FRAGILE or AGILE?

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UCLA Lake Arrowhead Symposium 2015
Q: Why do planners forecast to the nearest tenth of a percent?

A: To prove they have a sense of humor.

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Typical Transportation Project Development Process

**Planning Studies**
- Determine Existing Conditions
- Traffic Forecasts
- Analysis Needs
- Conceptual Solutions
- Preliminary Cost Estimates
- Cost Estimation Validation Process (CEVP)

**Environmental Studies**
- Purpose and Need
- Traffic Analysis
- Preliminary Alternatives
- Public Outreach
- Technical Studies
- Air Quality
- Noise Analysis
- Socio/Economic
- Cultural Resources
- Biological Resources
- Hazardous Materials
- Water Quality
- Floodplain/Hyrdolic
- Energy
- Land Use
- Economic
- Wetlands
- Visual Effects
- Environmental Justice
- Cumulative & Secondary Impacts
- Cost-Benefit Analysis
- Refine Alternatives
- Alternative Selection
- Section 4 (f) Evaluation
- Record of Decision

**Preliminary Design**
- Geometric Design
- Typical Selections
- Grading
- Drainage
- Structural
- Traffic/ITS
- Signing/Striping
- Lighting
- Utilities
- 30% Plans

**Final Design**
- 60% Plans
- 90% Plans
- Specifications and Estimates
- Final Plans

**Right-of-Way Engineering and Acquisition**
- Right-of-Way Setting
- Right-of-Way Engineering
- Appraisals
- Purchase Offers
- Counter Offers
- Relocation
- Asbestos Clearing
- Demolition
- Condemnation (if necessary)
- Federal Regulations

Source: Nevada DOT
Extremely FRAGILE
MOORE’S LAW —
Number of transistors in integrated circuit doubles every two years.
AGILE
Super AGILE
In a higher world it is otherwise, but here below to live is to change, and to be perfect is to have changed often.

— John Henry Cardinal Newman