**TRANSPORTATION REVOLUTION (Theme #12)**

*Clermont* (1807) – the first financially successful steamboat created by Robert Livingston and Robert Fulton; it could travel upstream and its route was from NYC to Albany, NY on the Hudson River

National Road (1811) – a highway from Wheeling, Virginia that ultimately went to Vandalia, Illinois that brought settlers by land west of the Appalachian Mountains

American System (1816) – a plan proposed by Henry Clay in Congress that was to fund internal improvements (roads and canals)

*Gibbons v. Ogden* (1824) – Chief Justice John Marshall ruled that Congress had the constitutional right to break down the Livingston/Fulton steamboat monopoly that was granted by the NY state legislature; Congress had the right to do so as it could regulate the trade from NY to New Jersey

Erie Canal (1825) – canal that connected the Hudson River to Lake Erie in New York which enabled travel from the Atlantic Ocean to the Great Lakes and the Midwest; also started a boom in canal building

Chesapeake & Ohio (1828) – canal that connected the Potomac River (by Washington, DC) to lands west; it never connected all the way to Ohio as the railroads took their business and the company was in debt

Baltimore & Ohio (1828) – railroad that connected east to west that took business away from the canals; led to a boom in railroads and the ability of people to settle away from waterways

Maysville Road Veto (1829) – President Andrew Jackson vetoed the bill that would have provided federal funding for this road; he rationalized that it was only in Kentucky, thus shouldn’t be paid for by the federal government

Boston & Worcester (1831) – railroad built to connect Boston to the west; it extended to NY by 1833

Cross-country stage coach (1858) – the first non-stop stage coach from St. Louis arrives in Los Angeles

Pony Express (1860) – mail delivery service first crosses the country from the Midwest to California; it uses short sprints with fresh horses and riders who change horses frequently along the way

Pacific Railroad Act (1862) – with it Congress authorized the construction of the transcontinental railroad and gave 10 square miles of land for every mile of track built to the two construction companies that worked on the project – the Union Pacific which hired civil war veterans and Irish immigrants to build west from Omaha, Nebraska and the Central Pacific which hired Chinese immigrants to build east from Sacramento, California; the two lines met at Promontory Point, Utah in 1869

George Pullman (1865) – introduced the first sleeping car for passenger train service

George Westinghouse (1868) – invents compressed air locomotive brake that allowed for better braking which means trains could travel faster more safely

Granger Laws (1870s-1880s) – laws passed by states with pressure from the Grange (farmers organizations) that regulated railroad rates; these laws were declared unconstitutional

*Munn v. Illinois* (1876) – Supreme Court case that allowed states to regulate certain businesses within their borders, including railroads, and is commonly regarded as a milestone in the growth of federal government regulation

Northern Pacific (1883) – a transcontinental railroad that passed through northern states in the west was completed

electric streetcars (1884) – first electric streetcar or trolley system became operational in Cleveland, OH

*Wabash v. Illinois* (1886) – Supreme Court decision that severely limited the rights of states to control interstate commerce; it led to the creation of the Interstate Commerce Commission; it argued that states couldn’t regulate interstate trade, which left the door open for the federal govt. to do so, which it did in the Interstate Commerce Act

Interstate Commerce Act (1887) – set up the Interstate Commerce Commission (ICC) which was a regulatory body whose purpose was to regulate railroads (and later trucking) to ensure fair rates, to eliminate rate discrimination, and to regulate other aspects of common carriers

Orville and Wilbur Wright (1903) – successfully flew the first airplane in Kitty Hawk, NC which served as a model for other airplane builders

Elkins Act (1903) – strengthened the ICC by addressing rebates and requiring railroads to publish rates

subway (1904) – first underground street car line or subway became operation in NYC

Hepburn Act (1906) – strengthened the ICC by allowing it to set maximum railroad rates and gave it the power to view the financial records or railroad companies

Henry Ford (1908) – his Ford Motor Company produced the first automobile that was mass produced and affordable for the general public – the Model T; used the assembly line to accomplish this

city bus service (1912) – Cleveland launches the first city bus service

*Titanic* (1912) – the largest passenger ship ever at the time, this luxury liner sunk after hitting an iceberg

Panama Canal (1914) – its opening was overshadowed by the start of World War I, but it became incredibly important to world shipping connecting the Pacific and Atlantic Oceans

passenger airlines (1920s) – major passenger airlines such as American Airlines, United Airlines, and Pan Am Worldwide Airway were created during this decade

Air Commerce Act (1926) – allowed Federal regulation of air traffic rules; the aviation industry backed the passage of this act, believing that without the government's action to improve safety the commercial potential of the airplane would not be realized

Charles Lindbergh (1927) – completed the first trans-Atlantic non-stop solo flight and became a national hero

General Motors (1927) – began to lead the automobile industry due to its wide range of colors, and the stylish Chevrolet make

Amelia Earhart (1929) – became the first woman to fly across the Atlantic solo; later vanished in a round-the-world trip

Highway Act (1956) – passed by President Eisenhower who saw it as part of our nation’s defense plan after seeing the German autobahn during WWII and how effective it was; led to the creation of suburbs and industries and businesses related to driving (trucking, restaurants, motels, etc)

Boeing 707 (1957) – 1st commercially successful passenger jet airliner

*Sputnik* (1957) – Soviet Union launches first satellite which spurred US efforts in education and scientific research to keep up

Yuri Gagarin (1961) – USSR cosmonaut who became the first human in space

John Glenn (1962) – first US astronaut in space

*Unsafe at Any Speed* (1966) – book by Ralph Nader that proclaimed cars were unsafe and called for federal safety regulations to protect passengers

Boeing 747 (1969) – 1st “jumbo jet” passenger airline

Neil Armstrong (1969) – first astronaut to step foot on the moon along with Buzz Aldrin

Rail Passenger Service Act (1970) – created govt. run Amtrak, reviving passenger rail service in the US

Space Shuttle (1981) – first space shuttle was launched