Existing Conditions

Eastern Region

SR 276 Route Development Plan

Jct. US 195 To Jct. SR 270

SR 276 Right of Way and Access Control

SR 276 right of way and access control was purchased in the 1970's after the Advanced Planning Reports identified a preferred alternate bypass to the north of the City of Pullman. Right of way limits were determined based on proposed alignments and profiles meeting design requirements at the time. The right of way plans and alignments are included in Appendix B of this report. Currently the existing right of way corridor is vacant with no highway construction funded in the current Highway Systems Plan. A portion of the corridor is being leased for agricultural use by abutting land owners.

Access control is established to preserve the safety and efficiency of specific highways and to preserve the public investment. Access control in Washington State is defined as either 'Limited Access' or 'Managed Access'. Limited Access acquires rights of access from abutting property owners, typically by deed, and limits approaches to the facility.

Limited access facilities are further distinguished as having full, partial or modified access control as described below:

Full Access Control Criteria

Fully controlled access highways provide almost complete freedom from disruption by permitting access connections only through interchanges at selected public roads, rest areas, viewpoints, or weighing stations, and by prohibiting all crossings and private connections at grade.

Partial Access Control Criteria

Partial access control may be established when warranted on highways other than Interstate. Partial control provides a considerable degree of protection from traffic interference and protects the highway from future strip-type development. Access control on partially controlled highways is exercised to the degree that, in addition to connections with selected public roads, some crossings and private driveway connections may be permitted at grade. Commercial approaches are not allowed within the limits of partial access control.

Modified Access Control Criteria

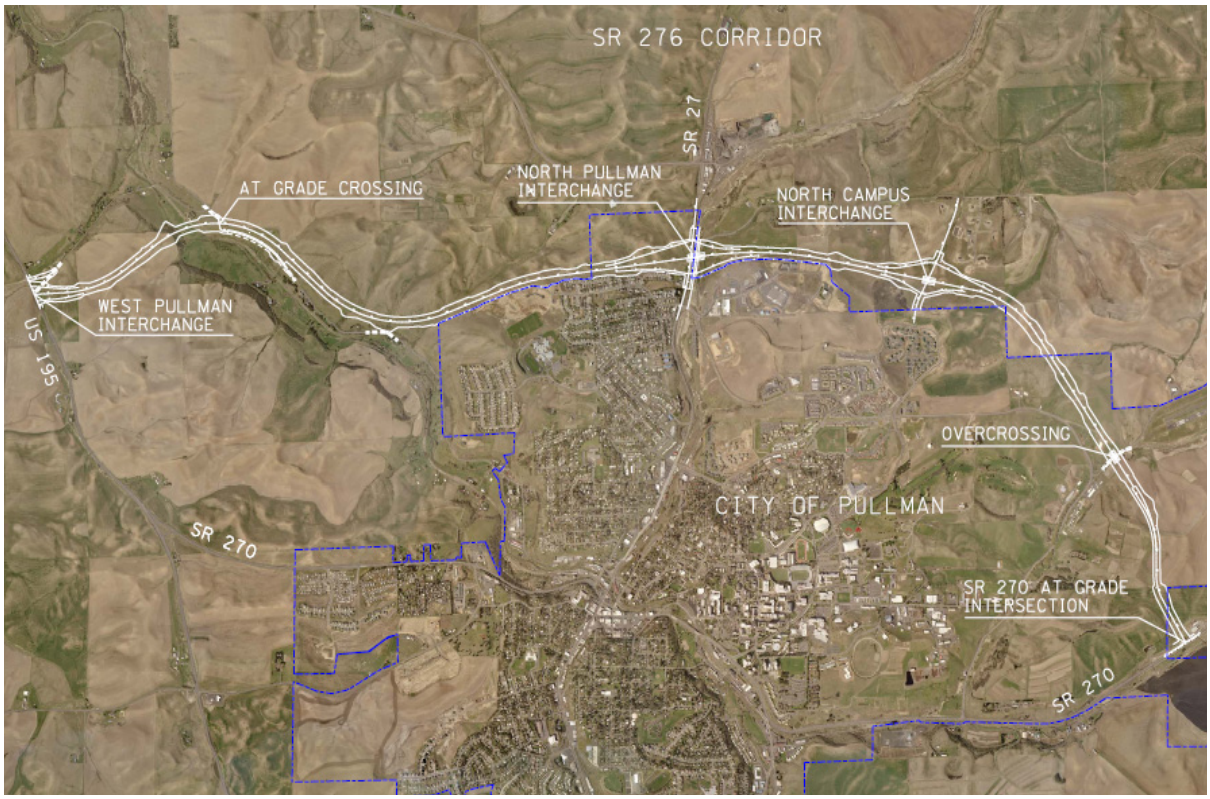
Modified access control is intended to prevent further deterioration in the safety and operational characteristics of existing highways due to traffic interference associated with strip development by limiting the number and location of access

points to the highway. In general, modified access control is applied where some degree of control is desired, but existing and potential commercial development preclude the implementation of partial or full control.

Managed Access highways are regulated by the governmental entity having jurisdiction. WSDOT has access connection permitting authority over all state highways outside of incorporated towns and cities. Incorporated towns and cities have access connection permitting authority for the managed access state highways within their boundaries when an adopted ordinance is in place. Managed Access facilities are classified from Class 1, the most restrictive, to Class 5, the least restrictive.

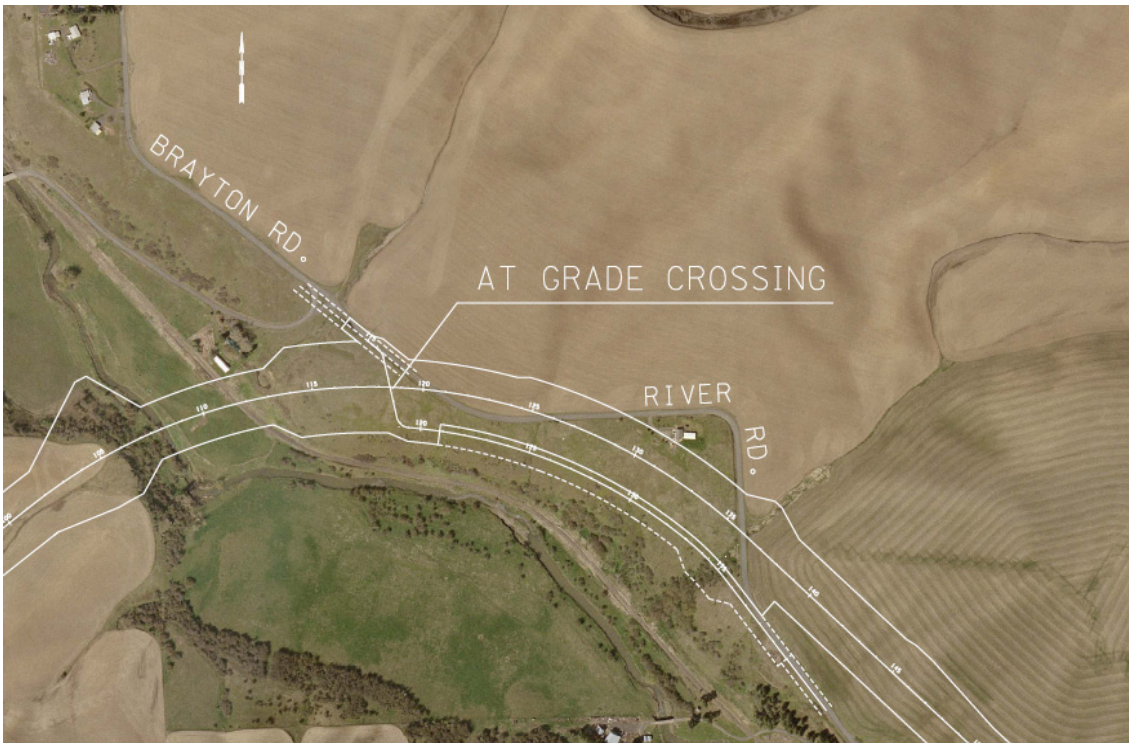
The number of access points per mile, the spacing of interchanges or intersections, and the location of frontage roads or local road connections are determined by characteristics such as functional classification, traffic volume, present and future land use, environment and aesthetics, highway design and operation and economic considerations.

The original 1972 SR 276 Access Report identified 5 access points in the SR 276 facility:



US 195 West Pullman Interchange at SR 276 MP 0.01, US 195 MP 29.91

West At Grade Intersection SR 276 MP 0.99



SR 27 North Pullman Interchange SR 276 MP 3.47

North Campus Interchange SR 276 MP 4.64

SR 270 At Grade Intersection SR 276 MP 6.89, SR 270 MP 5.69

SR 276 has “Partial Access Control” from the West Pullman Interchange to the North Pullman Interchange (US 195 to SR 27), and “Full Access Control” from the North Pullman Interchange to the SR 270 At Grade Interchange (SR 27 to SR 270).

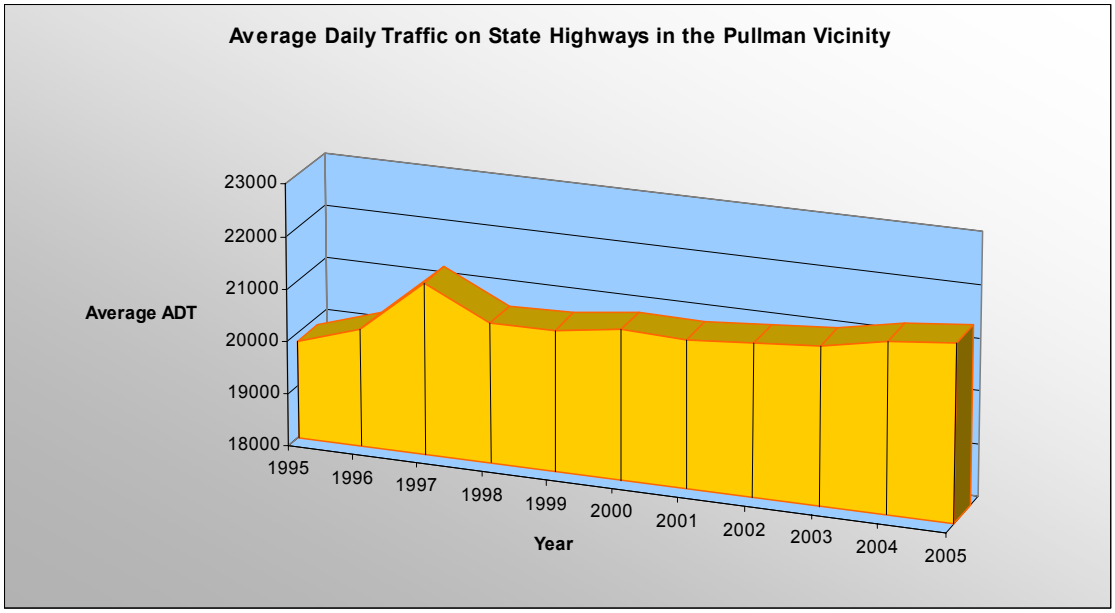
Regional Traffic Volumes

Historically, the population growth rate of Pullman tends to mirror the growth rate for WSU. The growth rate was relatively flat in the 1980s and 1990s. Based on data from the Washington State Office of Financial Management, Pullman has experienced growth averaging 1.29 percent per year from 2000 to 2005. Considering this rate of growth, the anticipated development trends for Pullman would be considered moderate. Pullman, however, is currently experiencing property growth with expansion in housing primarily to the northwest and southwest, multi-family units primarily to the northeast, commercial development primarily to the south, and industrial build up to the north.

Traffic trends on the SR 270 facility were studied to gauge characteristics pertinent to this RDP. Average Daily Traffic comparisons have been limited to the data within the City of Pullman from MP 0.76 to MP 5.56. The SR 270 facility from MP 5.56 to MP 9.89 (Idaho State Line) is outside the limits of the SR 276 Bypass study area.

SR 270 and SR 27 are the principal arterials within the City of Pullman. US 195 is the major north-south connection for Whitman County and bypasses Pullman to the west. SR 270 carries the bulk of the traffic through the city urban area that would ultimately be reduced by the SR 276 North Pullman Bypass. In 2005 the SR 270 and SR 27 intersection was identified as a 'Bottleneck and Chokepoint' by the Eastern Region. The City of Pullman identified a deficiency in the Central Business District on SR 27 (Grand Ave.) for a lack of travel lanes through the downtown core. A safety improvement project to widen Grand for a left turn lane at Ritchie St. is currently being considered by the City.

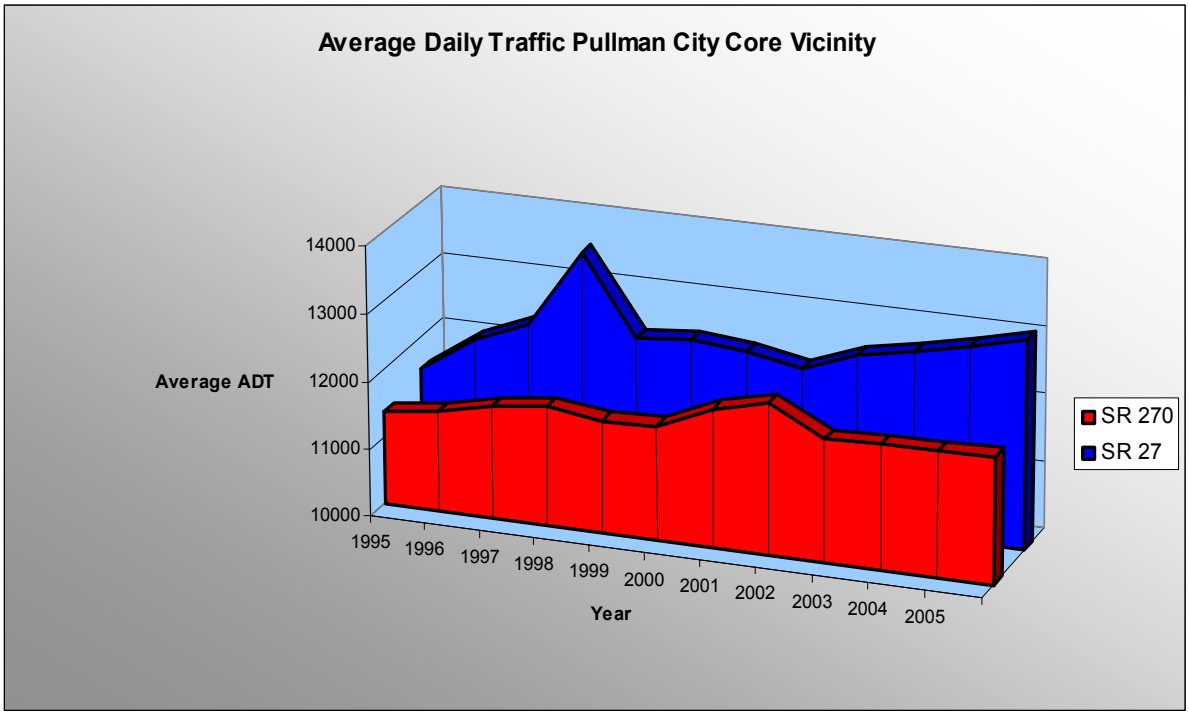
A ten year accumulation of WSDOT's average daily traffic count data in the Pullman vicinity is represented in the graphic below:



Source: WSDOT Annual Traffic Reports 1995-2005

Over a ten year period overall Average Daily Traffic (ADT) in the City of Pullman on all State facilities shows a moderate 7.5% increase. Data over the last five years suggest a continued steady growth pattern, especially in the SR 27 corridor where residential and commercial development is pushing to the north of SR 270.

The following graphic illustrates the average ADT growth patterns in the urban Pullman environment between SR 27 and SR 270.



Source: WSDOT Annual Traffic Reports 1995-2005

Traffic Growth Forecasts

Combined forecasted average traffic growth on state highways in the Pullman vicinity by the WSDOT Transportation Data Office (TDO) is 2.34% per annum for the next 20 years. The sector showing the greatest traffic increases is the SR 27 corridor north of SR 270 and up to the limits of the SR 276 right of way.

The following table is a representative cross-section of projected roadway average daily traffic volumes based on 10 year growth trends:

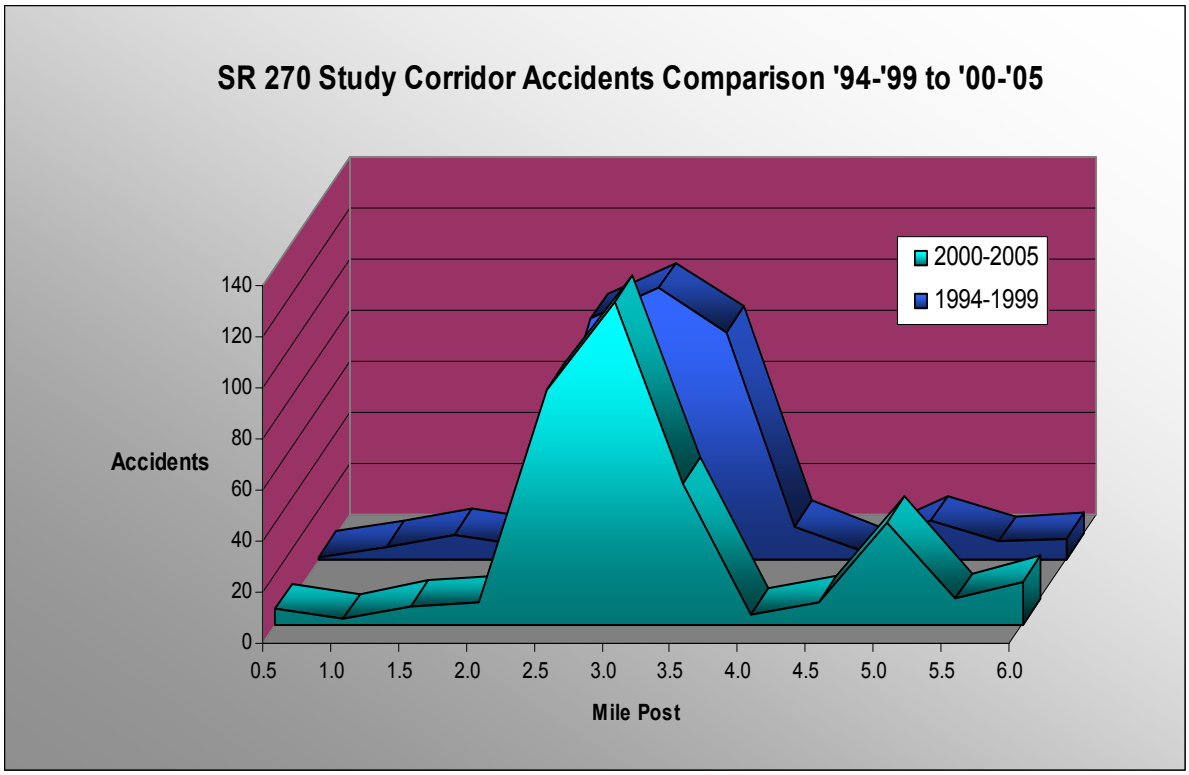
Projected Growth in Pullman Urban Core

State Route	Location	Mile Post	2005 ADT	2025 ADT	Annual Increase	20 Year Increase
SR 270	SR270 East Of Wawawai	1.57	6,318	11,500	4.1%	83%
SR 270	Davis West Of Grand	2.27	8,808	14,850	3.4%	69%
SR 270	Grand North Of Main	2.34	19,494	26,650	1.8%	37%
SR 270	Paradise East Of Grand EB	2.40	8,115	8,950	0.5%	10%
SR 270	Main East Of Stadium	3.18	16,378	20,050	1.1%	22%
SR 27	Grand South Of Paradise	2.27B	15,529	16,650	0.4%	7%
SR 27	Grand at SR270	0.00	16,843	17,450	0.2%	4%
SR 27	Grand North Of Stadium	0.74	12,244	22,300	4.1%	82%
SR 27	Grand North Of Larry	1.31	8,481	18,850	6.1%	222%

Based on Transportation Data Office Forecast Nov. 2006. The complete TDO spreadsheet with Pullman vicinity forecast data is available in Appendix C.

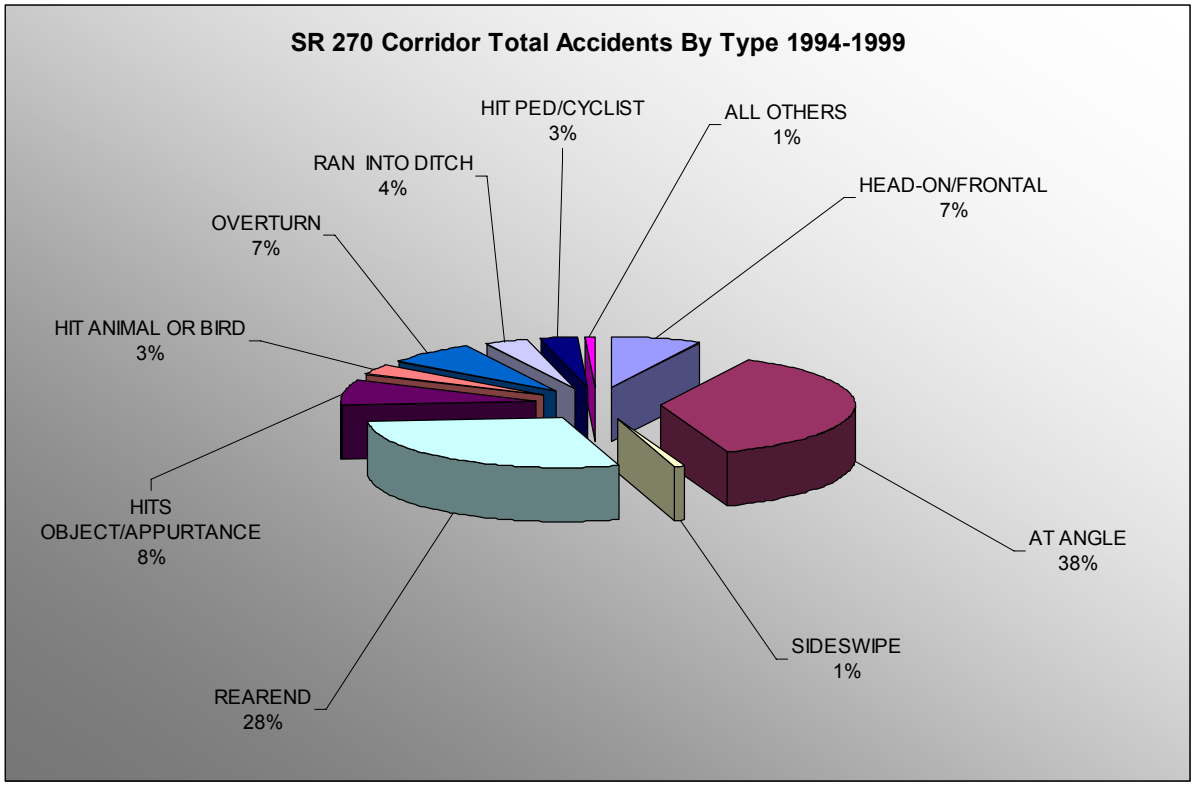
Accidents

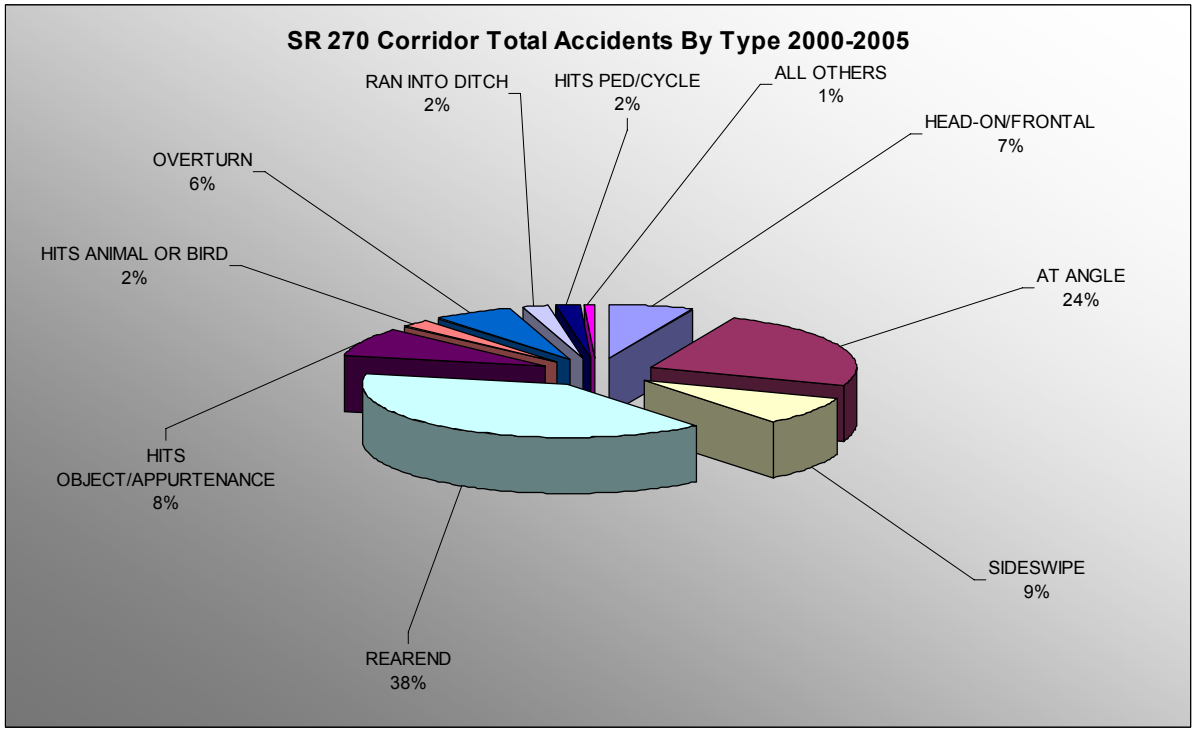
Accidents within the SR 270 corridor study area are the most likely to be reduced by the SR 276 Bypass due to a decrease in Average Daily Traffic. A comparison of two time periods from 1994-1999 and 2000-2005 show that accidents have increased over the last six year period by approximately 6%. Accident patterns are similar, with the bulk of occurrences in the couplet area in the urban core of Pullman and the intersections of SR 27 and SR 270 from MP 2 to MP 4.

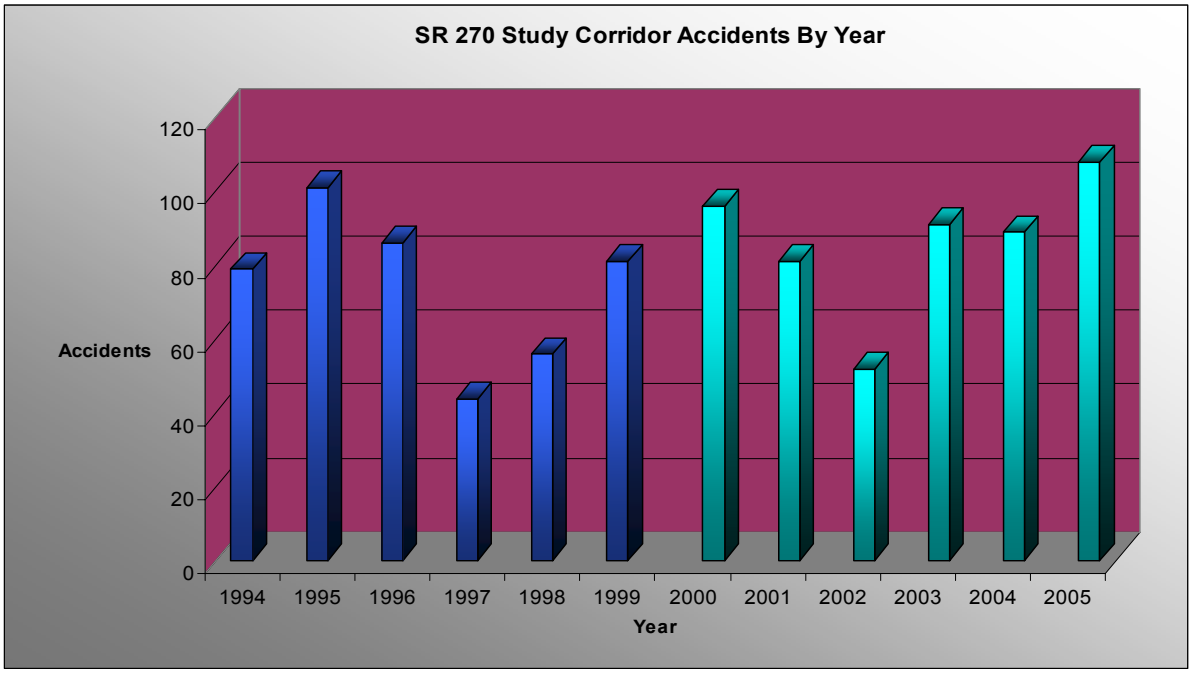


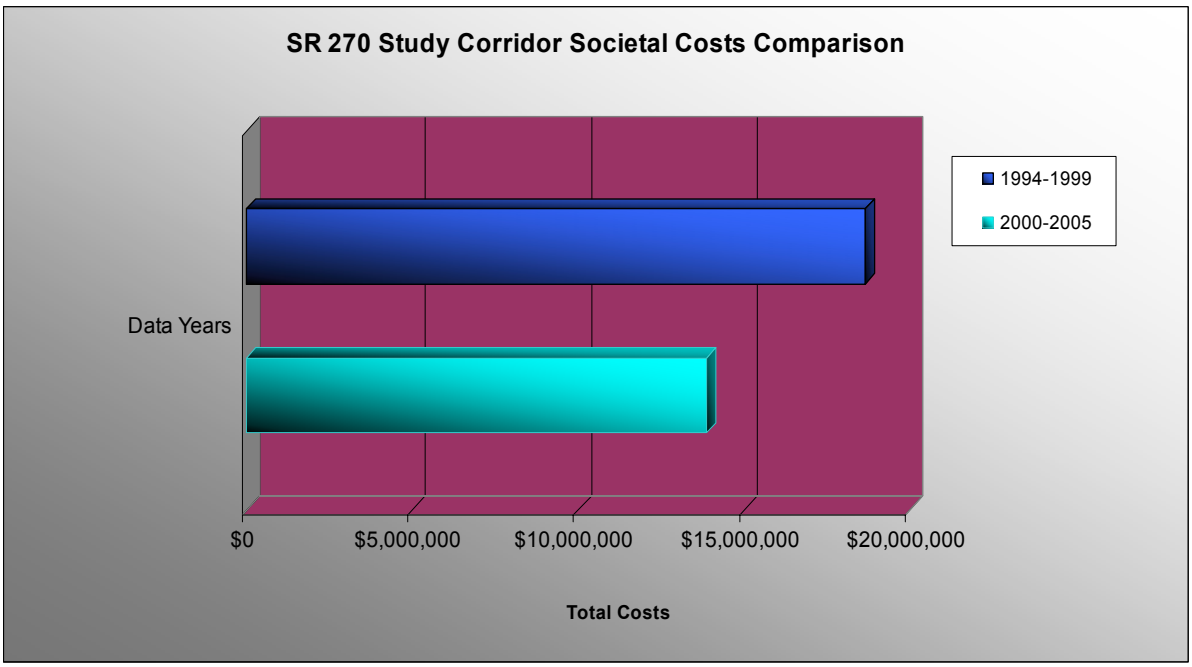
The 2007-2009 Biennium High Accident Location (HAL) report identified SR 270 Couplet MP 2.76 to MP 2.90 and SR 270 MP 4.40 to MP 4.50 as locations that qualified as HALs. A HAL is a spot location under one mile in length which has an average accident rate of at least 3 per year and at least 10 severity points over a 10 year period. Severity points are based on the nature and type of injury or vehicle damage sustained in an accident.

Accident patterns by type of accident are also similar over the two time periods, with most accidents being 'rearend' or 'at angle' turning movements.









There are no clear accident trends developing over the last 12 years in the SR 270 study corridor. Although accidents have increased in the 2000-2005 period, the societal cost has decreased, indicating a decrease in severity. There were no fatalities within the SR 270 study area in either time periods.

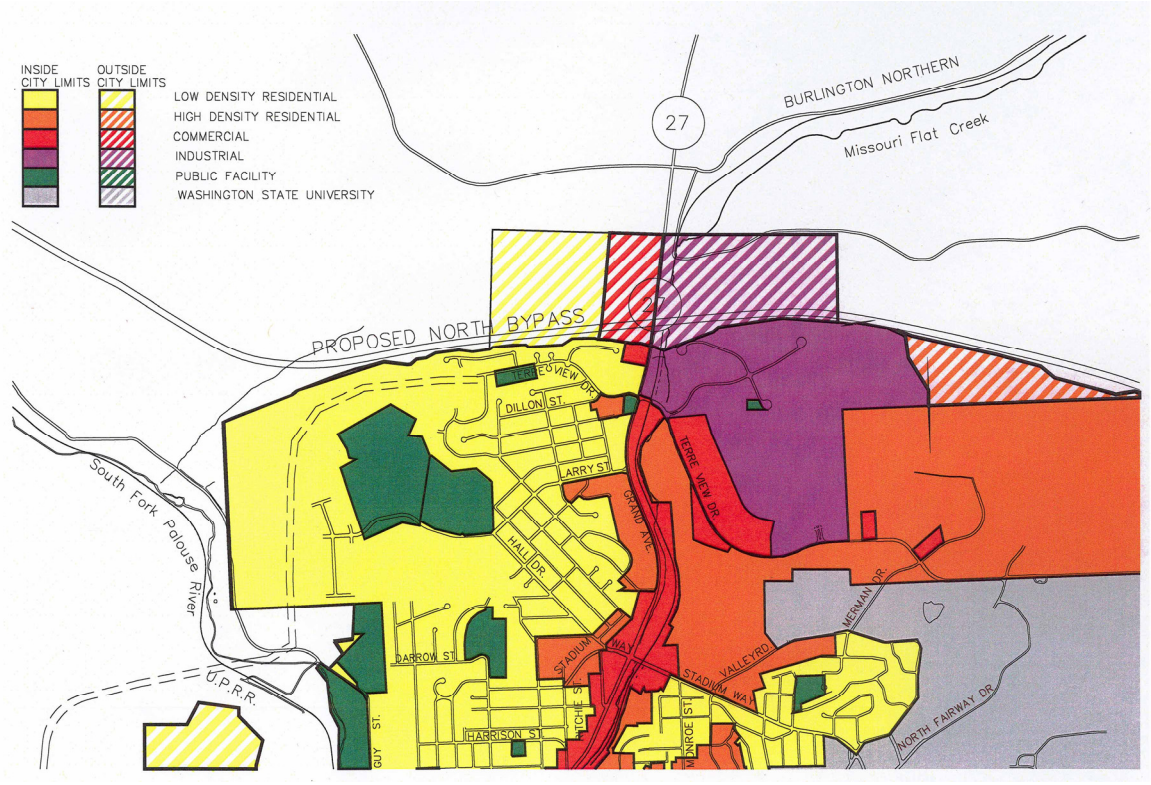
SR 270 connects the two university communities of Pullman and Moscow, Idaho and is heavily traveled by people commuting to work and involved in general commerce. Currently WSDOT is improving capacity and safety by widening SR 270 from MP 3.69 to MP 9.96 from a two-lane roadway to a four-lane facility with a 14-foot wide median lane configuration. This project extends partially into the SR 270 corridor study area and will serve to improve mobility and safety. The project will add a general-purpose lane in each direction and will provide a 14-foot center turn lane with rumble strips to enable traffic to access adjacent properties and to separate opposing traffic. This will improve traffic flow and safety

- This project will substantially improve safety by creating additional lanes.
- The project will increase capacity and reduce travel times.

Construction is expected to be complete in Fall 2007.

Pullman Growth and Expansion

The graphic below is a portion of the City of Pullman Land Use Map (Appendix E) illustrating the development pressure surrounding the SR 270 North Pullman Bypass. City limits have recently extended to the north side of the bypass right of way. Both population and traffic growth forecasts indicate that there will be a sustained expansion in the city for the next several years and beyond. It is apparent that the expansion will continue to the north, abutting the SR 276 corridor limits.



Considerable interest in future city arterials to serve new development has prompted inquiries into the potential use of the SR 276 right of way. This includes crossing points for the city arterials and/or construction of surface arterials within the right of way corridor that could eventually be incorporated into ultimate bypass roadway prism.