IMPROVEMENT STUDY

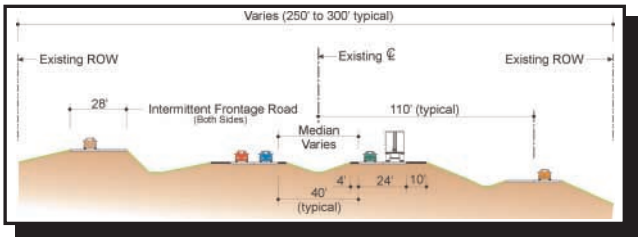
Strategy 1

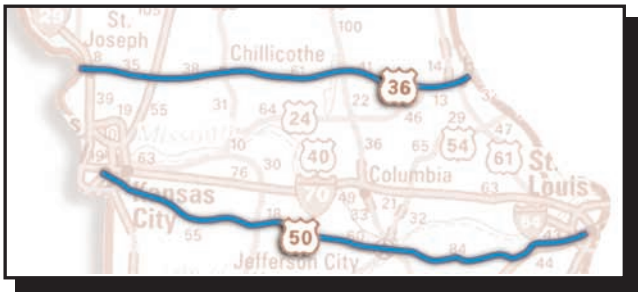
(No Build)

Description:

Preserve existing I-70 with rehabilitation of pavement and bridges and continued operation and maintenance. Adding new lanes or adding capacity would not be included.

Characteristics:





- I-70 would continue to be a 4-lane freeway in its current configuration.
- Improvements to the state's highways would include the 5-year Transportation Improvement Plan and other assumed upgrades:
  - 4-laning of US36 and US50
  - 4-laning of major north-south routes
- "No-Build" strategy provides a basis of comparison for other strategies.

Construction Cost per Mile	**Not Applicable**
Annual Operations and Maintenance Cost per Mile	**$22,000 - $26,000 per Mile**
Acceptable Capacity	**36,000 - 40,000 Vehicles per Day**
Operating Speed	**70 mph (Posted)**
Typical Right-of-Way Width	**250 - 300 feet**
Alignment	**Not Applicable**

IMPROVEMENT STUDY

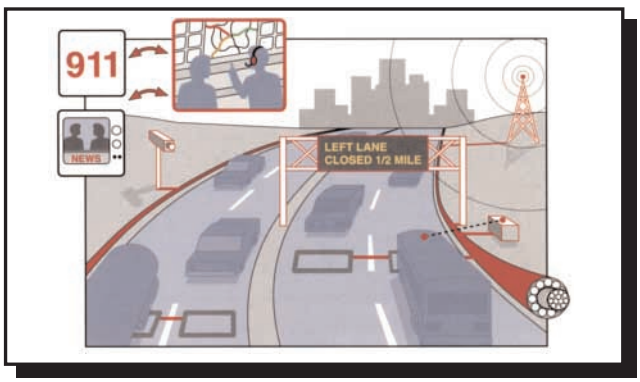
Strategy 2

(TSM/TDM)

Description:

Manage the flow of traffic and/or the demand for travel through relatively "low-cost" measures and tools to optimize the performance of I-70. Does not include adding lanes to I-70.

Characteristics:



- Intelligent Transportation System (ITS) tools for a freeway management system include vehicle detectors, highway advisory radio, variable message signs and a traffic operations center.

- Incident and emergency vehicle management improves emergency responses and removal of incidents from the roadway.

- Travel Demand Management (TDM) tools include encouraging ridesharing and transit use, park-and-ride lots and telecommuting.

IMPROVEMENT STUDY

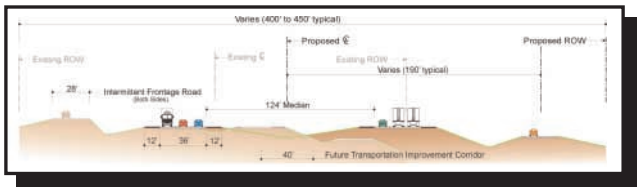
Strategy 3

(I-70 Widening)

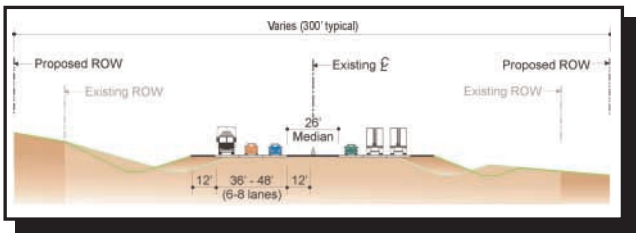
Description:

Improve existing I-70 by adding lanes and reconstructing I-70 to enhance safety and performance.

Characteristics:



- **Rural Area** - Up to 150 feet of additional right-of-way would be needed on one side of existing I-70. An extra wide median could be provided for future improvements.



- **Urban Area** - Additional lanes would be added or a local relocation would be constructed in Columbia, Warrenton and Wright City and Wentzville.

Construction Cost per Mile	**$5 - $7 Million per Mile**
Annual Operations and Maintenance Cost per Mile	**$26,000 - $32,000 per Mile**
Acceptable Capacity	**55,000 - 70,000 Vehicles per Day**
Operating Speed	**70 mph (Posted)**
Typical Right-of-Way Width	**400 - 450 feet**
Alignment	**Existing**

MoDOT

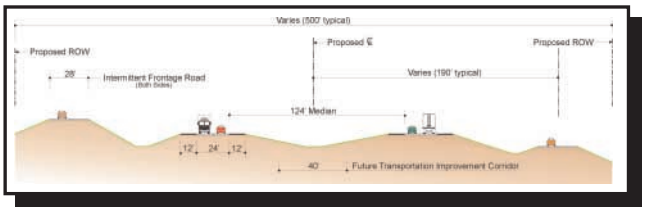
Strategy 4

(New Parallel Facility)

Description:

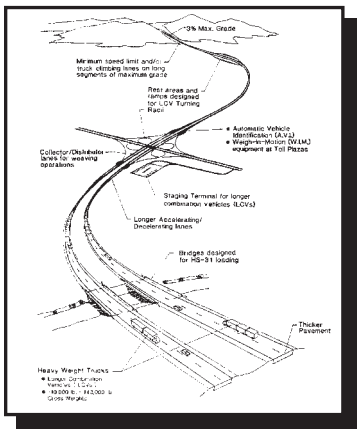
Build a new 4-lane freeway parallel to and in close proximity to existing I-70.

Characteristics:



- An extra wide median would be provided for future improvements.

- Interchange locations would be limited.



- Possible features include a high-speed freeway or a truckway with thicker pavement and stronger bridges.

Construction Cost per Mile	**$7 - $9 Million per Mile**
Annual Operations and Maintenance Cost per Mile	**$22,000 - $26,000 per Mile**
Acceptable Capacity	**30,000 - 40,000 Vehicles per Day**

Operating Speed	**70 - 80 mph**
Typical Right-of-Way Width	**500 feet**
Alignment	**New**

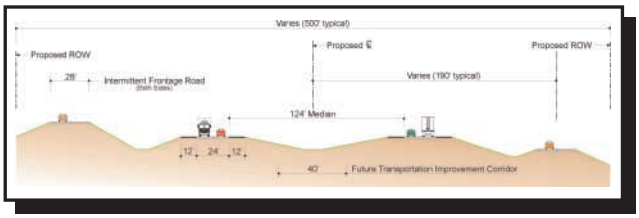
Strategy 5

(New Parallel Toll Road)

Description:

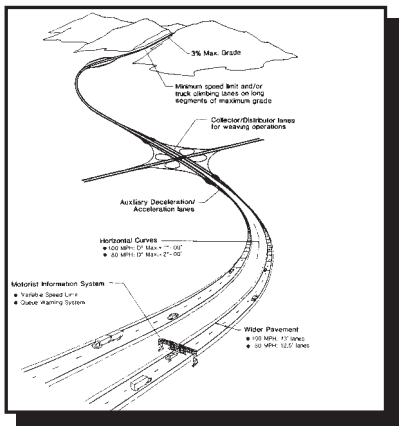
Build a new 4-lane toll road parallel to and in close proximity to existing I-70.

Characteristics:



- The toll road would be built similar to the New Parallel Freeway Strategy (Strategy 4).

- Barrier toll plazas would be constructed to collect tolls. Electronic toll collection technologies would be used.



- Features would be similar to the New Parallel Freeway Strategy (Strategy 4) to attract travelers to the toll road.

Construction Cost per Mile	**$7 - $9 Million per Mile**
Annual Operations and Maintenance Cost per Mile	**$100,000 - $120,000 per Mile**
Acceptable Capacity	**36,000 - 40,000 Vehicles per Day**

Operating Speed	**70 - 80 mph**
Typical Right-of-Way Width	**500 feet**
Alignment	**New**

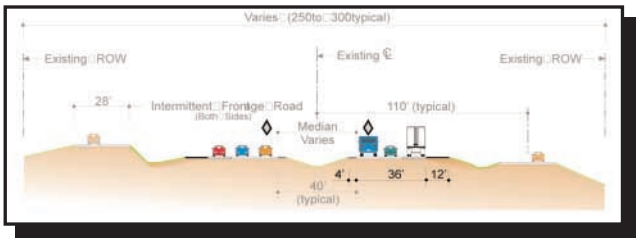
Strategy 6

(High Occupancy Vehicles)

Description:

Add new lanes to existing I-70 dedicated for exclusive use by multi-person vehicles.

Characteristics:



- Additional lanes would be added to the outside. Inside lanes would be converted to HOV use.

- Park-and-Ride lots and expanded bus service would encourage ridesharing.

Construction Cost per Mile	**$3 - $5 Million per Mile**
Annual Operations and Maintenance Cost per Mile	**$26,000 - $32,000 per Mile**
Acceptable Capacity	**55,000 - 70,000 Vehicles per Day** (Increased Occupancy Rate)
Operating Speed	**70 mph**
Typical Right-of-Way Width	**250 - 300 feet**
Alignment	**Existing**

Strategy 7

(High-Speed Rail)

Description:

Use high-speed passenger rail to alleviate some of the traffic pressure on existing I-70.

Characteristics:

- Improve current passenger rail service between Kansas City and St. Louis with expanded service plan and faster travel.
- Construct new high-speed passenger rail between Kansas City and St. Louis.

Construction Cost per Mile	$2 - $20 Million per Mile
Annual Operations and Maintenance Cost per Mile	$50,000 - $100,000 per Mile
Acceptable Capacity	2,400 - 4,800 Passengers Per Day
Operating Speed	80 to 150 mph
Typical Right-of-Way Width	40 - 80 feet
Alignment	Existing or New