ROAD BUILDING

Road Building History
- Roman Roads
- Chronology
- Thomas Telford
- John Loudon McAdam
- Layout

Roman Roads
- First True Road Builders
  - Adequate Drainage, Proper Foundation, Cambered Surface, & Impermeable Surface
- Constructed 372 Major Roads (53,000 Roman Miles)
- Roman Roads of Britain - Set Stage For Modern Roads

Abbreviated Chronology
- Fall of Roman Empire (Early 5th Century)
- Act Of Parliament (1555)
  - Two Men of Each Parish (Surveyor & Orderers)
- Turnpike Act - England (1663)
  - No Control Over Routes & Maintenance
- 4000 Trusts Responsible For 22,000 Miles (1830s)
  - Poorly Designed - Lost Roman Technology
- l ‘Ecole des Ponts et Chaussees (1762)
  - Train Men To Oversee Construction (Civil Eng. ?)
- Motorways - Limited Access (Motor Vehicles)
  - First Was 40.5 Miles - Long Island (1914)

Thomas Telford
- Maps & Surveying
- Precise Rules
  - 1:40 Gradient
  - 3-4 Feet Above
  - Crowned Road
- Recommended Eminent Domain
- Precise Construction

John Loudon McAdam
- Previously
  - Round Stones
  - Gravel
- Coarsely Cut Stones
  - Unite By Angles
- Tested Stone Sizes
  - Fit In Mouth
- Stone Size Depends On Soil
- No Fine Material Added
  - Steel Wheels Broke Stones
Layout (Middle 19th Century)

- Grades Limited to 3%
- Radius of Curves - 164'
- Gutters (1860-1880)
- Embanked (1860-1880)