reflect responses generated for the year 2035, not 2030 (i.e., “By 2035, food insecurity...”).

Slide 12

Slide title is Topic #4: Autonomous Vehicles.

Implications:

- The notion of car ownership may change, with access to large fleets of autonomous vehicles
- Everything associated with individual travel will change
- Transportation costs will drop, resulting in a potential democratization of transportation
- Driverless cars are also expected to affect a broad range of industries (e.g., trucking, car repair, connections to commerce, parking)

Slide 13

Slide title is Topic #4: Autonomous Vehicles.

By prevalent, we mean that driverless cars are widely available such the vision of democratized transport is achieved (i.e., 20 cents per mile).

Slide 14

Slide title is Audience Voting.

The audience voting results presented here, if used, reflect responses generated for the year 2035, not 2030 (i.e., “By 2035, autonomous vehicles...”).

Slide 15

Slide title is Topic #5: Catastrophic Incidents.

FEMA defines a catastrophe as “any natural or manmade incident, including terrorism, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions.”

Slide 16

Slide title is Topic #5: Catastrophic Incidents. No notes.

Slide 17

Slide title is Audience Voting.



The audience voting results presented here, if used, reflect responses generated for the year 2035, not 2030 (i.e., “By 2035, the United States will have experienced...”).

Slide 18

Slide title is Topic #6: Fusion.

- Fusion would provide a potentially inexhaustible and zero-carbon source of energy
- Providing energy from fusion is one of the National Academy of Engineering 14 Grand Challenges for Engineering in the 21st Century
- We have already been able to demonstrate fusion on a small scale. However, because of the enormous temperatures involved, current human-engineered fusion requires more energy than it produces. The challenge is to scale up and make the fusion process more efficient to be a viable energy source.

Slide 19

Slide title is Topic #6: Fusion. No notes.

Slide 20

Slide title is Audience Voting.

The audience voting results presented here, if used, reflect responses generated for the year 2035, not 2030 (i.e., “By 2035, commercially viable fusion reactors...”).

Slides 21 and 22

Slide title is Topic #7: Virtual Reality. No notes on both slides.

Slide 23

Slide title is Audience Voting.

The audience voting results presented here, if used, reflect responses generated for the year 2035, not 2030 (i.e., “By 2035, virtual reality...”).

Slide 24

Slide title is Topic #8: Medical Breakthroughs. No notes.

Slide 25

Slide title is Topic #8: Medical Breakthroughs. No notes.

Slide 26

Slide title is Audience Voting.

The audience voting results presented here, if used, reflect responses generated for the year 2035, not 2030 (i.e., “By 2035, how many of the following medical breakthroughs will be a reality in the United States?”).

Slide 27

Slide title an image of the Cybersecurity and Infrastructure Security Agency (CISA) seal and logo