# The Best Is Yet To Be Or Not To Be?

### **Tunnels**

**Big Dig**: The Big Dig was the most expensive highway project in the United States, and was *plagued by cost overruns, delays, leaks, design flaws, accusations of poor execution and use of substandard materials, criminal charges and arrests, and the death of one motorist.* The project was originally scheduled to be completed in 1998 at an estimated cost of \$2.8 billion (US\$7.4 billion adjusted for inflation as of 2020). However, the project was completed in December 2007 at a cost of over \$8.08 billion (in 1982 dollars, \$21.5 billion adjusted for inflation), a cost overrun of about 190%. As a result of a death, leaks, and other design flaws, the Parsons Brinckerhoff and Bechtel consortium agreed to pay \$407 million in restitution and several smaller companies agreed to pay a combined sum of approximately \$51 million.

**Obstacles**:The political, financial and residential obstacles were magnified when several environmental and engineering obstacles occurred. The downtown area through which the tunnels were to be dug was largely landfill, and included existing Red Line and Blue Line subway tunnels as well as innumerable pipes and utility lines that would have to be replaced or moved. Tunnel workers encountered many unexpected geological and archaeological barriers, ranging from glacial debris to foundations of buried houses and a number of sunken ships lying within the reclaimed land.

**Channel Tunnel**: The **Channel Tunnel** sometimes referred to by the portmanteau **Chunnel**, is a 50.46 km (31.35-mile) undersea railway tunnel, opened in 1994, that connects Folkestone (Kent, England) with Coquelles (Pas-de-Calais, France) beneath the English Channel at the Strait of Dover. It is the only fixed link between the island of Great Britain and the European mainland.

Incidents: There have been three fires in the tunnel, all on the heavy goods vehicle (HGV) shuttles, that were significant enough to close the tunnel, as well as other minor incidents. On the night of 19/20 February 1996, about 1,000 passengers became trapped in the Channel Tunnel when Eurostar trains from London broke down owing to failures of electronic circuits caused by snow and ice being deposited and then melting on the circuit boards.

### California High Speed Trail:

### Plans:

**Phase 1** of the planned route, about 494 miles (795 km) long, runs from the Salesforce Transit Center in San Francisco to the Anaheim Regional Transportation Intermodal Center in Anaheim, with intermediate stops planned for Millbrae, San Jose, Gilroy, Merced, Madera, Fresno, Kings/Tulare (Hanford), Bakersfield, Palmdale, Burbank and Los Angeles. An additional station between Los Angeles and Anaheim, at Norwalk or Fullerton, is being considered. The existing 4th and King Caltrain station in San Francisco is expected to be the northern terminus of Phase 1 until the future completion of the Downtown Rail Extension (now known as The Portal) to the Salesforce Transit Center.

**Phase 2** would construct two major extensions to the system. The northern extension would stretch 115 miles (185 km) from Merced to Sacramento, with intermediate stops at Modesto and Stockton. It would largely parallel the existing San Joaquins route through the Central Valley. In the south, the system would be extended 167 miles (269 km) from Los Angeles to San Diego. Instead of continuing south from Anaheim, it would split off from the Phase 1 route at Los Angeles Union Station and travel east along I-10 before turning south, following an inland route along I-15 or I-215. This would enable high-speed trains to serve the Inland Empire and inland parts of San Diego County, with stops at Ontario International Airport and Escondido.

## **Cities**

**Sejong:** was founded in 2007 as the new planned capital of South Korea from many parts of the South Chungcheong Province and some parts of North Chungcheong Province to ease congestion in South Korea's current capital and largest city, Seoul, and encourage investment in the country's central region. Since 2012, the government of South Korea has relocated numerous ministries and agencies to Sejong, but many still reside in other cities, primarily Seoul, where the National Assembly and many important government bodies remain.

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Hambantota (Sri Lanka): This underdeveloped area was hit hard by the 2004 Indian Ocean tsunami and is undergoing a number of major development projects including the construction of a new sea port and international airport finished in 2013. These projects and others such as Hambantota Cricket Stadium are said to form part of the government's plan to transform Hambantota into the second major urban hub of Sri Lanka, away from Colombo.

Economy and Infrastructure: A cement grinding and bagging factory is being set up, as well as fertiliser bagging plants. Large salt plains are a prominent feature of Hambantota. The town is a major producer of salt. A Special Economic Zone of 6,100 hectares (15,000 acres) has been proposed by Prime Minister Ranil Wickremesinghe, out of which approximately 500 hectares (1,235 acres) will be situated in Hambantota to build factories, LNG plants and refineries while the rest will be in Monaragala, Embilipitiya and Matara. A Vocational training Center was opened in 2017 by Prime minister Ranil Wickremesinghe with China to train the workforce needed for the SEZs. Wickramasinghe also came into an agreement with state-owned China Merchants Port Holdings to lease 70 per cent stake of the strategically-located Hambantota port at \$1.12 billion, opening Hambantota to the Belt and Road Initiative.

The Line (NEOM): The Line (stylised THE LINE; Arabic: ذَا لَا يَنُ is a conceptual linear smart city in Saudi Arabia in Neom, Tabuk Province, housed in a single building, that is designed to have no cars, streets or carbon emissions. The original plans called for the city to span 170 kilometres (110 mi) at a height of 500 m (1,600 ft) and a width of 200 metres (660 ft) sized to accommodate a population of 9 million (25% of Saudi Arabia's 2022 population of 35.5 million). The Line would have an entirely glass mirror exterior. The plan calls for all basic services to be within a five-minute walking distance.

**Proposal:**The Line is eventually planned to be 170 kilometres (110 miles) long. It could stretch from the Red Sea approximately to the city of Tabuk and could have nine million residents, resulting in an average population density of 260,000 per square kilometre (670,000/sq mi).By comparison, Manila, the world's most densely populated city in 2020, had a density of 44,000 per square kilometre (110,000/sq mi).The Line's design consists of two mirrored buildings with an outdoor space in between, having a total width of 200 metres (660 ft) and a height of 500 metres (1,600 ft). This would make it the third tallest building in the country after the Abraj Al-Bait Clock Tower and the Jeddah Tower, and approximately the 12th tallest building in the world.

The plan is for the city to be powered entirely by renewable energy. It will consist of three layers, one on the surface for pedestrians, one underground for infrastructure, and another underground for transportation. Artificial intelligence will monitor the city and use predictive and data models to find ways to improve daily life for its citizens, with residents being paid for submitting data to The Line.

It is claimed by the Saudi government that it will create 460,000 jobs, spur economic diversification, and contribute 180 billion SAR (US\$48 billion) to domestic GDP by 2030. According to Crown Prince Mohammed bin Salman in 2022, the first phase

project is expected to cost SAR 1.2 trillion (US\$320 billion), and the Saudi sovereign wealth fund Public Investment Fund (PIF) would provide half of the sum.

On 5 April 2024, Bloomberg News reported that the project had been scaled back as a result of restrictions over funding by the PIF. Bloomberg cited Saudi officials as expecting a 2030 completion of a 2.4 kilometres (1.5 mi) section of the city which would contain fewer than 300,000 residents, down from an expected 1.5 million.

Khazar Islands: The stated plan was for \$100 billion, with \$30 billion coming from foreign investors and another \$30 billion from apartment sales, the city aiming to house 1 million residents in a development with 150 schools, 50 hospitals and daycare centers, numerous parks, shopping malls, cultural centers and a university campus plus a Formula 1 quality racetrack around a centrepiece \$2 billion

Azerbaijan Tower (planned to have been the tallest in the world). [2][3][6] The city was expected to be equipped with 150 bridges and a large municipal airport to connect the islands to the mainland. It is expected that, in general, the city, when completed in 2022–2023, will host 1 million residents. According to the project, the price of completely renovated apartments will be around \$4000–\$5000 per square meter [2][3][7] [8]

All of these facilities were to be able to withstand up to magnitude 9.0 earthquakes. [6][9] The president of the controlling Avesta Group of Companies, Ibrahim Ibrahimov, reportedly had the original idea in a flash while flying between Baku and Dubai. [10][11][12] He told reporters that American, Turkish, Arab, and Chinese investors had showed interest in the project, which he described as being like a "new Venice". [1][4]

# **Bridges and Dams**

The Three Gorges Dam is a hydroelectric gravity dam that spans the Yangtze River near Sandouping in Yiling District, Yichang, Hubei province, central China, downstream of the Three Gorges. The world's largest power station by installed capacity (22,500 MW), [5][6] the Three Gorges Dam generates 95±20 TWh of electricity per year on average, depending on the amount of precipitation in the river basin. [7] After the extensive monsoon rainfalls of 2020, the dam's produced nearly 112 TWh in a year, breaking the previous world record of ~103 TWh set by Itaipu Dam in 2016. [8][9]

**Environmental Concerns:**At current levels, 80% of the land in the area is eroding, depositing about 40 million tons of sediment into the Yangtze annually and according to the National Development and Reform Commission, 366 grams of coal would produce 1 kWh of electricity during 2006. From 2003 to 2007, power production equaled that of 84 million tonnes of standard coal.

The Hong Kong–Zhuhai–Macau Bridge (HZMB) is a 55-kilometre (34 mi) bridge–tunnel system consisting of a series of three cable-stayed bridges, an undersea tunnel, and four artificial islands. It is both the longest sea crossing<sup>[6][7]</sup> and the longest open-sea fixed link in the world.<sup>[8]</sup> The HZüü-MB spans the Lingding and Jiuzhou channels, connecting Hong Kong, Macau with Zhuhai—a major city on the Pearl River Delta in China.

#### **Problems:**

Worker deaths and injuries: The number of deaths and injuries during the construction project came under scrutiny in Hong Kong. In addition to nine fatalities on the mainland side, more than ten deaths were reported on the Hong Kong side of the construction project, plus between 234 and 600 injuries, depending on the source. In April 2017, the Construction Site Workers General Union, the Labour Party and the Confederation of Trade Unions demonstrated at the Central Government Complex, demanding the government take action.

Faked safety testing: In 2017, Hong Kong's Independent Commission Against Corruption (ICAC) arrested 21 employees (2 senior executives, 14 laboratory technicians, and 5 laboratory assistants) of Jacobs China Limited, a contractor of the Civil Engineering and Development Department for falsifying concrete test results, thus potentially risking the safety of the bridge for public use. In December 2017, a lab technician pleaded guilty and was sentenced to imprisonment for eight months, while the others await sentencing. Hong Kong's Highways Department conducted tests again after the falsified results were exposed and found all test results met safety standards.

**Impact on wildlife**:Conservationists at WWF Hong Kong blamed the construction of the HZMB for the falling number of white dolphins in the waters near the bridge. The dolphins found near waters of Lantau were the worst hit with numbers dropping by 60 percent between April 2015 and March 2016.

The New Eurasian Land Bridge: sometimes called the New Silk Road is the rail transport route for moving freight and passengers overland between Pacific seaports to Europe. The Eurasian Land Bridge starts from west China to Moscow whereas The New Eurasian Land Bridge extends from east of China to the center of Europe if it sticks to the plan. Also managers are planning to make the bridge go around Russia due to the ongoing war.

### Loneliness

The <u>World Health Organization</u> (WHO) has declared loneliness to be a pressing global health threat, with the US surgeon general saying that its mortality effects are equivalent to smoking 15 cigarettes a day..But it also blights the lives of young people. Between <u>5% and 15% of adolescents are lonely</u>, according to figures that are likely to be underestimated. <u>In Africa, 12.7% adolescents experience loneliness compared to 5.3% in Europe</u>.

Past studies in the industrialized world have suggested loneliness is on the rise, but without historical data on the issue, it's hard to say how present-day numbers compare over time or across geographical regions. "It's a commonly held belief that around 1 in 12 people experience loneliness at a level that can lead to serious health problems, however, the source of such data are unclear and researchers have never established how widespread loneliness is on a global scale," says epidemiologist Melody Ding from the University of Sydney. Ding and her colleagues have therefore pulled together 57 observational studies on loneliness from 113 countries or territories between 2000 and 2019. The authors hope to use the findings as a pre-pandemic baseline to monitor feelings of lonesomeness going forward. Because loneliness is associated with mental, emotional, and physical well-being, the findings could help reveal emerging issues in public health that must be better addressed. Global loneliness estimates were mostly available for adolescents, and findings among 77 nations suggest the issue can range from 9.2 percent in South-East Asia to 14.4 percent in the Eastern Mediterranean region

### **How To Fix Loneliness**

In Japan, robots are often assumed to be a natural solution to the "problem" of elder care. The country has extensive expertise in industrial robotics and led the world for decades in humanoid-robot research. At the same time, many Japanese people seem—on the surface, at least—to welcome the idea of interacting with robots in everyday life.

In Japan, many workers face punishing hours, fueling the phenomenon of *karōshi*, or death by overwork. At the less extreme end of the spectrum, grueling work schedules leave people with little time to find partners and have children. This causes loneliness For instance, Sony's Aibo robot dogs, for example, re-launched by maker Sony after being retired in 2006, inspire such an emotional bond with their owners that some hold funerals when the robotic pets stop working. Tech giant Softbank Robotics produces the Pepper robot, a humanoid designed to provide companionship, which some have taken to integrating into their family as substitute children or grandchildren. At Silver Wing care facility, Pepper is in charge of the midday exercise session.

### **Birth Rates**

The term "Meta Crisis" refers to the interconnected, complex crises that overlap and amplify one another. The intersection of finance, technology, and climate presents a multifaceted challenge that reshapes the global economy in several ways:

- Economic Disparities: The financialisation of economies has led to growing wealth inequality. Investment in high-yield assets often benefits those already wealthy, while low-income households face financial precarity.
- **Debt Levels**: High levels of personal and national debt create vulnerabilities. Economic downturns or shifts in policy can exacerbate these vulnerabilities, leading to broader financial instability.
- **Automation and Job Displacement**: Technologically disruptive advances in artificial intelligence and automation are transforming labour markets. While technology can increase productivity, it also risks displacing workers, particularly in low-skilled sectors.
- Digital Divide: Access to technology varies widely, impacting economic opportunities. Those without adequate digital infrastructure or skills face exclusion from emerging economic benefits.
- **Environmental Costs**: Climate change has very tangible economic impacts, from damage to infrastructure due to extreme weather events to increased insurance costs and resource scarcity.
- Transition Costs: Shifting to sustainable practices and renewable energy requires significant investment. While necessary for long-term sustainability, these transitions can impose short-term economic burdens on businesses and consumers.

To stop their population implosions, countries are turning to immigration, stimulating birth rates and strengthening social services. None of them might be enough – and the long-term fix might be a radical one.

Many people habitually check their phones for information, even during meals, which reflects our constant access to news and answers. While this can be useful, the flood of often negative or violent content can harm mental health, leading to stress and anxiety. The core question is whether governments or others should limit how much information people can access to protect their well-being.