

PCAST Reference Slides

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\$644

Annual average cost to Michiganders due to driving on roads in need of repair

20%

Monitored beaches have been closed for bacterial pollution

8.8 Billion

Annual gallons of untreated sewer overflows into Michigan waterways

43rd

Michigan's rank among States in power grid reliability

11.4%

(1,292 bridges) — Michigan bridges that are structurally deficient

33%

Percentage of Federal-Aid Pavement in Poor Condition

50%

Rivers and streams in Michigan that exceed the water quality standards for E. coli

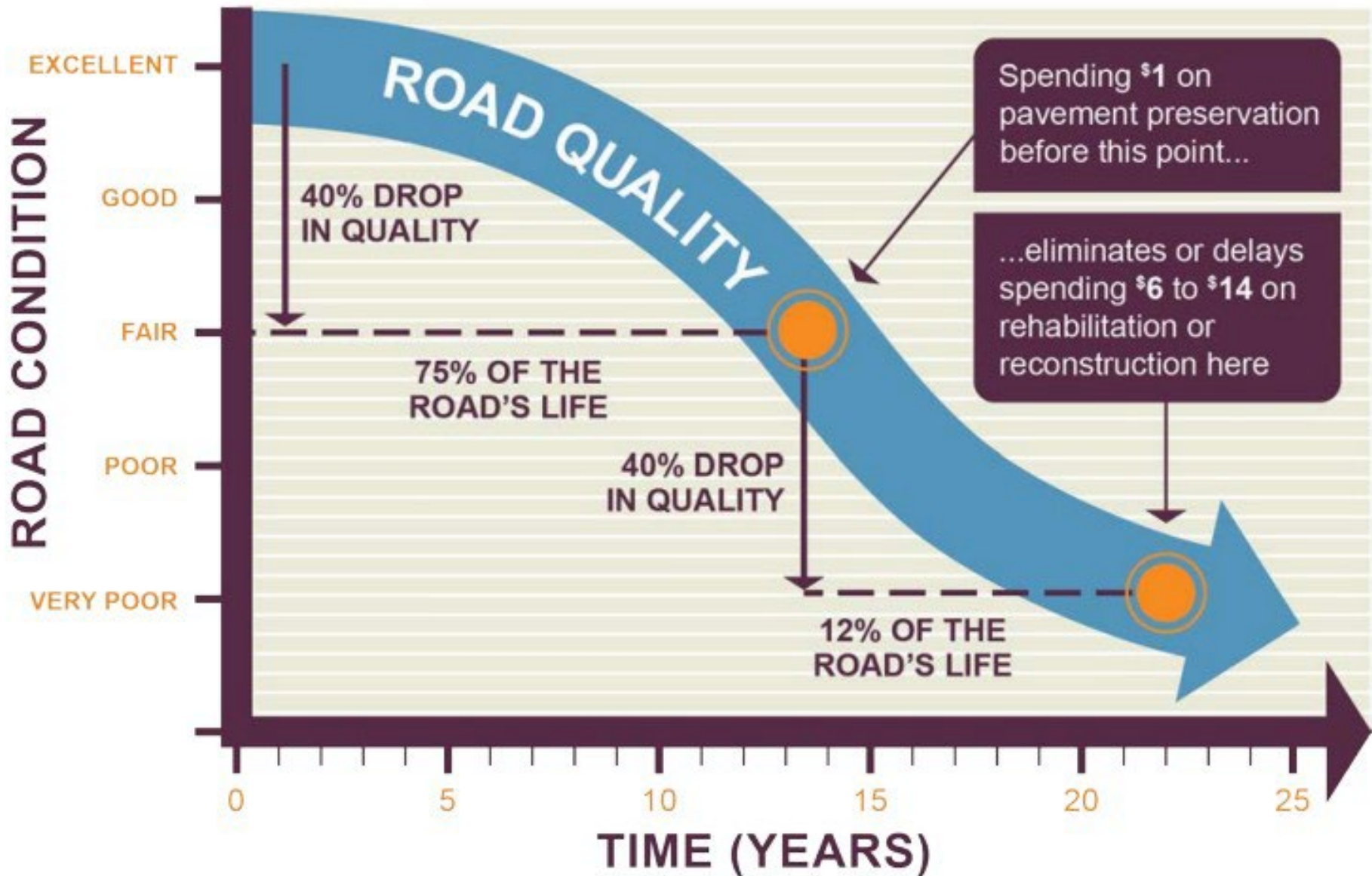
47%

Percentage of Non-Federal-Aid Pavement in Poor Condition

308,885

Community Water Services known to contain lead or likely to contain lead

EXHIBIT 3. Road Condition and Preservation



DAMS

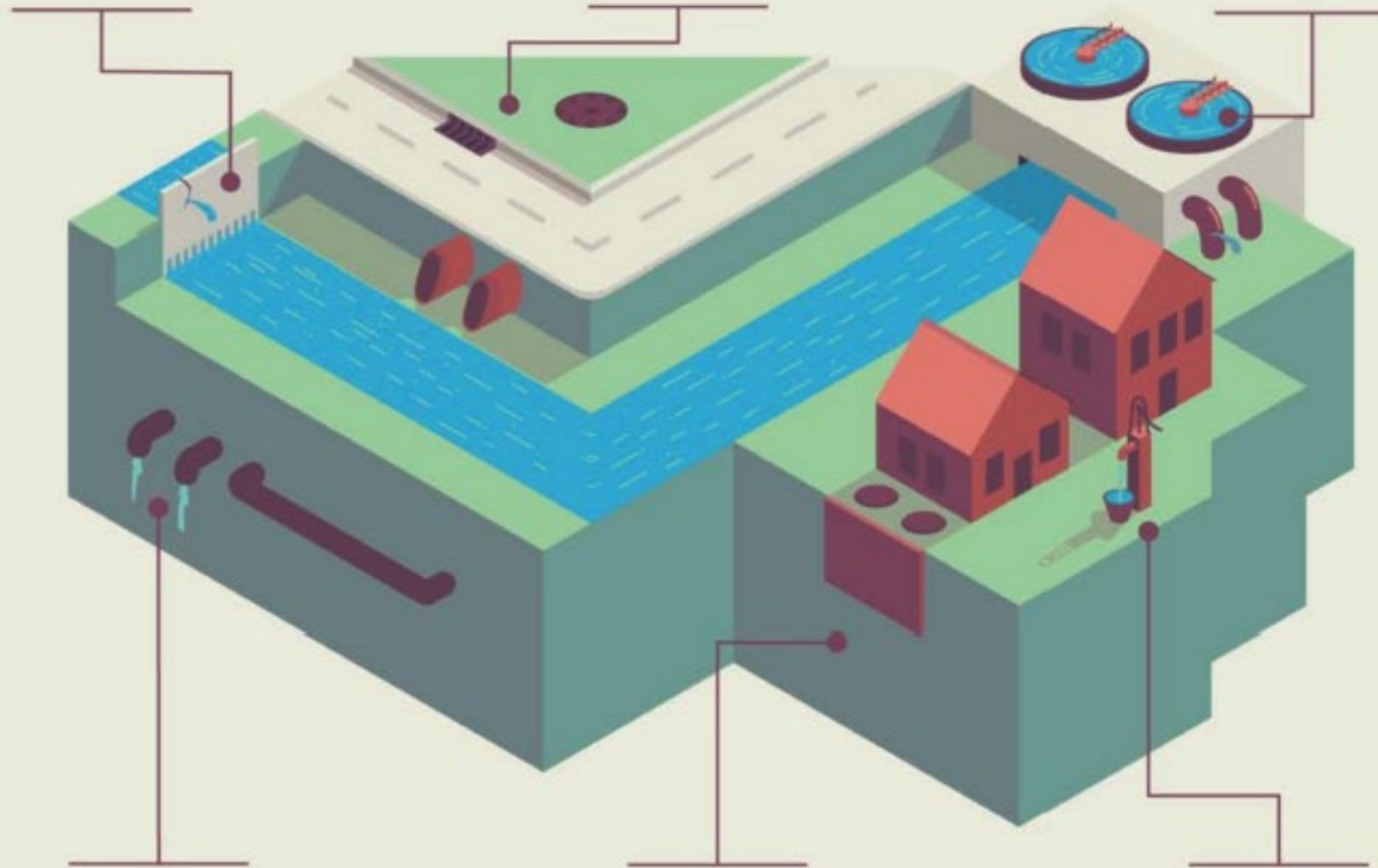
- ▶ Michigan has an estimated **2,600 dams**, many of which were built decades ago.
- ▶ More than **10 percent** of rated dams are in poor or unsatisfactory condition.

DRAINAGE SYSTEMS

- ▶ Drainage systems capture stormwater through open ditches, underground pipes, retention, and treatment systems to prevent flooding.
- ▶ **35,000 miles** of county drains serve more than **17 million acres**.
- ▶ Many communities lack sustainable funding mechanisms to support drainage systems.

MUNICIPAL WASTEWATER

- ▶ **1,080 community municipal wastewater treatment systems** serve **70 percent** of Michigan residents.
- ▶ Since 2008, an average of **5.7 billion gallons** of untreated sewage flowed into Michigan waterways.



MUNICIPAL DRINKING WATER

SEPTIC SYSTEMS

PRIVATE WELLS

NONMOTORIZED

- ▶ Michigan has more than **20,000 miles** of trails, including **2,700 miles** of rail trails supporting transportation, recreation, and tourism.
- ▶ While Michigan's nonmotorized options continue to grow, it is still a patchwork system that can prevent safe connections between communities.

RAIL LINES

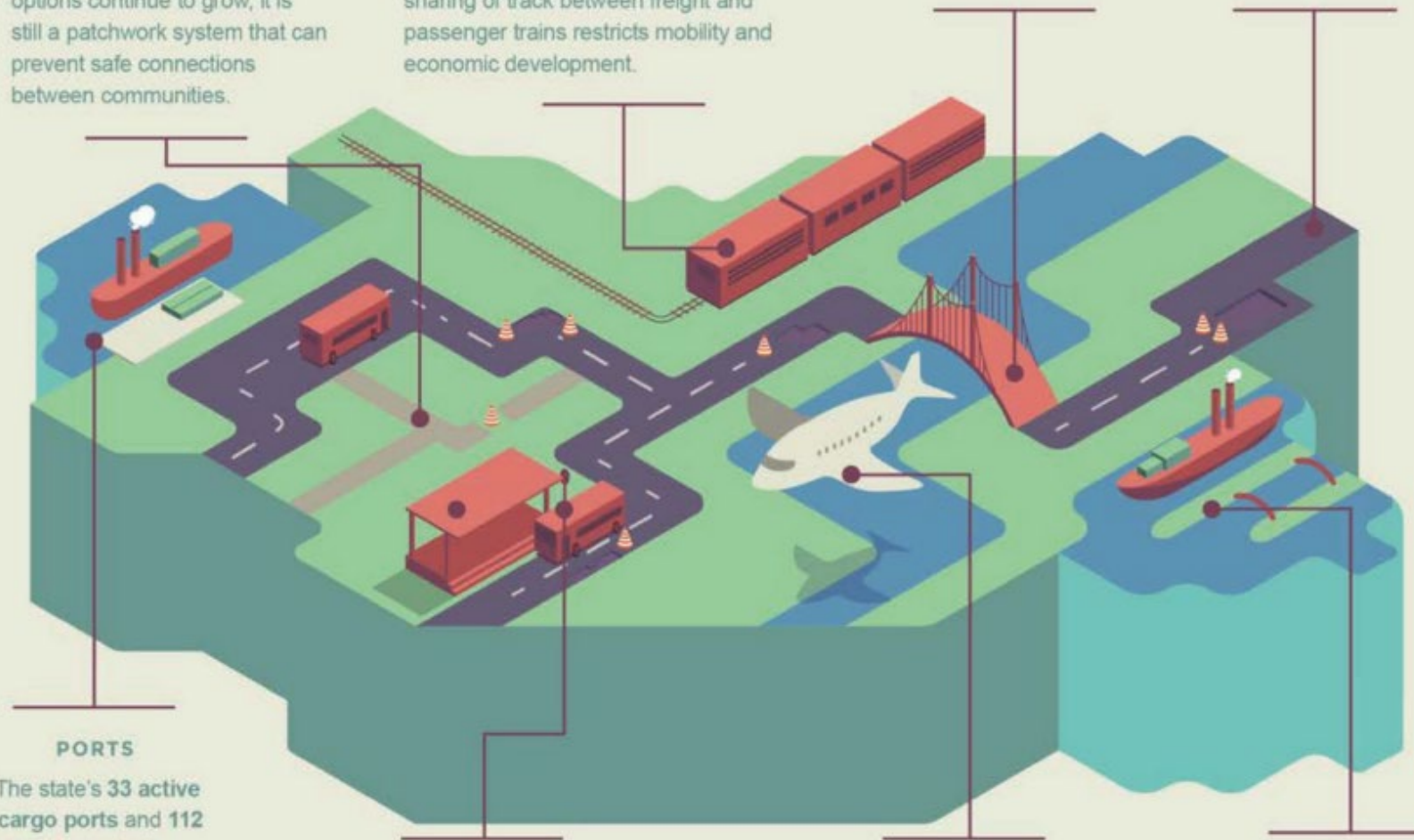
- ▶ Approximately **3,600 miles** of active rail lines carry **100 million tons** of freight cargo.
- ▶ Ridership on passenger rail routes has increased by nearly **40 percent** in the last ten years.
- ▶ The lack of passenger rail capacity and the sharing of track between freight and passenger trains restricts mobility and economic development.

BRIDGES

- ▶ Michigan has more than **11,000 bridges**.
- ▶ **1,200** of the state's bridges are structurally deficient or functionally obsolete.

ROADS

- ▶ Michigan's **600 road agencies** manage over **120,000 route miles**.
- ▶ **38 percent** of Michigan roads are in poor condition.



PORTS

- ▶ The state's **33 active cargo ports** and **112 cargo terminals** handle approximately **70 million tons** of cargo yearly.
- ▶ For the past few decades, many of

TRANSIT

- ▶ More than **70 local transit systems** provide approximately **90 million passenger trips** annually.
- ▶ Three intercity passenger rail routes serve

AVIATION

- ▶ More than **38.4 million passengers** are served through Michigan airports each year.
- ▶ Airports accommodate over **672.8 million**

SOO LOCKS

- ▶ **67 million tons** of cargo travel through the Soo Locks each year.

Prior to 1840	Gains fluctuating with losses, ending with 9,000 persons in Detroit, 103,000 in the total region most people live on farms.
1840 - 1900	Both city and region grow at a good rate. As manufacturing and trading economy rapidly expands, Detroit gains 277,000 (more than 30 times its 1840 population); region gains 479,000 (more than five times its 1840 total).
1900 - 1930	Rapid growth in both as automobile manufacturing booms. Detroit gains 1,283,000 persons (a five-fold increase); region gains 1,800,000 (a four-fold increase).
1930 - 1940	Relatively little growth, due to economic stagnation, drop in birthrate, and limited residential construction during the Great Depression. Detroit gains 55,000 (four percent); region gains 232,000 (10 percent).
1940-1950	Economic recovery, World War II defense production, wartime restrictions slow non-defense construction, and post-war boom begins. Detroit's gain of 626,000 (a 14 percent increase) comprises 86 percent of the total region's gain of 731,000 (a 28 percent increase).
1950 - 1970	Diverging trends. After reaching a peak population of 1,850,000 in 1950, Detroit's population begins to decline. The city has a net loss of 338,000 (seven percent), while the region gains 1,391,000 (42 percent).
1970 - 1990	Oil embargoes, global competition, and the severe recession of 1979-1982 hit hard, causing out-migration from region. Population losses in both areas. Detroit loses 484,000 (32 percent); region loses 146,000 (three percent).
1990 - 2000	Another divergence. Detroit population loss slows, but still is 77,000 (seven percent), while region gains 243,000 (five percent).