State Street Corridor Strategic Plan Study
Final Report

Prepared for:

ACHD

BOISE
CITY OF TREES

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I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly certified Professional Traffic Operations Engineer under the requirements established by the Transportation Professional Certification Board Inc.

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EXECUTIVE SUMMARY

State Street is a major "gateway" to the City of Boise that provides the only complete east-west connection north of the Boise River. It serves as an essential arterial carrying commuter, neighborhood, general business, leisure/ recreational, and commercial traffic to and from downtown Boise. The thriving Treasure Valley economy, successful downtown Boise businesses, tremendous residential growth to the west, and limited public transportation options have left State Street with significant traffic delays during peak times, higher than average accident rates, and projected traffic volumes that will grid-lock the corridor in the future.

The acknowledgement of these issues led the Ada County Highway District (ACHD) and the City of Boise to commission the development of a strategic plan for the State Street Corridor from 23rd Street to State Highway 55. This report documents the results of this study that include the near-term improvements necessary, the vision for how State Street should evolve over the next 20 years, and an implementation plan to help the multi-jurisdictional agencies responsible for this area make the vision a reality.

A comprehensive transportation planning study was conducted to evaluate the deficiencies and develop solutions. Existing and future conditions analysis identified corridor deficiencies in the areas of traffic operations, public transportation and alternate modes (including pedestrian and bicycle), corridor features, and geometric configurations. Potential improvement options (38 separate) were developed and matched to the deficiencies. Further analysis created a list of near-term improvements required and a set of three long-term scenarios which represented different possible visions for the corridor. Finally, a preferred scenario was selected and a strategy was formed to identify the necessary steps toward implementation.

A multi-jurisdictional team worked closely throughout the study. It was evident early on in the study process that in order to implement change in the State Street corridor a multi-jurisdictional team would be required. The agencies that participated in the study included ACHD, Boise City, Garden City, Community Planning Association of Southwest Idaho (COMPASS), Idaho Transportation Department (ITD), and ValleyRide. Staff members from the agencies, a citizen representative and consultants formed a collaborative and productive team interested in moving forward with the recommendations of this strategic plan.

An extensive public involvement process supported the study results and outcomes. Nearly 45% of the total study budget was dedicated to the preparation and conduct of the public involvement process. That process included stakeholder meetings, special gatherings of business and neighborhood representatives, three large public meetings, workshops and presentations to Commissions and City Councils, and outreach to interested parties. A successful effort was made to balance the needs of the neighborhoods, businesses, and commuters. The public involvement process provided invaluable information to the Study Team and influenced the results and outcome of the State Street Corridor Study. Additionally, the public commended the process and efforts of the team, fostering an increased level of trust and improved relations for future projects.

Near-term (1-10 years) improvements are identified for implementation. The analysis conducted as part of the State Street Corridor Study determined that there are numerous, lower-cost improvements that can be made in the near-term to improve the operation and look of State Street. These improvements are categorized into: traffic operation, public transportation, pedestrian/bicycle, and land use/other. Analysis showed that the implementation of these near-term improvements would be sufficient to accommodate future traffic volume growth over the next 10 years while essentially maintaining the existing level of traffic delay. After that, larger more expensive solutions would need to be implemented.

Three long-term scenarios are presented and evaluated as possible future visions. They include transit, conventional, and high capacity scenarios as follows:

The ***Transit Scenario*** expands on the near-term improvements and provides for an additional dedicated lane in each direction to accommodate a rapid bus approach (10-minute headways during peak travel times). This would require a 7-lane roadway cross section with the corresponding right-of-way required. Additionally, this scenario recommends that the commercial development be reorganized into "nodes" at specific locations in the corridor. These commercial nodes would help to foster the use of public transportation and provide for more concentrated, useable services by the neighboring residents.

The ***Conventional Scenario*** provides for two additional lanes of vehicle travel and therefore also requires a 7-lane cross section with the corresponding right-of-way required. The current commercial development patterns would continue to occur with no land use changes. Major intersections would require extensive changes with overpasses and other large treatments to accommodate the future traffic volumes.

The ***High Capacity Scenario*** is the only one that does not require extensive right-of-way acquisition. Instead, it includes a three-lane elevated structure down the middle of State Street. These lanes would include one lane in each direction for mixed traffic and a reversible middle lane available for transit or High Occupancy Vehicles (HOVs). The elevated section would begin at 30th street (east end) and continue west to Glenwood Boulevard. Interchanges would be required at key locations.

The Transit Scenario is preferred by the Study Team and the public, alike. The preferred scenario for State Street is the Transit Scenario – it incorporates a multi-modal vision for the corridor that includes a progressively increasing level of transit service and is consistent with the regional plans for the corridor. This scenario was the result of the Study Team's analysis and was the most supported by the public. It also requires a change in development patterns (concentrated "nodes") to take advantage of the enhanced transit. It provides for an expanded roadway to accommodate both transit and increases in regional traffic. A summary of the Transit Scenario is provided in Table 1. To make this a reality, the multi-agency study team will need to continue to work together to address all the challenges yet to be faced.

An implementation strategy is developed to assist toward beginning the next steps. The implementation of the Transit Scenario will require three parallel strategies involving aspects of the: roadway (ACHD), land use/urban form (cities), and transit (ValleyRide). The success of this recommended strategy requires the alignment of the agency actions into a coordinated framework. The affected agencies are committed to the success of the transit scenario. However, they recognize that several near-term elements of this scenario need to be achieved in order to fully realize the benefits of this new concept. The progress of these achievements will be monitored carefully to determine the future timing and scale of any large infrastructure investments by the agencies.

Study recommendations focus on implementation of the State Street Corridor Study results and outcomes. The Study Team recommends the following actions begin immediately:

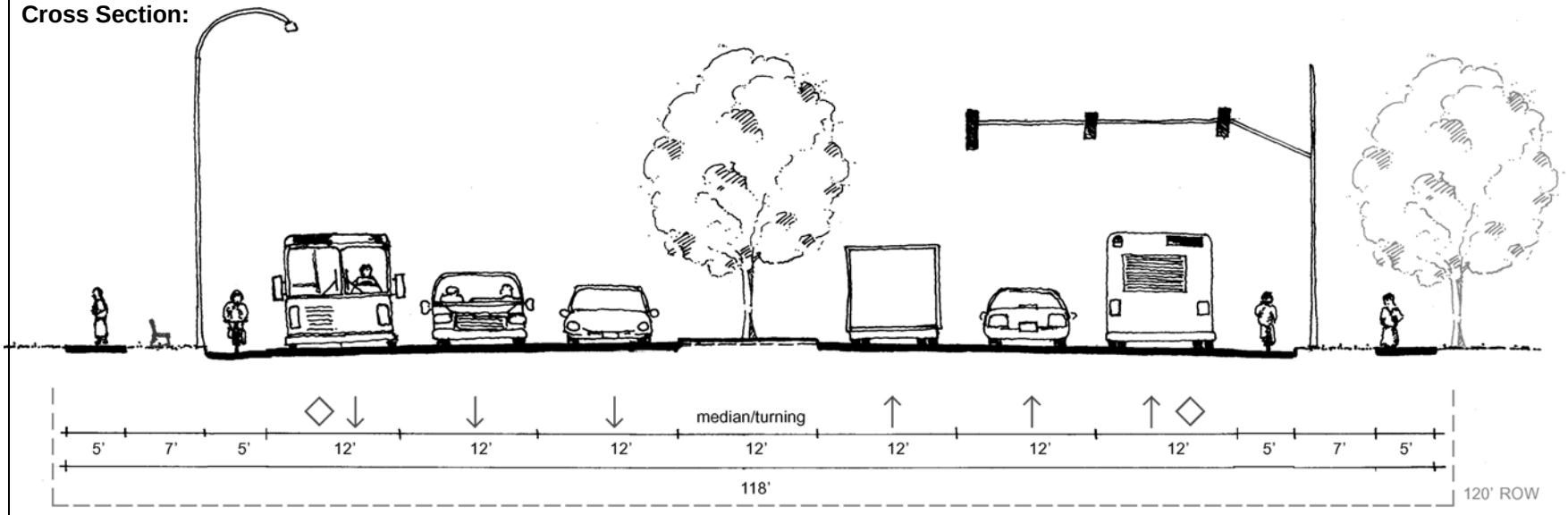
1. Adopt the Transit Scenario as State Street's future vision.
2. Form a joint working group to implement the vision that includes staff from ACHD, Boise City, Garden City, City of Eagle, and ValleyRide.
3. Focus implementation on the redevelopment nodes – begin with Veterans Memorial Parkway and Collister Drive.
4. Pursue an incremental approach to roadway improvements. This includes monitoring performance of the corridor for enhanced mobility, transit use, and change in urban form.
5. Accelerate transit planning for State Street by incorporating these results into the regional transit plan.

Table 1. Transit Scenario At A Glance

Description: The preferred Transit Scenario incorporates a multi-modal vision for the State Street Corridor – one that includes an increased frequency and coverage of transit service, a change in development patterns to take advantage of enhanced transit, and an expanded roadway to accommodate both transit and future increases in regional traffic. Transit dedicated lanes on both sides of the street are required to facilitate the level of transit service envisioned, making the roadway a total of seven lanes. The Transit Scenario was chosen because it demonstrated a higher overall level of meeting the objectives of the strategic plan and it provided the most flexibility for meeting future mobility needs. The estimated roadway costs for this scenario are $57 million. These costs exclude redevelopment and additional transit vehicles and operations costs.

Public Input: Input from the public meetings indicated strong support for enhanced transit service. The public also supported commercial redevelopment at nodes and the notion of dedicated lanes for the high level of transit envisioned in this scenario. The public also expressed concern that people will not use the transit even if it is provided. Of the three scenarios presented at the final meeting, the Transit Scenario ranked the highest in the scorings, on average.

Cross Section:



Primary Elements:

- Rapid Bus: Bus Rapid Transit (BRT) at 10-minute headways with stops limited to ½ mile, special shelters and traffic signal priority
- Commercial Node Development: Concentrate retail at crossroads to provide opportunities to introduce higher intensity residential and commercial/office. Nodes are recommended at 28th, 33rd, Veteran's Memorial Parkway/36th, Collister, and Glenwood/Gary.
- Land Use Requirements: Nodes in the eastern half of the corridor would be mixed-use with a residential emphasis, while nodes to the west would be mixed-use with a commercial focus.
- Other Features: Landscaped median and bike lanes throughout, continuous sidewalks separated from the street by planting strips, ITS technology enhancements

Implementation Strategy: Recommended approach is for ACHD, the City of Boise, Garden City, the City of Eagle and ValleyRide to work jointly on roadway, redevelopment and transit improvements, focusing first on the nodes at Veterans Memorial Parkway and Collister Road.

INTRODUCTION

The Ada County Highway District (ACHD) and the City of Boise commissioned a study to develop a strategic plan for the State Street Corridor from 23rd Street to State Highway 55 (6.4 miles). A map of the study area (Figure 1) is provided on the next page. This report documents the results of this study including the near-term improvements necessary, the vision for how State Street should evolve over the next 20 years, and elements of an implementation plan to help the multi-jurisdictional agencies responsible for this area make the vision a reality.

PROBLEM STATEMENT

State Street is located on the north side of the Treasure Valley and serves as an essential east-west arterial carrying commuter, neighborhood, general business, leisure/ recreational, and commercial traffic to and from downtown Boise. As a connection to northern and western neighboring communities that include Emmett, Horseshoe Bend, Eagle, Star and Middleton, it represents a major "gateway" to the City of Boise. No other major arterial exists north of the Boise River that provides this complete east-west connection. The thriving Treasure Valley economy, successful downtown Boise businesses, tremendous residential growth to the west, and limited public transportation options have left State Street with significant traffic delays during peak times, higher than average accident rates, and projected traffic volumes that will grid-lock the corridor. These issues led to a growing need for a long-term transportation and operational strategy to guide implementation of future improvements.

STUDY PURPOSE

The purpose of the State Street Corridor Study was to develop a strategic plan for this essential east-west corridor that would create a new future vision for State Street and define the near-term improvements and future steps necessary to achieve that vision. The study required the active participation of the responsible land use and traffic management agencies and input from the public that travels, provides and/or uses the services offered in the corridor.

PURPOSE OF THIS DOCUMENT

The purpose of this document is to provide the reader with a complete understanding of the results of the study, and the approaches and analysis used to arrive at those results. The State Street Corridor Study Final Report contains one main body which concisely documents the study approaches and results, and three supporting data volumes containing the analyses and evaluations in a greater level of detail. Please use the following to find the information contained in this report that is most important to you.

Report Chapter and Supporting Volumes	Contents
Introduction	Corridor Characteristics, Existing/Future Conditions, Study Approach, Participants
Improvement Options and Future Scenarios	Improvement Options, Future Scenarios
Public Involvement Results	Public Involvement Process, Results from Meetings 1, 2, and 3
Preferred Scenario and Implementation Strategy	Scenario Evaluation, Recommended Scenario, Implementation Strategy
Recommendations	Specific Recommendations
Supporting Data Volumes I, II and III	(I) Existing and Future Conditions; (II) Public Involvement Process and Results; (III) Scenario Development and Analysis

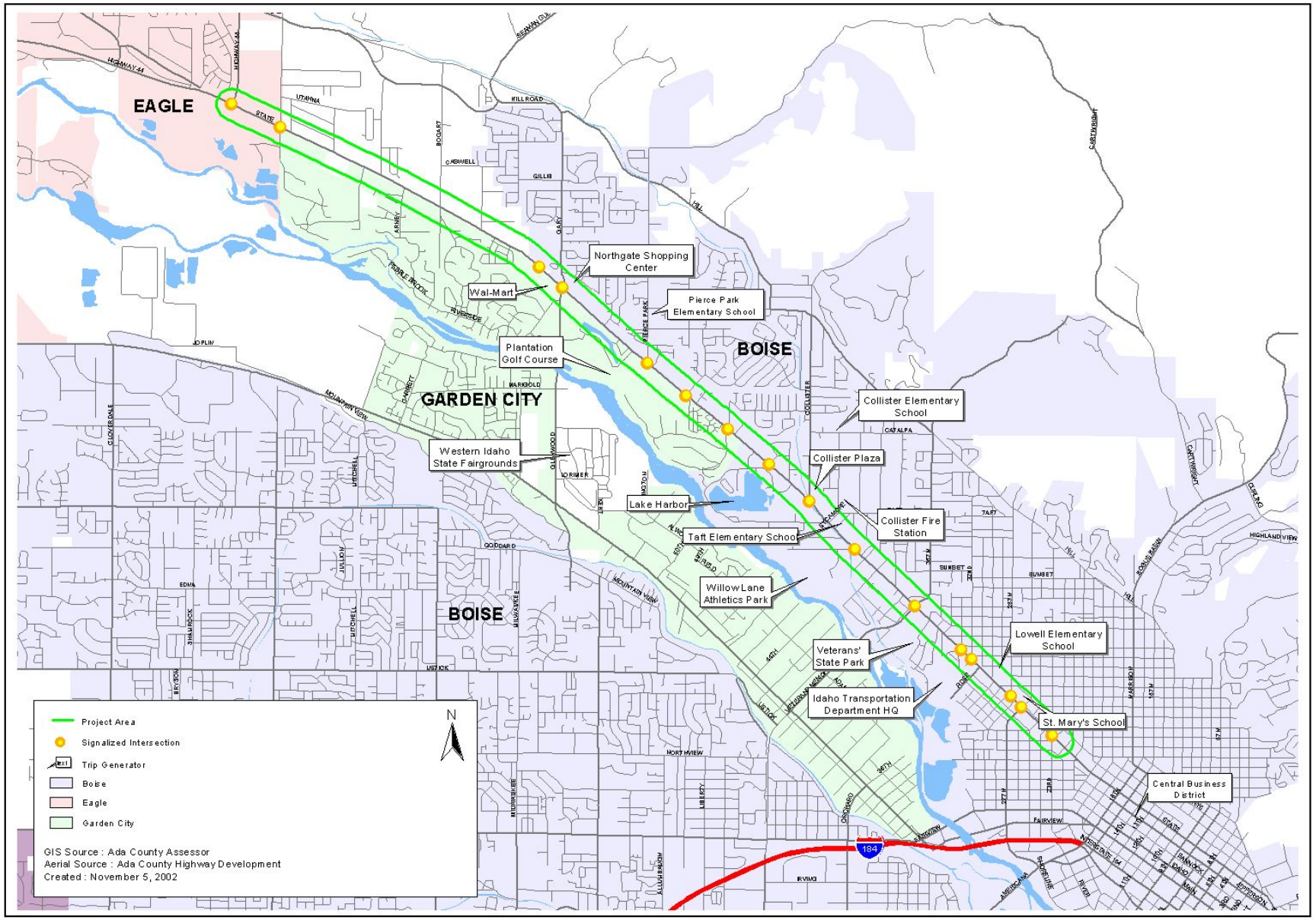


Figure 1. State Street Corridor Study Project Area Map

CORRIDOR CHARACTERISTICS

The State Street Corridor, between the study boundaries of 23rd Street and Highway 55, includes residences, schools, ITD headquarters, small office complexes, general businesses, retail stores, churches, and undeveloped land. It is a multi-use facility that functions as a primary transportation corridor for vehicles, transit, cyclists and pedestrians.

State Street serves as a gateway to Boise and the regional connection to north Idaho. The street presents an image of the city with visually stimulating views of the Boise Foothills. Seven nodes have been identified along the corridor that serve as centers of activity and connections to the surrounding neighborhoods. Proceeding east on State Street, development spreads over the 4-mile entrance to Boise with a variety of architectural styles, numerous signs, and overhead utility lines presenting a visually chaotic image.

The predominant land uses along State Street are commercial, office, public, and residential. The corridor is substantially built-up on the east end with large portions of vacant land on the west. Newer neighborhoods predominate the western segments of State Street. Many homes west of 36th Street have large lots, gardens, and horse pastures.

The zoning designations along the corridor encourage redevelopment of much of the corridor toward commercial centers and medium and high-density housing. The development of more intensive uses along State Street reflects higher land values and will continue to displace single-family residential uses along the street frontage. Design review procedures have been established by the City of Boise for new development fronting State Street. Design elements in Boise include a 20-foot landscaped setback for a parking area or building.

ValleyRide operates Route 16 with one-hour headways along State Street to provide regular daily service and reverse-commute service during peak periods on weekdays. Routes 1 and 2 provide directional service to State Street on Saturdays with 45-minute headways.

Major pedestrian and bicycle investments have been made in the corridor to provide a multi-use path along the Boise River that connects from Glenwood Boulevard to the central business district (CBD). Following a northwest alignment, the Boise Greenbelt provides a paved path parallel to State Street. The path follows the north side of the river west to Plantation River Street, where it crosses the river and follows along the southern bank until it temporarily ends west of Glenwood Street. Future plans will extend the greenbelt westward to Eagle Island beyond the City of Eagle.

Additionally, State Street is designated a bike lane and mixed-use route from 36th Street to Gary Lane. State Street provides pedestrian connections to shopping centers, businesses, parks, schools, churches and neighborhoods along the corridor. Pedestrian facilities along State Street are limited to attached sidewalks along various portions of the corridor and numerous gaps are present in the western half of the corridor.

A number of large grassy and treed areas help shape State Street. These include the Idaho Transportation Department campus, Veterans Park with its numerous evergreen trees, Lowell School with over a block of tree-lined playground, and a row of Maple trees along Plantation Golf Course. Often large cottonwood trees are visible from the street and along cross streets such as Willow Lane.

Canals provide a natural feature to the roadway and a connection to local irrigation and agriculture. They include the Farmers Union Canal, which flows along the south side of the street from Willow Lane to Collister Drive. Other waterways crossing State Street includes Crane Creek Flume, Stuart Gulch, Boise Valley Canal, and Little Union Canal. The waterways provide both an aesthetic opportunity and a challenge to cross and blend into new development.

EXISTING AND FUTURE CONDITIONS

The existing and future conditions of the State Street Study Corridor are documented in detail in the Supporting Data Volume I. The information presented here is meant to be a summary that focuses on the deficiencies derived from the existing and future condition analyses. They are as follows:

Traffic Volumes are projected to significantly increase in the next 20 years. Figure 2 illustrates the existing, 2010 and 2025 average daily traffic volumes for selected locations within the corridor. Traffic volumes on State Street have increased from around 30,000 ADT to 37,000 ADT (over 23%) in the last 4 years. Traffic growth is expected to increase more than 50% in the next 20 years with volumes exceeding 55,000 ADT. This increase in traffic will exceed corridor and intersection capacity and create operational bottlenecks, as well as increased safety concerns.

Intersection operations will continue to degrade as traffic volumes increase. Table 2, to the right, displays the intersection average delay and level of service for 2002 and expected in 2025 during pm peak travel periods. The data illustrates that as the traffic volumes increase in the corridor, the intersections will quickly breakdown and become significant bottlenecks severely impeding traffic flow.

The existing conditions analysis shows that peak period intersection operations at the Glenwood/Gary Lane and 26th/27th Street locations are currently operating in saturated conditions and that the Veteran's Memorial Parkway intersection is experiencing near breakdown conditions during the PM peak period.

Further breakdown and deficiencies would be expected to occur by the year 2025. Higher volumes along State Street would worsen conditions by causing more delay and lowering levels of service if modifications to the roadway are not made. As saturation is reached and thresholds are exceeded, roadway problems compound when improvements are not made. The existing problem areas (Glenwood/Gary Lane, Veteran's Memorial Parkway, and 26th/27th Street) would deteriorate further as volumes increase along the State Street corridor. By 2025, the Highway 55, Horseshoe Bend, Wal-Mart, Pierce Park, Collister Drive, 32nd Street, and 28th Street intersections would also reach saturation during one or both peak periods.

Table 2. Intersection Delay and LOS

PM Peak Hour Intersection Avg Delay/(Level-of-Service)		
Intersection	**2002**	**2025**
Hwy 55	26 (C)	232 (F)
Horseshoe Bend	15 (B)	98 (F)
Glenwood/Gary	52 (D)	128 (F)
Pierce Park	18 (B)	119 (F)
Collister	16 (B)	82 (F)
VMP/36th	57 (E)	233 (F)
28th	36 (D)	>250 (F)
26th/27th	90 (F)	146 (F)
23rd	4 (A)	22 (C)

Crash rates are currently higher than average and are expected to grow as traffic volumes increase. Crash records for the project were obtained from the Idaho Transportation Department (ITD) Safety Department. There were 192, 181, and 188 crashes in the State Street study area in 1999, 2000, and 2001, respectively. Although traffic volumes have increased over the three-year analysis period, crashes remain essentially constant. There are significant numbers of access-related crashes, rear-end crashes, head-on crashes, and congestion-related crashes at intersections in the corridor. The improvement options and scenarios recommended in the corridor address the safety concerns demonstrated by these numbers.

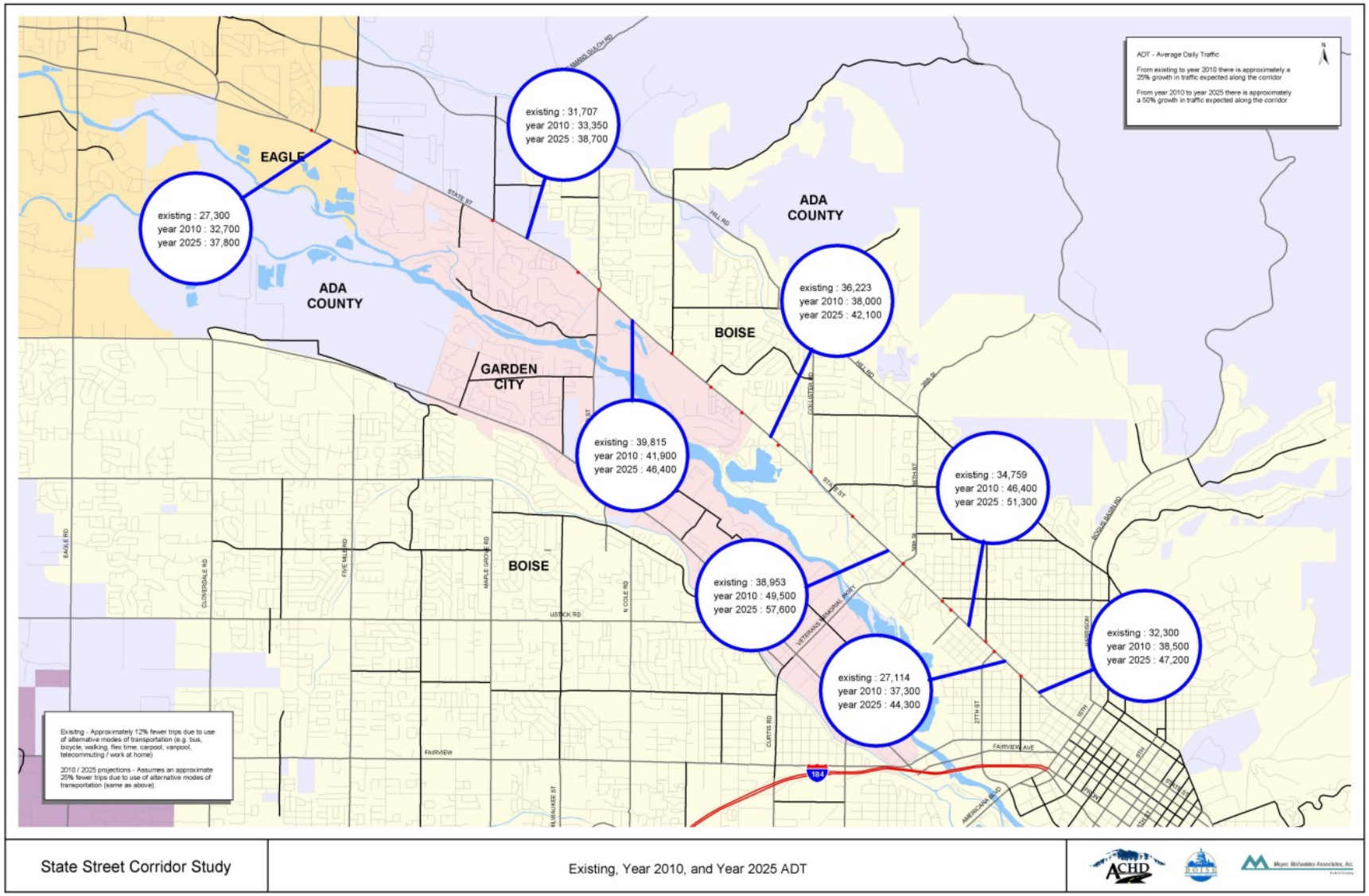


Figure 2. State Street Corridor Study Existing and Future Average Daily Traffic Volumes

Connection spacing and driveway densities are too high for a major arterial. The segments of State Street near Glenwood, Pierce Park, Plantation River, Collister, Willow, Veterans Memorial, 32nd, 33rd, and 28th Streets have numerous driveway connections that are at or above 45 connections per mile, which is an indicator of increased crash potential and decreased corridor capacity. Several of the study improvement options included in all long-term scenarios incorporated consolidation of driveways to address these operational deficiencies.

Existing levels of Public transportation and the use of other modes are inadequate to significantly reduce number of single occupant vehicles in the corridor during peak travel periods. One significant traffic volume mitigation approach is to encourage the use of public transit or other modes of travel (car pool, van pool, telecommuting, etc.) to reduce the number of single occupancy vehicles and effectively increase the number of people moving through the corridor. The current programs and offered public transportation are not sufficient to made a significant difference. Several of the suggested options were aimed at future transit improvements, and a specific scenario was dedicated to expansion of these approaches.

Existing Bicycle and pedestrian facilities need expansion to be effective. This is important to facilitate the use of other modes and the easy use of the services in the corridor by neighboring residents without vehicle travel. Although bicycle and pedestrian issues are present the entire length of the corridor, specific needs were identified at key intersections. For instance, near the intersection with Veteran's Memorial Parkway/36th Street a high incidence of pedestrian/bike crashes are occurring. Improvements to bicycle and pedestrian facilities were incorporated in all the long-term scenarios that were developed.

STUDY APPROACH

The approach implemented to conduct the State Street Corridor Study encompasses three distinct stages, each with a technical and public input component. Figure 3 illustrates the study approach and the interaction between the technical and public input iterative process.

Stage 1 of the study began with the development of the existing and future conditions of the corridor (documented in Supporting Data Volume I). That activity provided the team the information necessary to conduct several stakeholder meetings and the first public meeting. The results of those meetings identified the participants' perceived needs and future vision of the corridor.

With the needs and vision suggested from the stakeholders, and the deficiencies identified in the existing and future conditions analysis, Stage 2 identified several improvement options that could be implemented to address the needs and achieve the corridor vision. These improvement options fell into 5 categories (roadway improvements, alternative transportation, intersection improvements, corridor appearance, and capacity enhancements). The definition of each improvement option was provided to the public in the second public meeting. The results of that meeting provided the study team with a level of support for each of the 38 improvement options, as well as the meeting participants' relative ranking of a set of evaluation criteria.

Stage 3 identified near-term improvements and packaged the other improvements into 3 different scenarios. The scenarios (transit, conventional, and high capacity) represent three different possible visions for the corridor. A third public meeting was held to show the public the scenarios and elicit input regarding their level of support for each. With that knowledge, the study team then established the preferred scenario and developed an implementation strategy that will

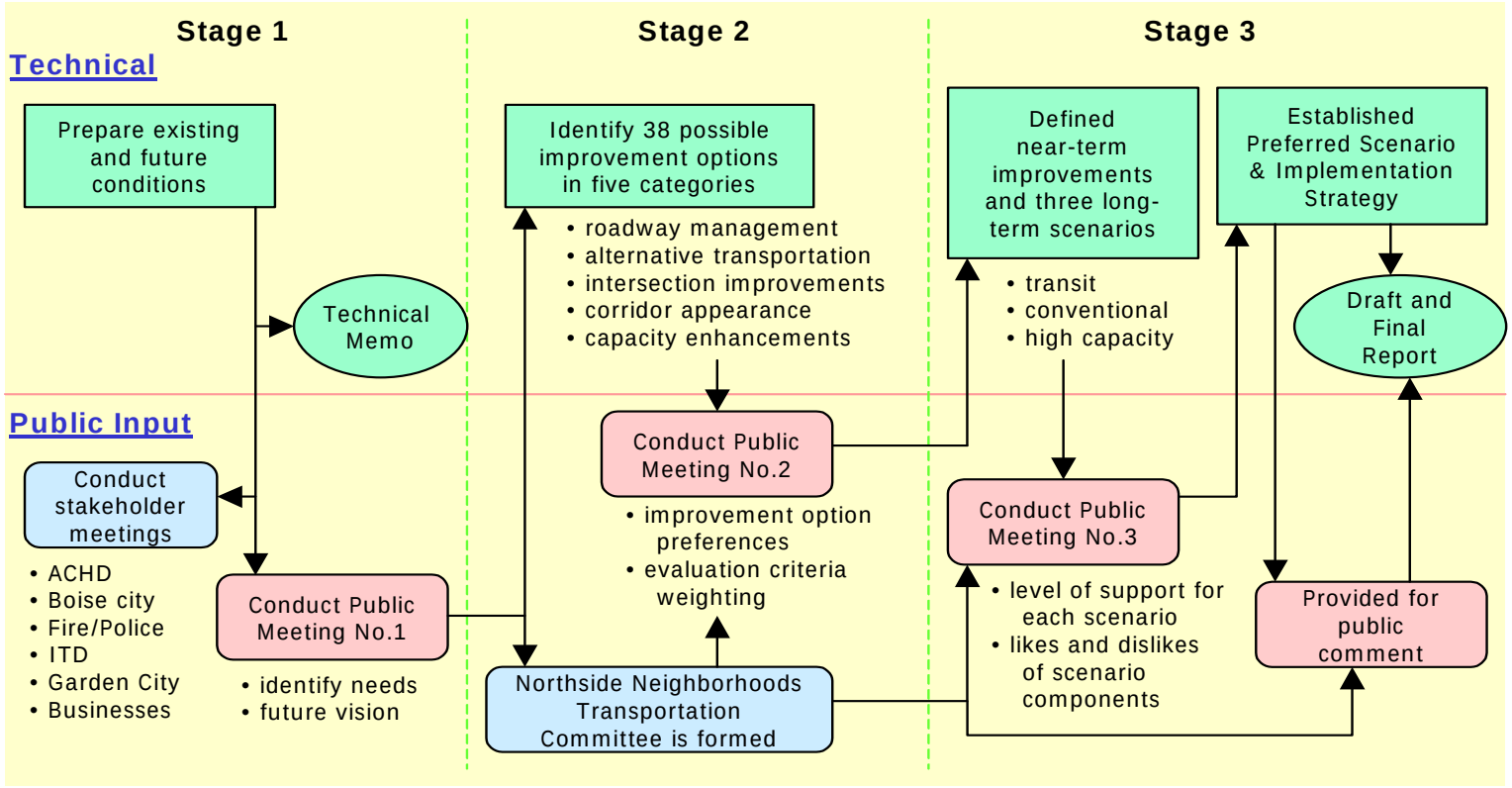


Figure 3. State Street Corridor Study Approach

form the basis of the study recommendations. These results were available for public comment and input was collected.

Several neighborhoods were interested in actively participating in the study and formed the Northside Neighborhoods Transportation Committee. This Committee and their constituents provided input at each of the study's public meetings, as well as conducted their own neighborhood meetings to expand awareness of the study and collect additional input. The Committee's report to the study team is included in Supporting Data Volume II.

The entire State Street Study is documented in this Final Report. The detailed analysis and resulting findings are presented in various chapters that follow.

PARTICIPANTS

Responsible agencies in the corridor included Ada County Highway District (ACHD), Boise City, Garden City, City of Eagle and Idaho Transportation Department (ITD). Northwest Boise City limits extend to Horseshoe Bend Road on the north side of State Street and just west of Lake Harbor on the south. Garden City extends from Plantation River Drive to Horseshoe Bend Road on the south side, where the City of Eagle begins. ACHD owns and operates the roadway from 23rd Street to Glenwood Boulevard. The section from Glenwood to Highway 55 (also designated as Highway 44) is currently owned and operated by ITD.

Other participating public agency stakeholders included Boise City Police and Fire Departments, Community Planning Association of Southwest Idaho (COMPASS), and ValleyRide (regional public transportation agency).

The public played an extensive role in the development and outcome of the results documented within. The public participants generally represented three distinct groups: neighborhoods, businesses, and commuters. In addition, the Northside Neighborhoods Transportation Committee contributed heavily to the study findings.

The study team was led by the transportation planning consultant, Meyer Mohaddes Associates, Inc. (MMA) Supporting MMA as subconsultants were RBC, Inc. (Rosemary Curtin), Planmakers, and Doherty & Associates, Inc., who provided services that included public involvement, land use planning, and engineering design, respectively.

IMPROVEMENT OPTIONS AND FUTURE SCENARIOS

The analyses of existing conditions and of future traffic volume projections for the State Street corridor depict a pattern of increasing levels of traffic congestion and hazard into the future if the existing roadway and transit system is left unchanged. Without some level of improvement to the roadway and transit system, the future conditions on State Street will reach a plateau of congestion during peak periods, with peak conditions extending over longer periods of time and with traffic diverting to neighborhood routes or other corridors during those same time periods.

With this perspective in mind, the State Street Corridor Study Team carefully evaluated the causes of the corridor deficiencies as well as public input related to their perceived corridor needs and concerns from the focus groups and the 1st public meeting. The team used this information to develop a set of improvement strategies. As concepts for addressing existing deficiencies and future needs were developed, it became apparent that no single improvement would solve the problems identified for State Street. Rather, a combination of improvements that address how and why people travel on State Street is needed. It also became apparent that the future problems on State Street do not materialize at some fixed point in time, but rather that they accumulate over time. The solutions developed for State Street need to be organized to be implemented over time and be additive so that they build upon one another.

To adequately address both the need to combine types of improvements and to understand how those combinations work over time, the Team first identified five general categories of improvements (strategies) and then identified individual options within those categories. The five categories reflected different strategies for improvement as follows:

- Roadway Management
- Intersection Operations
- Capacity Enhancements
- Alternative Transportation
- Corridor Appearance

Potential improvement options in these five categories were refined through further analysis until a set of 38 options resulted. This process laid the foundation for the rest of the study in that these improvement options became the set of solutions that fully addressed the transportation challenges on State Street, now and into the future. Several of these improvement options were near-term, while some others were longer-term in their implementation timeframe. Additionally, each improvement option was noted to affect mobility and safety aspects within the corridor differently.

With this in mind, the improvement options were divided into those that are near-term, less costly, solutions and those that, when packaged properly, are long-term, more costly, solutions. The near-term solutions are recommended for implementation regardless of which long-term solutions are chosen. The long-term solutions became three distinct scenarios, each representing a different vision for how State Street could evolve in the future. The breakpoint in time between near and long term was approximately 10 years.

The 0-10 year improvement options were deemed near-term and will provide enough effectiveness to maintain the current level of traffic delay up to the end of that timeframe. The long-term scenarios required further evaluation and public input in order to determine the most preferred solution.

The Supporting Data Volume III documents the scenario development and analysis that supports the final recommendations. A later chapter entitled, Preferred Scenario and Implementation Strategy, discusses the results of the analysis. This

chapter summarizes the near-term improvement options and defines the long-term scenarios.

IMPROVEMENT OPTIONS

Table 3 shows the improvement options and categories that were developed for State Street. Many of these improvement options went on to be combined into long-term scenarios. Additionally, many others were identified for near-term (0-10 years) implementation. These near-term improvement options will be discussed in further detail in the next few paragraphs.

Intelligent Transportation Systems (ITS) – Continue to expand the existing traffic management center, communications, signal operation improvements, video detection cameras, and deploy dynamic message signs. These applications would inform the public about roadway conditions, assist in clearing incidents, and would allow ACHD to make real time operation adjustments for incidents and events.

Acceleration/Deceleration Lanes – would add short speed-change lanes mid block and at intersections to allow vehicles to more efficiently enter or exit the roadway. These additional lanes reduce delay in through lanes and improve safety by reducing rear-end collisions.

Signal Spacing/Consolidation –adequate signal spacing assists in coordination and limits vehicle storage and spillover, which decreases delay. Identify and implement candidate locations.

Table 3. Improvement Strategies

Category	Improvement Option
Roadway Management	Intelligent transportation systems Employer assistance programs Flex-time Telecommuting Signal spacing/signal consolidation Driveway spacing/consolidation/parking Medians/U-turns Frontage/backage roads
Intersection Operations	Signal improvements Intersection configuration Acceleration/deceleration lanes Through-lane overpass Roundabouts Couplet intersection design Urban interchange
Capacity Enhancements	Selected widening Reversible lanes 7-lane corridor Boulevard concept Elevated center lanes Expressway (limited access)
Alternative Transportation	Park-n-ride lots Pedestrian crossings Sidewalk improvements Bicycle network improvements Van/car pools Bus service – frequency and routing Bus pull outs/designated stops/shelters Express bus/bus rapid transit High occupancy lanes/toll lanes Light rail transit
Corridor Appearance	Landscaping/lighting/shoulder improvements Corridor beautification Neighborhood interconnectivity Commercial redevelop – on state Commercial redevelop – off state Node development

Selected Widening – would provide additional lanes as needed at spot locations.

Driveway spacing/parking – adequate driveway spacing decreases the number of slowing vehicles in the travel lanes, provides more space and opportunities for shared business parking, and improves bike and pedestrian safety.

Medians/U-turns – provide access management by controlling left turning movements and provide space for turn lanes to remove turning traffic from through traffic. Medians also provide space for landscaping to enhance the corridor's appearance.

Bus Service Improvements – the current system of limited local routes would be gradually expanded to add fixed route local service on longer portions of State Street.

Bus Pull-outs/designated stops – provide consistent pick-up and drop-off areas, improve safety for users with lighting and resting benches, remove transit vehicles from through lanes while improving neighborhood appearances.

Park-n-ride lots – provide safety and surveillance to people and parked vehicles while encouraging use of public transit. In turn, this reduces traffic on local roads, reduces parking demand in downtown Boise and supports employer assistance programs.

Express Bus Service – peak hour express services with a decreased number of stops for users (wider spacing between stops) would provide for shorter commute times.

Pedestrian Crossings –safe crossings for all pedestrians would be provided through the use of curb cuts, refuge islands, flashing lights, and sufficient walk time at signals.

Sidewalk Improvements – safe connectivity for neighborhoods and businesses would be provided by separating pedestrians and bicyclists from the roadway with planting strips and detached walks/paths.

Bicycle Network Enhancements – separate pathways from the travel way would be provided for bicycles and alternate route connections for bicycles would be made parallel to State Street.

Neighborhood Interconnection – where feasible, local street connectivity would be increased to reduce local traffic on State Street and to provide more options for neighborhood travel.

Commercial Redevelopment – off State Street – where feasible, commercial centers would be developed further into the neighborhoods to provide for local serving business needs.

Van/Car Pools – ACHD would continue to support formation of car and vanpools through employer incentive programs and development of park and ride lots.

Landscaping/Lighting – actions would include planting trees, shrubs, and other vegetation along the corridor and in the medians, providing street lights and public art to improve the aesthetics of the corridor, and creating an overall attractive appearance.

E*mployer Assistance Programs* – actions include parking incentive programs, van/car pool formation programs, and bicycle/walking/wellness incentive programs.

Flex-Time – encourage the use of staggered work hours and alternative work schedules (shortened work weeks).

Telecommuting – would encourage working from home (home office) and relocation of the work place closer to home.

FUTURE SCENARIOS

From a federal transportation planning perspective, the analysis of projected future volumes that was used to identify future needs is also an analysis of a "No Build" alternative for the corridor. Similarly, the near-term improvement options form what is essentially a Transportation Systems Management (TSM) alternative. As noted in the preceding sections of this report, *neither the No Build or the TSM alternative is adequate to achieve acceptable conditions throughout the 20-year planning horizon for the corridor* and a set of "build" alternatives are needed.

The State Street Corridor Study Team recognized that the needed alternatives for long-term improvement would not only affect operation of the transportation system, but would shape the urban form and character of the corridor and the areas adjacent to it. Accordingly, the Team chose to develop three future scenarios for long-term improvement of State Street, each of which emphasized different aspects of the future vision for the corridor. The future scenarios were also developed to be consistent with the near-term improvement options such that the long-term strategies would add to the near-term ones rather than replacing them.

The three different scenarios chosen for further evaluation were designed to emphasize the following three aspects:

- ***Transit*** – emphasized increased levels of transit beyond that of the near-term improvements, expanded the roadway with transit-only lanes, and focused commercial redevelopment in specific "nodes" in the corridor
- ***Conventional*** – emphasized the existing design and delay minimization, expanded the roadway to seven-lanes of vehicular traffic with no change in development patterns
- ***High Capacity*** – emphasized end-to-end commuter movement and added three elevated lanes of travel in the middle of State Street, while retaining the existing five travel lanes at grade. Development would remain similar to existing, but was assumed to intensify near interchanges with the elevated structure.

Each of these scenarios is described in greater detail in the following pages.

Corridor Urbanization

The State Street corridor spans a wide range of development conditions from the downtown street grid of the City of Boise, to a suburban pattern near Collister Road, to the rural edges of the City of Eagle. Urban form varies widely along the corridor and is changing as a higher level of urbanization moves westward along the corridor.

To effectively develop the future scenarios for the corridor, it is necessary to identify the likely limits of urbanization in the corridor, particularly in relation to block spacing and land use intensity. Evaluation of the existing patterns of urbanization in the corridor indicated that three zones are already present. Figure 4 illustrates the location of these zones.

The eastern end of the corridor is most urbanized and generally follows the one-eighth mile block grid of downtown Boise. The expected limit of this *urbanized* area has been presumed to be Collister Road. The speed limit in this area would be 35 mph, which is consistent with the shorter block spacing that is present and the higher density of access points to property along the corridor. Roadway drainage in this segment would be curb and gutter with storm sewer.

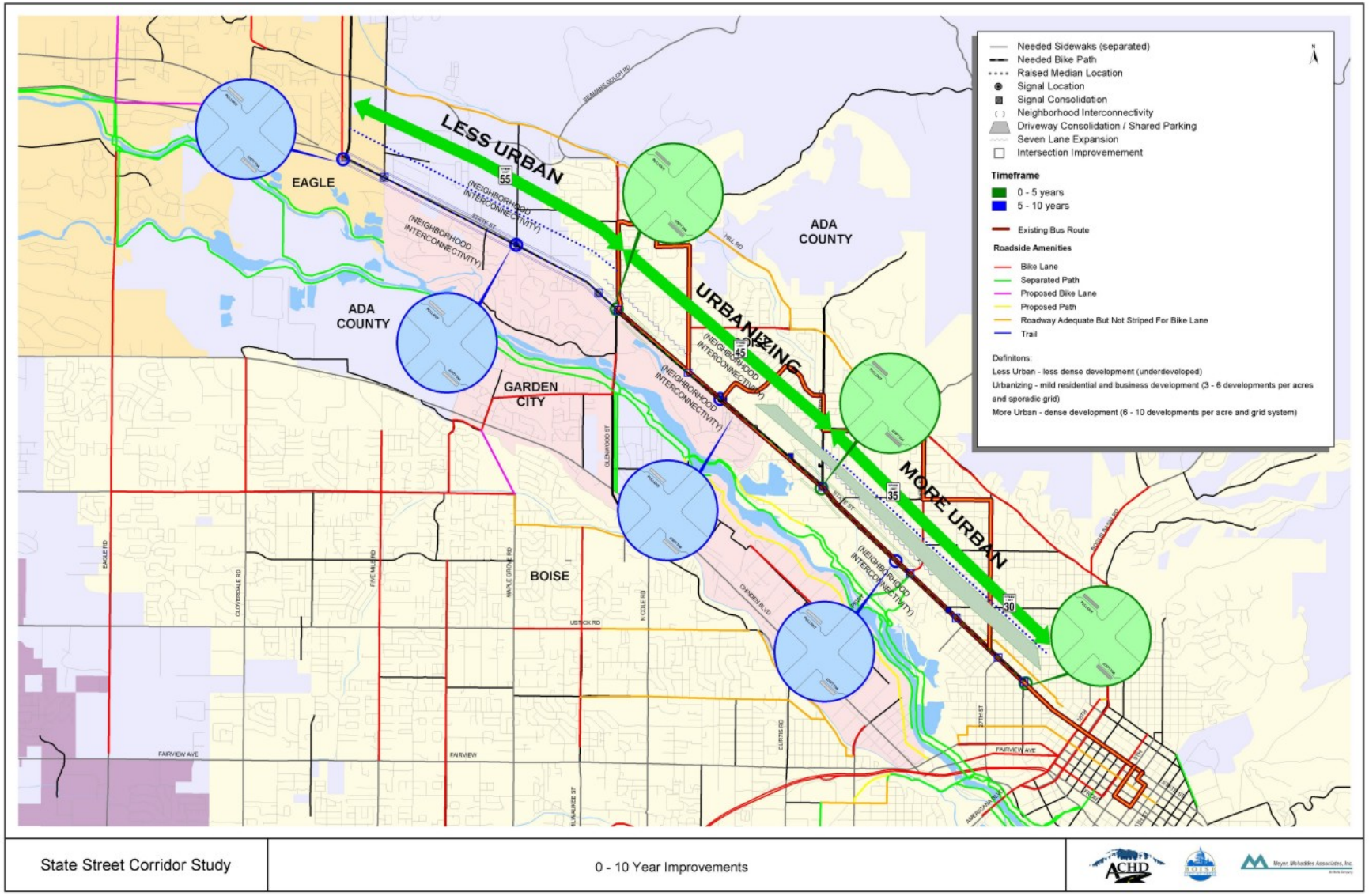


Figure 4. Extent of Corridor Urbanization

The second zone has been presumed to extend from Collister Road to Glenwood Street/Gary Lane and is characterized as an *urbanizing* area where more suburban intensities would be expected. Block spacing would be less regular than in the area to the east and intersections would be one-quarter to one-half mile apart. The speed limit in this segment would be expected to remain at 45 mph as the corridor develops. Roadway drainage in this segment, which is currently a mix of curb and gutter and swales, would be changed to curb and gutter throughout.

The third zone would a less urban or *rural* zone where low intensity development would be expected and intersections would be spaced one-half to one mile or farther apart. This zone has been presumed to occupy the western end of the corridor and the speed limit in this segment would be expected to be 55 mph. Roadway drainage would be accomplished with side swales and curb and gutter would not be used.

These three zones are common to all of the scenarios and have been used to shape urban form for the scenarios.

Transit Scenario

The transit scenario was developed on the basis of providing substantial transit incentives in the corridor to attract a higher level of ridership, particularly during peak periods. The design of the transit scenario seeks to balance the traffic and transit demand on the corridor and, in so doing, provide a more effective model for utilizing the corridor roadway and for shaping corridor land use and urban form to provide a more sustainable transportation system.

Within the future projections provided by COMPASS, there is an assumption of increased use of alternate modes (transit, telecommuting, carpool/vanpool), which means that future volumes have already been reduced to account for a baseline level of alternate mode use. To justify further use of transit, the transit scenario was designed around a higher level of transit service than was assumed in the regional forecasting work that generated the projected future traffic volumes. The transit service pattern has been assumed to develop over time as follows:

- 0-10 years – the current system of limited local routes would be gradually expanded to add fixed route local service on longer portions of State Street. Express bus service would be added to the corridor. Park and rides would be constructed along the western portion of the corridor and linked to major destinations to the east in the corridor and in Downtown.

- 10-20 years – rapid bus, also known as Bus Rapid Transit (BRT) service (10-minute headway, stops limited to ½ mile, special shelters and signal priority) would be introduced starting at the eastern end of the corridor and extending westward. The express bus and local bus service would remain as overlays to the rapid bus routes. As the rapid bus extends westward, some express service may be absorbed into the rapid route.

For BRT to be effective in the corridor, the bus system requires physical space on the roadway to operate. Under light traffic volumes on the corridor, BRT would be able to achieve the required level of operations in mixed traffic with traffic signal priority for buses and queue jump lanes at critical locations. However, bus operations would be compromised under higher levels of traffic congestion, particularly in peak periods. For these times, the buses would need to operate in exclusive lanes, parallel to the mixed traffic flow. This latter condition is the one that has been used to design the transit scenario for State Street.

Two basic cross sections are available for State Street to accommodate exclusive lanes adjacent to the traffic lanes:

- Widen the roadway to seven lanes, but stripe the outside lanes as diamond lanes that would be used by transit, car/van pools and right turns. These outside lanes could be mixed flow off-peak.

- Keep State Street five lanes and reclaim the old interurban electric right-of-way on the north side of the street as a parallel 2-lane transitway. The transitway would eliminate mid-block access on the north side and would potentially require crossing control at intersection for LRT/busway use.

Both of these conditions have been considered for the transit scenario. Because the transitway or diamond lanes would extend the length of the corridor, conditions have been developed with both side swale and curb and gutter drainage. Figure 5 and 6 illustrate the two versions of the transit scenario for these conditions.

The level of transit service under rapid bus or BRT operation would be adequate to accommodate transit riders at a level equivalent to 300 vehicles (of mixed traffic) per hour per direction. As part of developing the transit scenario, other configurations were tested, including one that looked at retaining the five lane existing cross section and using the outside lanes as carpool/vanpool/transit-only during peak periods. The expected level of diversion from mixed traffic to transit (which is equivalent to one-half lane) would not be sufficient to let the corridor operate with only one lane of mixed traffic in each direction during the peak periods, either today or in the future. The five-lane configuration was not carried forward.

Transit stops with the seven-lane transit scenario would be curbside at intersections and would, in most cases, be far side at traffic signals to take advantage of signal priority. Stops with the transitway scenario would be at stations located adjacent to the transitway. Separate signalization for the transitway would allow stations to be located opposite each other.

The seven-lane scenario has been assumed to incorporate a landscaped median, which would restrict left-turn access to intersections and a limited number of mid-block openings. Right turn access would need to be reconfigured over portions of the corridor to reduce the number of driveways or access points to meet minimum access spacing for each zone of the corridor. Since right-turning vehicles would share the diamond outside lanes with carpools/vanpools and transit, excessive numbers of right turns would interfere with transit operations.

The pattern of development in the corridor is currently configured to draw from the linear movement of traffic in the corridor. A pattern of node-based development that concentrates retail at crossroads and provides opportunities to introduce higher intensity residential and commercial/office would better support the level of transit service proposed in the transit scenario. Similarly the concentration of retail development into nodes would relax the need for direct access along the corridor between nodes.

Development nodes are recommended at 28th, 33rd, Veteran's Memorial Parkway/36th, Collister, and Glenwood/Gary. Figures 7 and 8 illustrate potential development patterns and types of urban form for the Veteran's Memorial Parkway node and the Collister node.

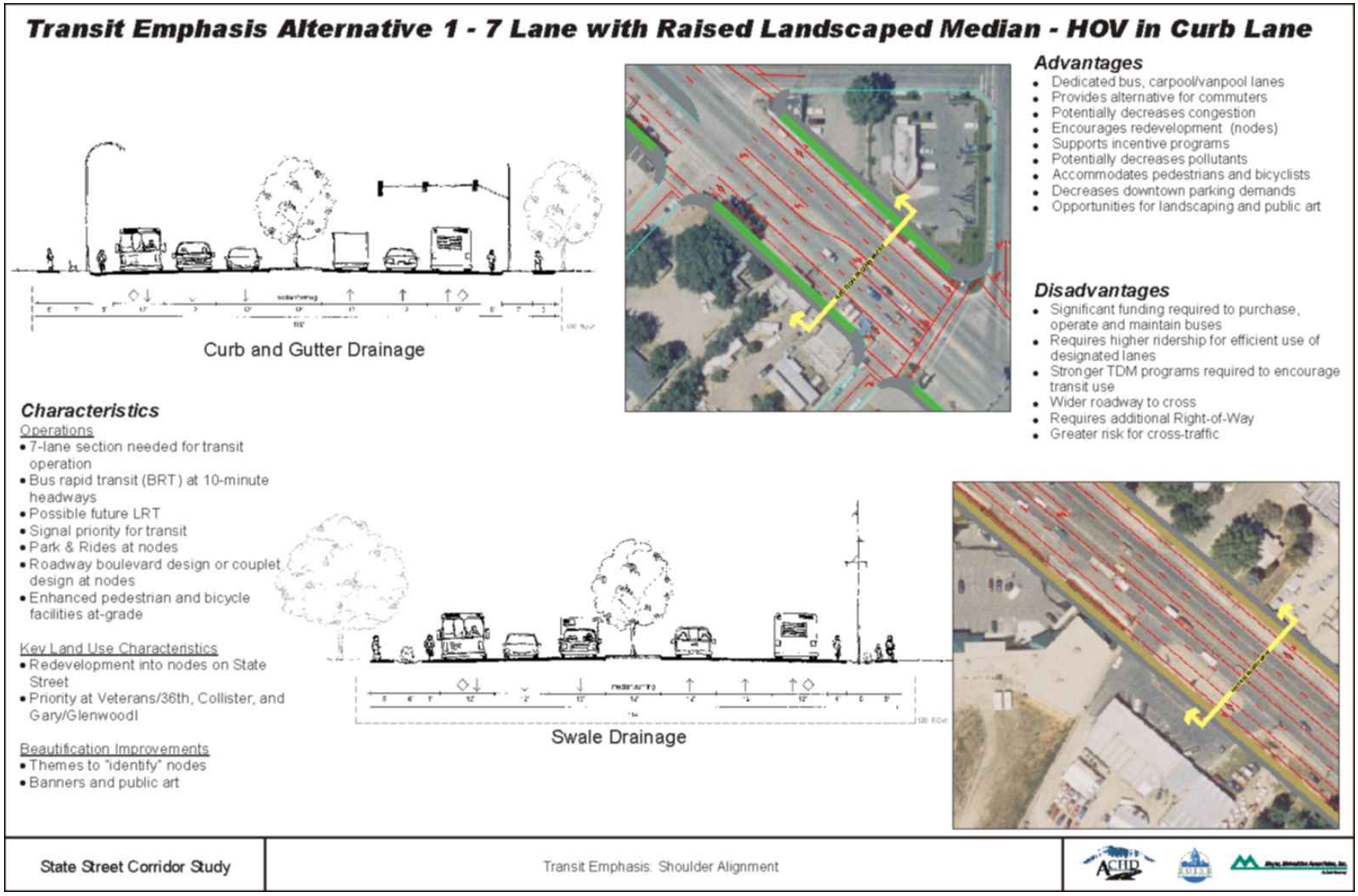


Figure 5. Transit Scenario – HOV in Curb Lane

Transit Emphasis Alternative 2 - 5 Lane with Raised Median - Transitway on North Side

Characteristics

Operations

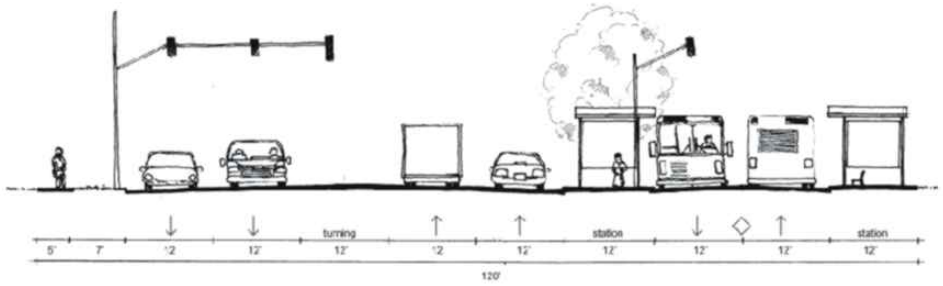
- 7-lane section needed for transit operation
- Bus rapid transit (BRT) at 10-minute headways
- Possible future LRT
- Signal priority for transit
- Park & Rides at nodes
- Roadway boulevard design or couplet design at nodes
- Enhanced pedestrian and bicycle facilities at-grade
- Bus stops separated on north side

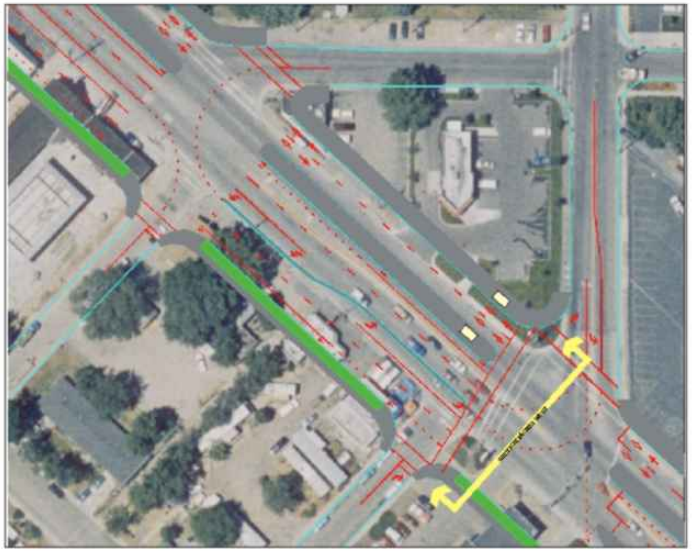
Key Land Use Characteristics

- Redevelopment into nodes on State Street
- Priority at Veterans/36th, Collister, and Gary/Glenwood

Beautification Improvements

- Themes to "identify" nodes
- Banners and public art





Advantages

- Dedicated bus lanes
- Provides alternative for commuters
- Potentially decreases congestion
- Encourages redevelopment (nodes)
- Supports incentive programs
- Potentially decreases pollutants
- Accommodates pedestrians and bicyclists
- Decreases downtown parking demands
- Opportunities for landscaping and public art
- Provides opportunity for future light rail option

Disadvantages

- Significant funding required to purchase, operate and maintain buses
- Requires higher ridership for efficient use of transitway lanes
- Extensive access control required
- Potential business relocation required on north side of State Street
- Stronger TDM programs required to encourage transit use
- Wider roadway to cross
- Requires additional Right-of-Way
- Greater risk for cross-traffic
- Transitway for buses only (no carpool/vanpool)
- Transitway complicates intersection design and operation
- Requires curb and gutter drainage throughout to fit within Right-of-Way of 120 feet

State Street Corridor Study	Transit Emphasis: Side Alignment	

Figure 6. Transit Scenario - North Side Transitway

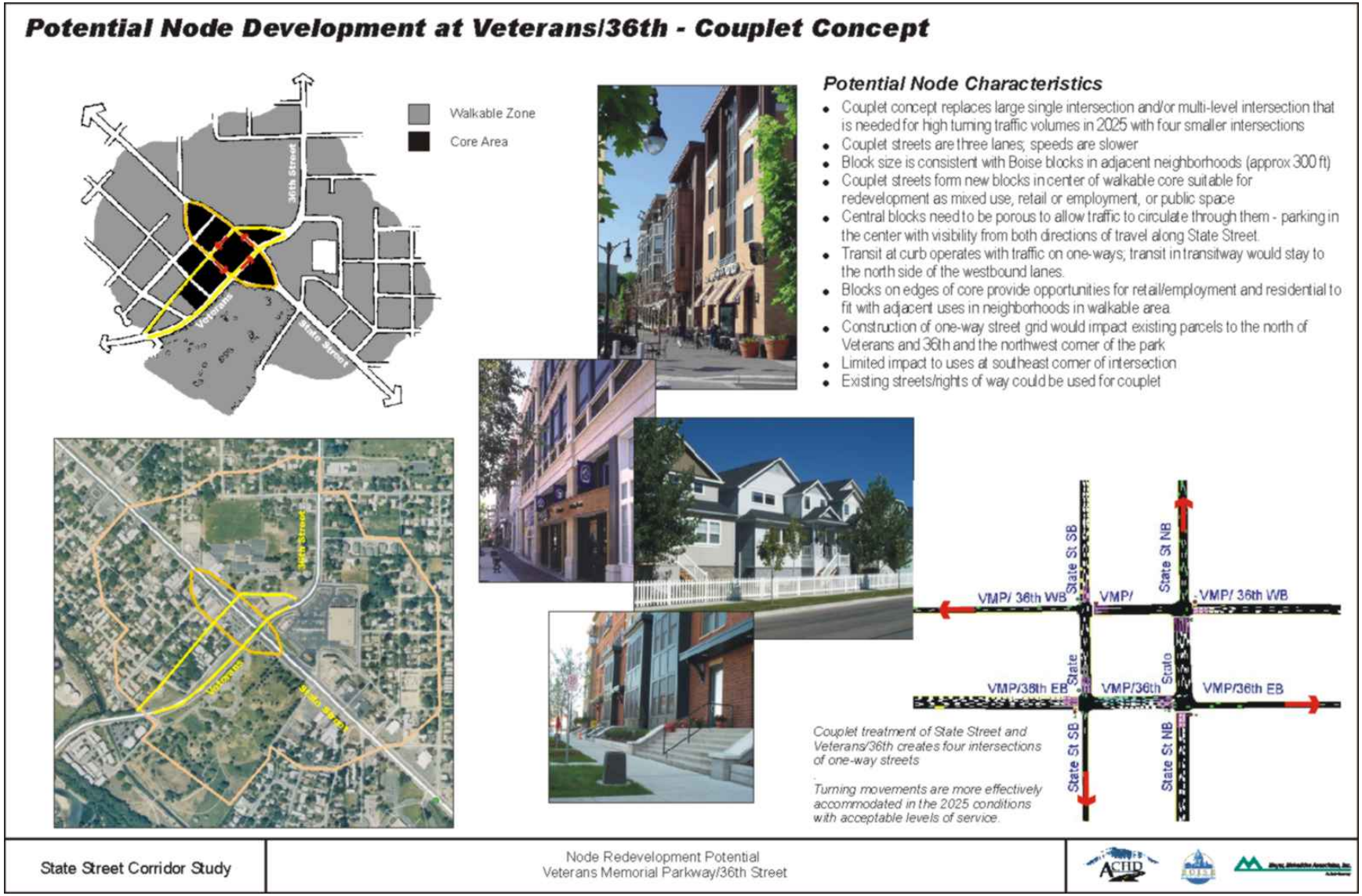


Figure 7. Veterans Memorial Parkway Node Concept

Figure 8. Collister Node Concept

Conventional Scenario

The conventional scenario was developed by focusing on conventional measures of traffic performance in the corridor and using those measures to determine the roadway cross section and intersection needs. The projected future volumes would require expanding the roadway to seven-lanes of mixed traffic. Figure 9 illustrates the expanded roadway for both the curb and gutter and swale drainage sections.

The seven-lane roadway has been assumed to incorporate a landscaped median, which would restrict left-turn access to intersections and a limited number of mid-block openings. The pattern of development in the corridor would remain oriented to draw from the linear movement of traffic in the corridor.

Right turn access would need to be reconfigured over portions of the corridor to reduce the number of driveways or access points to meet minimum access spacing for each zone of the corridor.

While the expanded roadway concept would accommodate future traffic at most intersections, several intersections would require dual left turn lanes and three locations that connect to river crossings would require interchange treatments to accommodate future traffic volumes. The interchange locations are Highway 55, Glenwood Street/Gary Lane, and Veteran's Memorial Parkway/36th Street. Figures 10 and 11 illustrate the potential treatments at Veteran's Memorial Parkway and Glenwood/Gary. The Highway 55 interchange is part of the Three Rivers Crossing project and will be designed as part of that project.

During the development of the conventional scenario, the use of reversible center lane(s) was evaluated to determine if the concept was suitable for use on State Street. Two concepts were evaluated that would have one or two center lanes that would be reversible/managed by time of day for inbound in the morning, outbound in the evening, and left-turn lanes in the off-peak. In one case separation would be by striping (broken double yellow) and lane control would be by overhead signage. In the other, separation would be by movable barrier, which would restrict left-turns off-peak to intersections (no mid-block turns). The reversible lane concept was considered since it would allow for a narrower roadway than the seven-lane conventional scenario.

Reversible lanes rely upon an unbalanced flow of traffic during peak periods, such that there is unused capacity in the off-peak direction. Evaluation of the directionality of traffic on State Street indicated that traffic flows are becoming more balanced and that this trend is extending into the future. The afternoon peak is expected to be nearly balanced at 55/45 by 2025, which diminishes the effectiveness of reversible lanes in mixed flow operations on the corridor. Under these conditions, the reversible lane concept would require as much, if not more, cross section width than was assumed for the conventional scenario and the reversible lane concepts were not carried forward.

High Capacity Scenario

The High Capacity scenario was developed to address the end-to-end commuter movement in the corridor and to separate the longer distance commuter trips from local traffic. This scenario uses an elevated center roadway to provide express operations for mixed traffic and carpools/vanpools/transit between the eastern and western ends of the corridor. By elevating the added lanes (and by diverting longer distance traffic to these lanes), the existing five-lane cross section on State Street can remain in place and serve the mixed traffic operations.

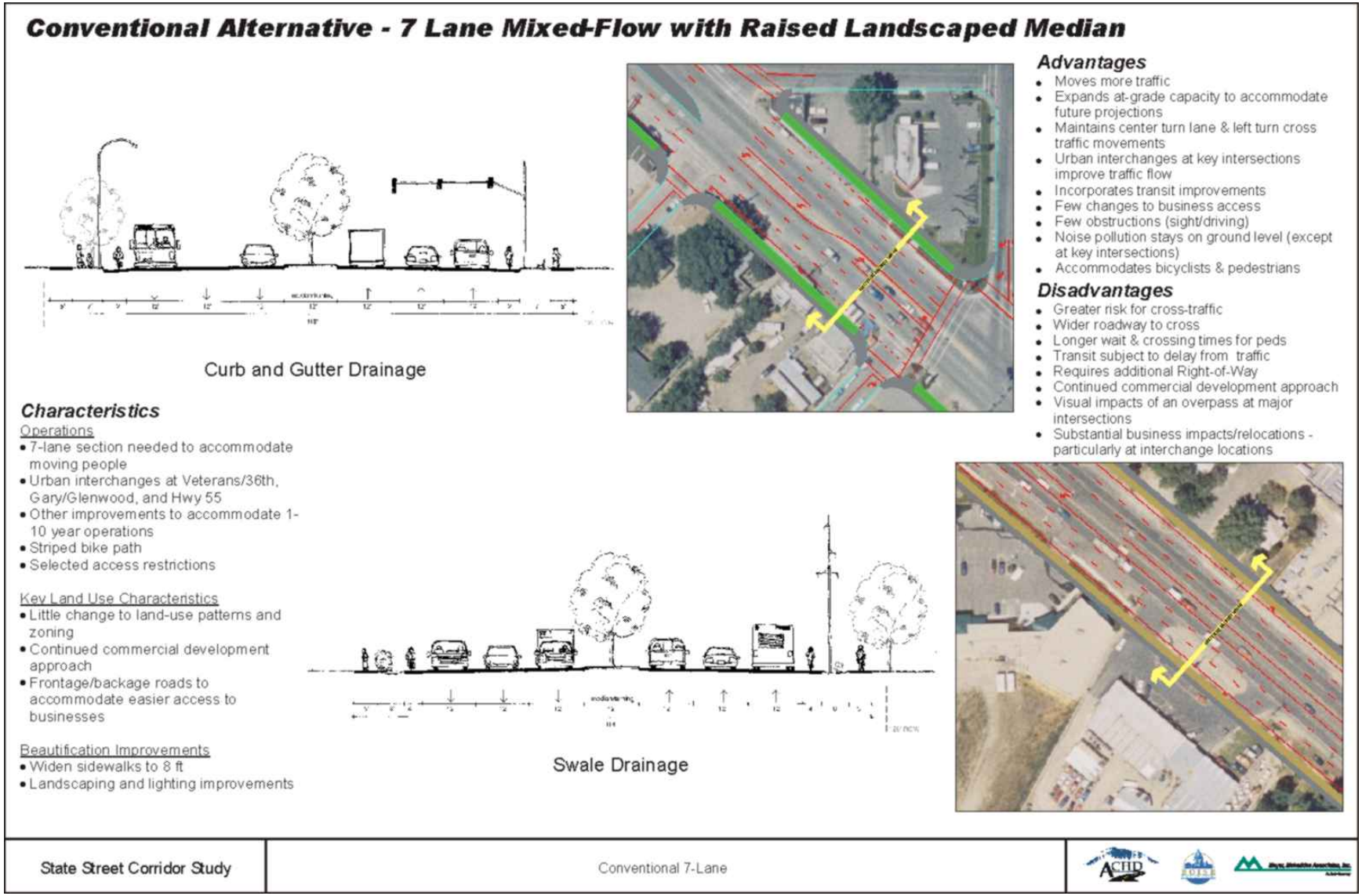
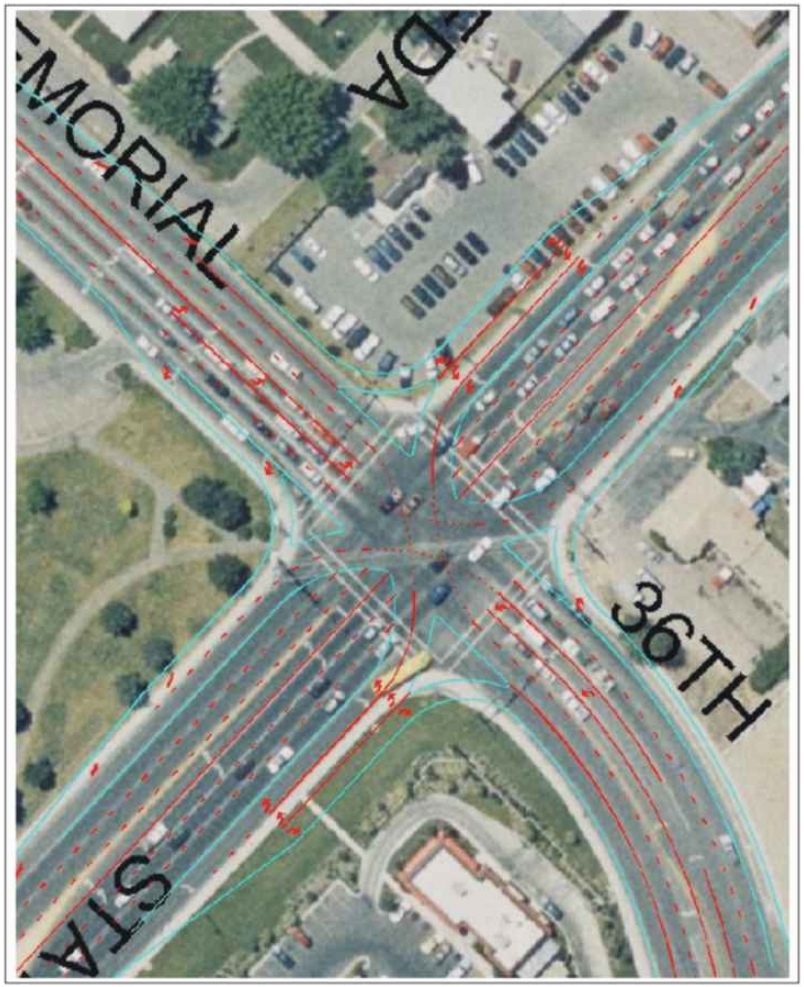


Figure 9. Conventional Scenario

Veterans Memorial Parkway Intersection Concept - Single Point Urban Interchange (SPUI)



Characteristics

- Pronounced "spooey", this urban interchange is a relatively new idea
- Resembles a slim classical diamond interchange as shown to the left over the aerial at VMP/State Street
- Appropriate for semi-urban settings with a footprint that potentially could fit on the conventional seven-lane section
- One traffic signal controls all crossing movements that come to a single point
- A proven successful urban interchange application around the country

Advantages

- The SPUI is a compact layout requiring less right-of-way acquisition at 36th Street and VMP
- A SPUI's ramps are placed close together to make them effectively part of the same intersection and impacting less adjacent businesses
- One traffic signal controls all crossing movements enabling concurrent opposing left turns, which increases capacity
- State Street through movements are uninhibited
- There are more free-flow vehicle movements accommodating VMP/36th and State Streets' high through and turning movements
- Urban interchange beautification, landscaping, and theme art potentially can enhance State Street's appearance

Disadvantages

- Complex intersection layouts and signal phases may be unfamiliar to drivers
- Multi-lane surface streets can lead to very large areas of uncontrolled pavement thus requiring the use of mid-block crossings or other similar facilities
- The SPUI urban interchange does not easily accommodate bicyclists and pedestrians because of uncontrolled areas on multi-lane streets
- Longer overpasses can require larger structures

State Street Corridor Study | Veterans Memorial Parkway/36th Street Intersection Concept

Figure 10. Veterans Memorial Parkway Interchange Concept

Gary/Glenwood Intersection Concept - Flyover Turn Lane

Characteristics

- Two lanes from northbound left to westbound on an elevated/flyover structure
- Standard striping and shoulder width provided
- Weaving sections at diverge and merge points
- Capacity increases for high left turn volume

Advantages

- Alleviates congestion at the Glenwood/Gary Lane intersection by accommodating high left turn volumes
- The flyover is a compact layout requiring less right-of-way acquisition than a full urban interchange
- Enables a free-flowing left movement from the Glenwood Street river crossing
- The flyover is of low impact to the surrounding businesses

Disadvantages

- The flyover will require some signal alterations
- Potentially will only accommodate congestion occurring from one movement
- The structure changes the overall appearance of the Glenwood/Gary Lane intersection
- Introduces complex weaving sections and lane patterns unfamiliar to drivers

State Street Corridor Study	Gary lane/Glenwood Street Intersection Concept	

Figure 11. Glenwood/Gary Interchange

The elevated structure would be three lanes with the center lane reserved for carpools, vanpools, and transit. The center lane would reverse direction during the morning and evening peaks. Figure 12 illustrates the elevated lanes of the high capacity scenario and shows them for the various drainage conditions in the corridor.

To evaluate the effectiveness of the high capacity scenario and to determine the number of lanes needed in the elevated section, travel patterns in the corridor were analyzed. Using forecast data from the COMPASS model, travel patterns at three points in the corridor were analyzed for origin/destination patterns. This analysis indicated that about 20-25% of the existing traffic and about 15-20% of the future traffic enters the corridor at one end and stays on it until the other end. In terms of peak hour volume, this represents about 670 vehicles per hour, whether existing or future. An additional 330 vehicles per hour would be expected to stay on the corridor until reaching the Collister Road area, which indicates that there is about one lane of demand (on an elevated roadway) in each direction between Collister Road and 23rd Street and about one-half lane of demand between 23rd Street and Glenwood Street/Gary Lane.

The above findings indicate that there is sufficient mixed traffic demand for a two-lane structure with a single interchange near Collister Road and touchdowns east of Glenwood Street/ Gary Lane and west of 23rd Street. This two-lane concept (one in each direction) was expanded to the three-lane concept used in the High Capacity scenario to accommodate transit and other high occupancy vehicles.

Diversion of longer-distance traffic to the elevated roadway allows the at-grade roadway to function adequately at five lanes and to free space for bicycles and pedestrians. Figure 12 shows these conditions.

The interchanges with the elevated lanes would require more width for ramps to and from the elevated lanes. In these areas, the roadway would resemble the seven-lane conventional scenario. The intersection of Highway 55 would require interchange treatment in this scenario as well as the other two.

Development patterns with the High Capacity scenario would remain similar to existing, but would intensify near interchanges with the elevated structure. The Collister Road interchange area would be the most likely to redevelop in response to the roadway changes. Figure 13 shows the interchange configuration at Collister Road for the High Capacity Scenario.

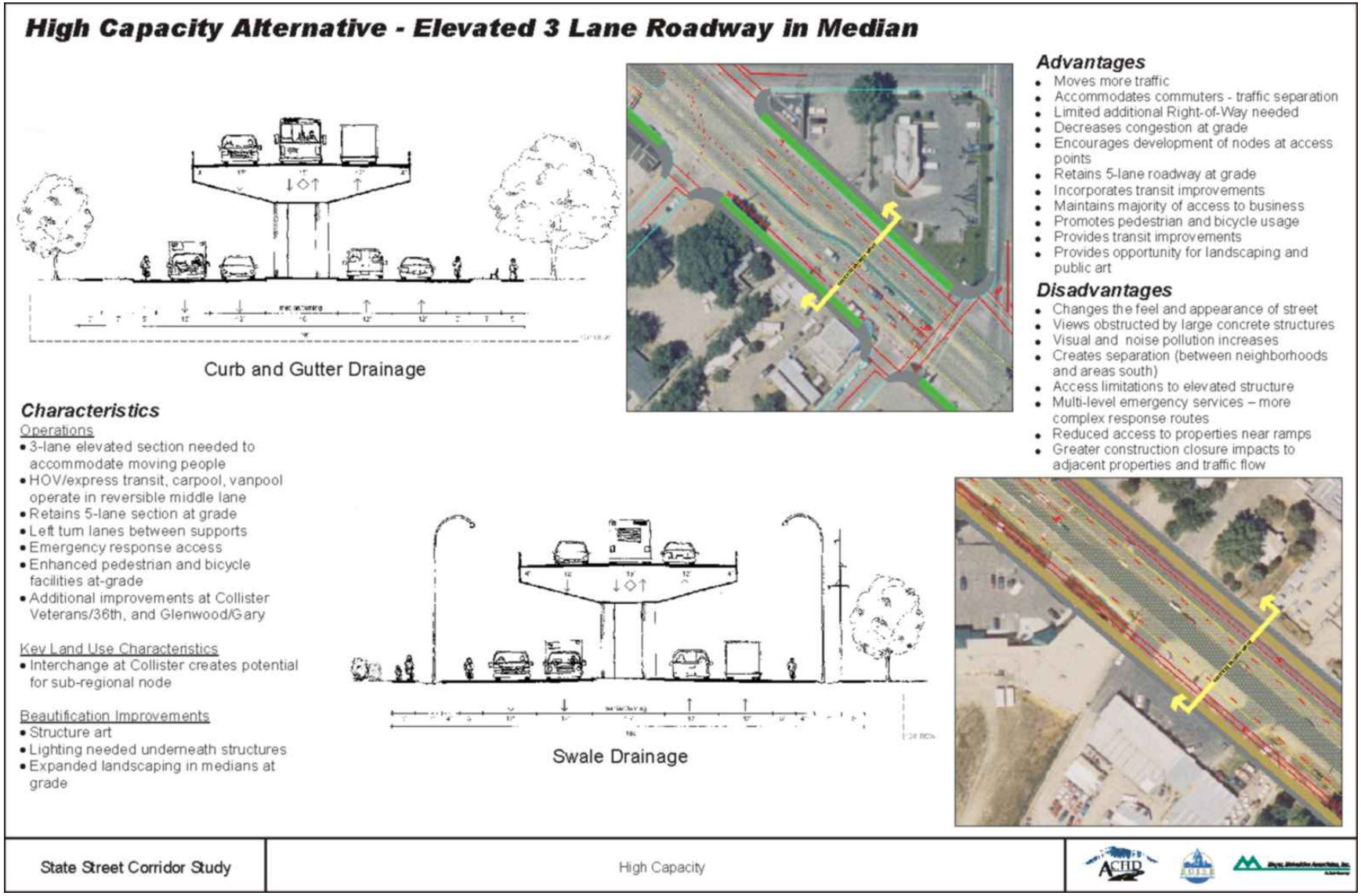


Figure 12. High Capacity Scenario

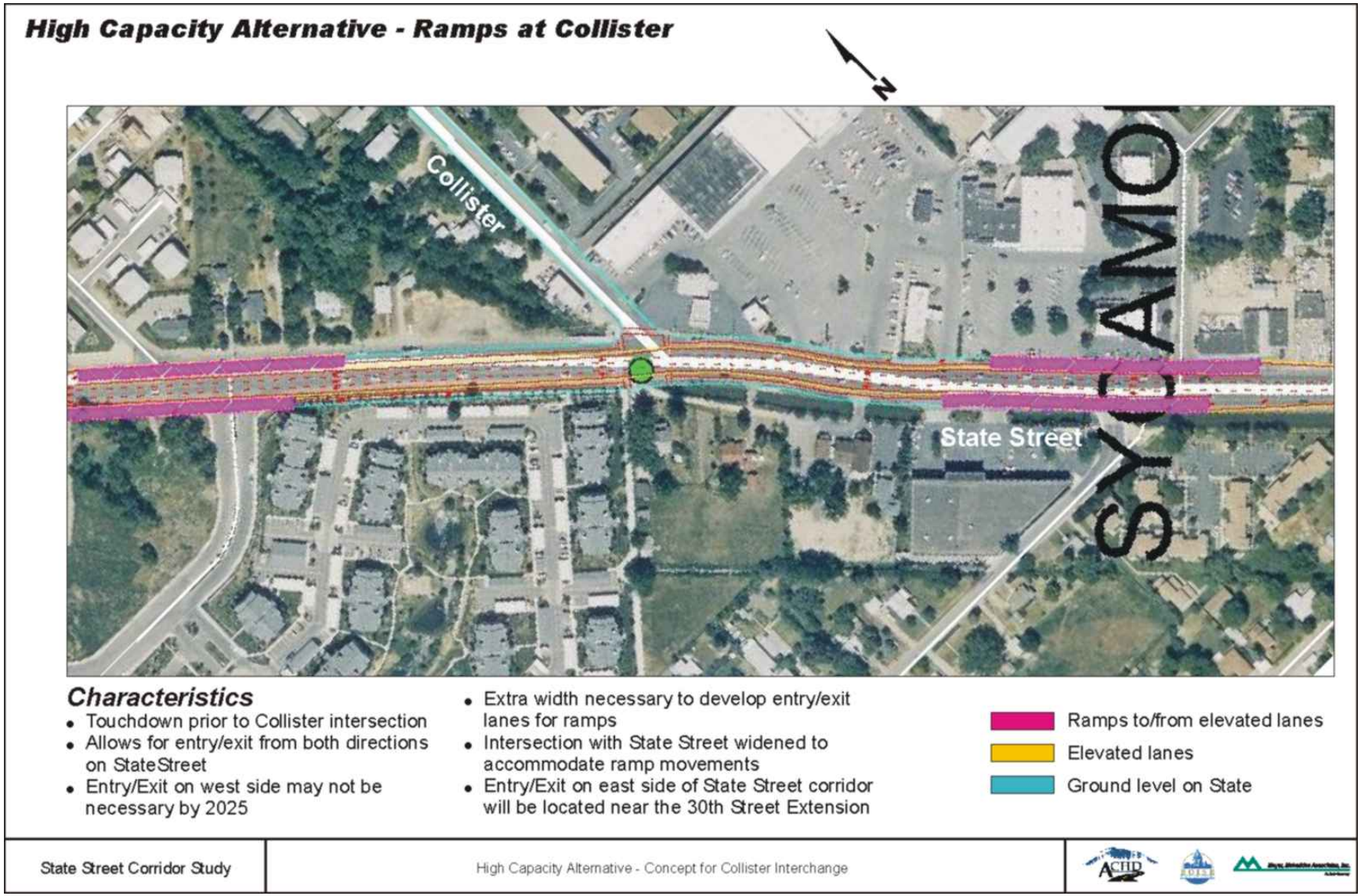


Figure 13. High Capacity Scenario – Collister Interchange Concept

PUBLIC INVOLVEMENT RESULTS

The State Street Corridor Study Team understood the need for public input and therefore implemented an extensive public involvement process. The purpose of the public involvement process was to: 1) demonstrate the ongoing progress of the study to the public (education); and 2) obtain meaningful input from the public to help guide the outcome of the study. A sincere attempt was made to balance the needs of the three public groups (neighborhoods, businesses, and commuters) and incorporate their input into the ongoing technical analysis. This chapter documents the process used and the individual results of the three large public meetings.

The detailed public involvement results are provided in Supporting Data Volume II, and the reader is encouraged to review that extensive information. The paragraphs contained in this chapter represent the public involvement process and results summary.

PUBLIC INVOLVEMENT PROCESS

As discussed and illustrated in the Introduction chapter, the State Street Corridor Study was conducted in essentially three stages. The strong public involvement component in each of those stages was an integral part of the study approach. Three large public meetings were held in association with the three project stages. Even though a strong public involvement process was planned from the very beginning of the project, the level of public involvement expanded as the project progressed. The increase in project budget allocated to public involvement, reflects this additional emphasis. Originally the project budget allocated to public involvement was a healthy 31% of the total budget. That eventually grew to approximately 45% of the project budget by the time the project was complete to accommodate the level of interest and the amount of information needed to properly educate and then obtain meaningful input. This included activities to involve both the interested and participating public agencies, as well as the general public. ACHD recognized the expanded emphasis required for the public involvement process and increased the overall project budget to cover the additional costs.

In addition to the three large public meetings, the study team dedicated resources to provide information to, and obtain input from, public agencies and other interested parties to involve them in the study process and outcomes of the project. This included the following activities:

- Updates and workshops to the ACHD Commissioners and Boise City Council
- Separate meetings with Garden City staff and Council
- Stakeholder meetings with Boise City Police and Fire Departments, Idaho Transportation Department, COMPASS, and ValleyRide
- Preparatory meetings with agency representatives prior to the public meetings
- Special forums to involve businesses in the corridor
- Special meetings with the Northside Neighborhoods Transportation Committee representatives
- Several project meetings dedicated to the planning and execution of the public meetings

The different perspectives of these groups and the input received throughout the project played an important role in guiding both the evolving project approach, and the outcomes of the study. The State Street Corridor Study Team believes the entire public involvement process was a tremendous success and significantly influenced the final results of the study. It also enhanced the relations between ACHD and other agencies, as well as the public. It improved the trust between these groups and will help to foster a stronger working relationship on future projects.

Each of the three public meetings had a specific purpose and was organized to support the ongoing technical work. A summary of the three public meetings, and relevant information, is shown in Table 4 as follows:

Table 4. Summary of Three Public Meetings

Meeting Attribute	Meeting #1	Meeting #2	Meeting #3
Date	January 16, 2003	May 1, 2003	September 30, 2003/ October 2, 2003
Timing	6:00 – 8:30pm	4:00 – 8:00pm	4:30 – 8:00pm (both days)
Location	Taft Elementary School	The Ada County Fairgrounds Small Animal Barn	Northgate Shopping Ctr./ Collister Shopping Ctr.
Purpose	Introduce project, obtain public's needs and vision	Define improvement options possible, obtain public's level of support for improvement options	Define near-term improvements and long-term scenarios, obtain level of support for scenarios
Type	Presentation and breakout group discussions	Open House. Introduction, plus 5 stations	Open House. Introduction, plus 6 stations
Attendance	Approx. 300	Approx. 150	Approx. 440 (total for both meetings)
Attendance mix	Primarily neighborhoods	Mostly neighborhoods, 17 businesses	55% neighborhoods, 32% commuters, 13% businesses
Information provided	Project purpose/back-ground, existing and future conditions	Information for 38 improvement options in 5 categories, evaluation criteria	Existing conditions, Near-term improvement options planned, details of 3 long-term scenarios
Input obtained	Through breakout discussions, list of needs and overall corridor vision. Several individual comments.	Through written forms, a 1-5 rating of support level for all 38 improvement options (by category). Evaluation criteria relative importance. Several comments.	Through written forms, a 1-5 rating of support level for the 3 scenarios. Identified likes and dislikes among the elements of each scenario. Several comments.
Incorporated into project next steps	Needs and vision directly supported development of improvement options	Level of support for each improvement option was to determine near-term options and package long-term scenarios	Level of support for each scenario assisted team to develop preferred scenario, implementation strategy, and recommendations

PUBLIC MEETING 1 RESULTS

The purpose of the first State Street Corridor Study public meeting was to introduce the public to the project and how they could participate that night and into the future. The Study Team displayed State Street information boards describing the current and future traffic conditions and safety issues within the corridor. ACHD made a 20-minute presentation about the project and the attendees then divided into 10 breakout groups, each with a leader, to express their needs and concerns. Additionally, the breakout groups focused on what their impressions were of the future vision of State Street.

This first meeting, with almost 300 attendees, was a success and met the purpose of conducting the meeting. The primary needs and concerns expressed by the public were:

1. Facilitate public transportation (Monorail, light rail, free buses, park and ride lots, HOV lanes for mass transit carpooling, commute tax for mass transit)

2. Improve signal coordination

3. Reinstate the foothills loop road concept

4. Widen Hill Road to relieve traffic from State Street

5. Provide alternative pathways for cyclist, pedestrians and access to businesses

6. Improve State Street before adding more traffic

Although these are not in any particular order, the theme of improving and expanding on public transportation as a way of moving people through the corridor, not cars, began early in the project. Incorporated with that thought was the need for improved pedestrian and bicycle facilities. The issues of the foothills loop road and using Hill Road to carry some of the traffic were out of scope of the State Street Study and needed to be addressed by the regional transportation planning process. COMPASS took on the assignment of educating the public about this distinction and staffed a booth at the next two public meetings to address the public's concern about this issue.

As expected, there were several ideas regarding a future vision for the State Street Corridor. The most common themes discovered during review of the input received resulted in the following summary statement:

> **Vision Summary**—Citizens would like a beautified corridor that allows pedestrians, cyclists and vehicles to move safely, has access to businesses and public transportation and traffic signals are coordinated. Citizens do not have agreement on desired roadway improvements and levels of access management. They do believe State Street is part of an entire transportation system and the system needs to be considered when making decisions.

The breakout group discussions were interesting and informative. They gave the Project Study Team the information necessary to complete the existing and future conditions analysis and generate a comprehensive list of potential improvement options. That list was evaluated and reviewed resulting in a final set of 38 different improvement options that directly addressed the needs and concerns expressed by the public during this first meeting.

PUBLIC MEETING 2 RESULTS

The original public involvement plan indicated that public meeting #2 would display various potential alternatives to improve State Street, and allow comment on those alternatives. It was decided by the Project Study Team to get the public's input on the different improvement options before

the options were packaged into specific alternatives. Although this was a departure from the original plan, it was agreed that this would be a more effective approach – and indeed it was.

The purpose of the second State Street public meeting was twofold:

1. To educate the public regarding the possible improvement options, and;

2. Then ascertain their level of support (or lack of support) for each one of these options.

The 38 improvement options were categorized into the following groups:

- **Roadway management**
  - Intelligent transportation systems
  - Employer assistance programs
  - Flex-time
  - Telecommuting
  - Signal spacing/signal consolidation
  - Driveway spacing/consolidation/parking
  - Medians/U-turns
  - Frontage/backage roads
- **Alternative transportation**
  - Park-n-ride lots
  - Pedestrian crossings
  - Sidewalk improvements
  - Bicycle network improvements
  - Van/car pools
  - Bus service operations – Frequency and routing
  - Bus pull outs/designated stops/shelters
  - Express bus/bus rapid transit
  - High occupancy lanes/toll lanes
  - Light rail transit
- **Intersection operations**
  - Signal improvements
  - Intersection configuration
  - Acceleration/deceleration lanes
  - Through-lane overpass
  - Roundabouts
  - Couplet intersection design
  - Urban interchange
- **Corridor appearance**
  - Landscaping/lighting/shoulder improvements
  - Corridor beautification
  - Neighborhood interconnectivity
  - Commercial redevelopment – on state
  - Commercial redevelopment – off state
  - Node development
- **Capacity enhancements**
  - Selected widening
  - Reversible lanes
  - 7-lane corridor
  - Boulevard concept
  - Elevated center lanes
  - Expressway (limited access)

Extensive displays with graphics and pictures were used to educate the public on each of the improvement options. They were then asked to complete a written form and indicate their level of support for each of the 38 options (1-do not support, 2-neutral, 3-support, 4-strongly support, and 5-top priority). The detailed findings from their responses can be found in the Supporting Data Volume II. A summary of the second public meeting findings includes:

- A majority of the meeting participants were serious and conscientious regarding their review of the material and input they provided.
- Of the five improvement option categories, most strongly supported were improvements to roadway management, alternate transportation, and corridor appearance. More controversial and receiving mixed-

to-negative responses were improvements to intersection operations and roadway capacity.

- Of the 38 individual potential improvement options, 14 were most strongly supported (received a "strongly support" or "top priority" scoring), 11 were moderately supported, 6 had mixed results (large numbers of respondents both "strongly support" and "do not support" the option, indicating no consensus among these improvements), and 5 were not supported (over 25% "do not support" AND under 25% "strongly support" or better). Table 5 (next page) shows the improvement options ranked from strongest support, regardless of category.
- In general, most of the near-term improvement options were supported and some of the longer-term, more costly options were either mixed or not supported.
- Received excellent input regarding the evaluation criteria ranking (see below). From this information, weighted criteria were established and adopted by the Project Study Team**.**

EVALUATION CRITERIA	Motorists	Businesses	Combined
Moving traffic	19%	21%	20%
Improving use of transit	16%	13%	16%
Improving use for bicycles	13%	9%	13%
Beautifying the corridor	11%	12%	11%
Supporting business activities	11%	21%	13%
Protecting Neighborhoods	19%	14%	18%
Cost	9%	10%	9%

- Comments received were both in support of and not in support of selected improvement options, but generally consistent with the rating received. Several comments commended ACHD for the meeting material and approach.

The Project Study Team was very pleased with the information it received from the public at this meeting. It was a lot of information for the public to absorb and react to, however it was evident that they took it very seriously (some people were there the entire 4 hours) and tried their best to provide thoughtful responses. This, on it own, lent credibility to the responses that were received.

The information received at the second meeting was used to package and define two important project outcomes:

- The improvement options that are near-term in nature and would be included with any and all scenarios. This included 20 improvements of the 38 possible options.
- Three different long-term scenarios that represented three separate possible visions of the future State Street: Transit, Conventional, and High Capacity.

Table 5. Level of support for all of the 38 improvement options, ranked by strongest support as provided by attendees at the second State Street Corridor Study public meeting

Improvement Options	Averages	Strongest Support	Do Not Support
Signal Improvements	4.14	74.4%	3.8%
Signal Spacing/Signal Consolidation	4.02	72.4%	5.7%
Pull-outs/Designated Stops/Bus Shelters	3.76	67.2%	10.2%
Bus Service Improvements - Frequency and Routing	3.74	60.2%	7.5%
Intelligent Transportation System Applications	3.65	58.4%	4.8%
Sidewalk Improvements	3.67	56.4%	5.3%
Acceleration/Deceleration Lanes	3.55	55.6%	7.9%
Express Bus/Bus Rapid Transit	3.47	54.1%	14.3%
Pedestrian Crossings	3.61	53.8%	4.5%
Driveway Spacing/Driveway Consolidation/Parking Strategies	3.37	53.2%	12.9%
Intersection Configuration	3.49	51.6%	7.0%
Park-N-Ride Lots	3.45	51.1%	9.8%
Bicycle Network Improvements	3.37	50.4%	14.5%
Node Development	3.29	50.0%	16.1%
Commercial Redevelopment - On State	3.23	48.8%	18.1%
Frontage/Backage Roads	3.27	48.4%	22.6%
Landscaping/Lighting/Shoulder Improvements	3.30	47.2%	14.4%
Light Rail Transit	3.09	45.7%	27.9%
Corridor Beautification	3.26	44.9%	15.7%
Neighborhood Interconnectivity	3.17	44.1%	18.9%
Van/Car Pools	3.30	42.6%	7.8%
Medians/U-turns	3.11	42.6%	16.4%
Transit Signal Priority/Queue Jumps	3.17	41.5%	15.4%
Through-lane Overpass	2.99	40.9%	29.9%
Employer Assistance Programs	3.12	39.4%	14.2%
Selected Widening	3.04	39.2%	20.8%
"Boulevard" Concept	3.02	38.5%	22.1%
Reversible Lanes	2.69	36.2%	36.9%
Flex-time	2.98	35.7%	14.3%
Commercial Redevelopment - Off State	3.07	34.9%	13.5%
High Occupancy Lanes/Toll Lanes	2.49	29.0%	41.0%
Telecommuting	2.87	28.5%	15.4%
Couplet Intersection Design	2.50	27.2%	34.4%
Urban Interchange	2.36	24.2%	42.5%
Expressway (Limited Access)	2.10	22.6%	55.6%
Roundabouts	2.33	22.5%	42.6%
7-Lane Corridor	2.16	19.7%	48.8%
Elevated Center Lanes	2.02	16.8%	54.4%

PUBLIC MEETING 3 RESULTS

The purpose of the third, and final, public meeting was to illustrate the near-term improvement options and three possible long-term scenarios, and obtain the public feedback on their level of support for each of the scenarios. In the previous meetings, attendance was primarily from the neighborhoods and in order for the Study Team to achieve one of its primary goals (to balance the needs of neighborhoods, businesses, and commuters), a more balanced attendance at the third meeting was needed. Several things were done to achieve more balance. First, two meeting dates were established at different locations in the corridor in the same week. They were located in empty storefronts on State Street to increase the ease of attending the meeting and reduce the walking distance required (experienced at the Fairgrounds). Second, the outreach was expanded to businesses. Third, the outreach was expanded to residents west of Glenwood Boulevard (Eagle, Star, etc.). Fourth, efforts were made to expand general advertising of the meeting through billboards and media coverage.

The attendance at the second meeting was half that of the first meeting, however, the attendance at the third meeting (both nights) was almost three times that of the second meeting. Moreover, the mix of attendees were significantly improved, with nearly a third having addresses west of Glenwood (representing commuters), and a total of 50 different businesses attending. The Project Study Team was pleased with the turnout and felt the input received more closely resembled the users of the entire State Street corridor. The total attendance at each of the two meeting nights was fairly close, with 232 and 211 individuals present at each of the meetings, respectively.

The attendees were asked to rate each overall scenario based on their level of support (1-do not support, 2-neutral, 3-support, 4-strongly support, and 5-top priority). Each scenario depicted a very different possible future vision for State Street. The responses were mixed. Within these scenarios, there was something to like and dislike for each individual and the input received reflected both strongly supportive and strongly against certain scenarios. The comments received generally reflected the numerical responses. The overall results were an average of the responses for each scenario, by which evening meeting they attended, as follows:

Scenario	September 30	October 2	Total
Transit	3.04	3.19	3.12
Conventional	2.52	2.40	2.46
High Capacity	2.14	1.84	1.98

The results were similar for both meetings. It is observed by these values that the Transit Scenario was 'supported', the Conventional Scenario was in the middle between 'support' and 'neutral', and the High Capacity Scenario was at the level of 'neutral'. It is interesting to note that although the Transit Scenario was clearly rated higher than the other two at both meetings, none of the scenarios were 'strongly supported'. In general it was also observed that the attendees of the October 2nd meeting, with a higher percentage of neighborhoods in attendance, rated the Transit Scenario slightly higher and the High Capacity Scenario slightly lower. The ratings for the Conventional Scenario were very close for both meetings.

The tallies and other important information that supports these findings is contained in the Supportive Data Volume II and the reader is encouraged to review the details presented there.

The attendees were also asked to mark what elements they liked and disliked about each scenario. Several of these elements were similar to the improvement options that were presented in the second meeting, and some were new and

specific to the scenario. Table 6 illustrates the elements (not tied to a specific scenario) and their average value of like and dislike, starting with the most liked element. In order to conduct this analysis, a "1" was assigned to the "liked" elements, a "-1" was assigned to the "disliked" elements, and if it was not marked or was marked in the middle, a "0" was assigned. The values in the table indicate the level of like (positive number) or dislike (negative number) for each element, on average. The closer the value is to "1" or "-1" indicates their increased level of like or dislike, respectively.

The majority of the elements were liked by the participants, on average. The most highly regarded elements included park n' ride lots, curb/gutter improvements, separated pedestrian/bike pathways, bus pull outs, rapid bus, and shoulder treatments with bike lanes. The two elements most disliked included the 3-lane elevated section and the bus stops in traffic flow.

In addition to receiving this input, the Northside Neighborhoods Transportation Committee submitted their report as input to the Project Study Team summarizing what was learned from the separate neighborhood meetings they sponsored. Their findings clearly supported the Transit Scenario, with its commercial redevelopment into nodes along the corridor. The full report is included in the Supportive Data Volume II.

The information gained during the third public meeting was used directly by the Project Study Team to determine the preferred scenario and develop the accompanying implementation strategy that defines a roadmap of how to get there.

Table 6. Level of "like' or "dislike" of the scenario elements at the third State Street Corridor Study public meeting

Scenario Elements	Value	Overall Assessment
Park & Rides	0.67	
Curb/Gutter/Storm drain facilities	0.60	
Separated pedestrian/bike pathways	0.57	
Bus pull-outs on north side of roadway	0.55	
Rapid bus	0.54	
Shoulder treatments with bike lanes	0.50	
Landscaped medians	0.43	
Node development on State Street	0.43	
Additional lanes dedicated to transit	0.39	
Widened sidewalks	0.39	**LIKED**
Pedestrian and bike facilities	0.38	
Level-of-access control	0.36	
Frontage/backage roads	0.35	
Level of access control	0.34	
"Themed" architecture at nodes	0.33	
Development nodes at access points	0.33	
Landscaping	0.30	
Additional Vehicle Lanes	0.30	
Maintain 5-lane section at grade	0.27	
Urban interchanges at intersections	0.27	
HOV in curb lane emphasis	0.26	
Light Rail option	0.26	
Lighting features	0.24	
Couplet intersection approach	0.23	
Transit on North side emphasis	0.18	
Level-of-access control	0.15	**Neutral**
Continued existing development pattern	-0.01	
Structural art on elevated supports	-0.08	
One elevated lane for transit/HOV	-0.18	
3-lane elevated section	-0.27	**DISLIKED**
Bus stops in traffic flow	-0.50	

Public Comments on Initial Draft

Release of the Final Report Initial Draft initiated an open public comment period for one month. During that time post cards were sent to everyone in the project database and the report was posted on the ACHD website dedicated to this project. The interest level remained high and the project team received 67 responses via email or fax.

The project team read each of the comments and compiled a summary of the responses regarding the support or lack of support for the Plan recommendations. Table 7 illustrates that summary.

Table 7. Summary of comments received from the public's review of the Final Report Initial Draft

Category	Value
Supported Plan as written	12 (18%)
Supported Plan with reservations	11 (16%)
Did not support the Plan	14 (21%)
Supported another scenario Conventional High Capacity	 5 (7%) 7 (10%)
Expressed other suggestions*	42 (63%)

**18 other suggestions only, 24 other suggestions with scenario preferences (noted in other categories)*

Most of the comments strongly stated their opinions. Approximately 34% supported the Plan recommendations (some with reservations), while 38% did not support of the Plan (some supported different scenarios as noted in the table). Most of the reservations expressed were either that the funding would never be secured to make it a reality, or the area would not be able to support the ridership necessary to allow transit operation of this magnitude.

Those that did not support the plan directed their comments specifically at their lack of support for the transit operation and the dedicated lanes for HOV. Most of those stating their support for another scenario also made mention of their lack of support for the transit scenario.

It is important to note that 63% of those who provided comments provided other suggestions. This value includes everyone that provided other suggestions for improvement, whether or not they expressed support or lack of support for a particular future scenario. There was a wide range of other suggestions. Most however, either supported another route other than State Street or represented a specific detail to improve mobility on State Street.

Several of the comments received commended the study process and appreciated the opportunity to provide comments prior to the completion of the final report.

Where possible, clarifications and refinements were incorporated into this Final Report based on the comments received.

PREFERRED SCENARIO AND IMPLEMENTATION STRATEGY

The preferred scenario represents the most appropriate vision for the future of State Street based upon identified needs, local policies and user and neighborhood preferences. It also includes the tailored near-term improvements that support the vision.

The State Street Corridor Team analyzed each of the three long-term scenarios. That analysis can be found in the Supporting Data Volume III. The outcome of the analysis and input from the public involvement process resulted in a preferred scenario – the Transit Scenario. This chapter summarizes the reason for this choice, some additional details of the transit scenario, and an implementation strategy to assist the multi-jurisdictional agencies to identify and begin the next steps.

SCENARIO EVALUATION

Evaluation of the three future scenarios started with an analysis of intersection operations for the 2025 P.M. peak hour. Building from the analysis used to determine the 0-10 year improvements, the design changes for the roadway for the Conventional Scenario were incorporated into the intersection analysis and tested to determine if they would be adequate to accommodate future traffic volumes at acceptable levels. The Transit and High Capacity Scenarios were then derived from the Conventional Scenario by adjusting traffic volume patterns (as noted in the previous chapter) to account for transit use and use of the elevated lanes. Table 8 shows the results of the operations analysis and indicates that all three scenarios produce acceptable operations at most intersections.

Important differences between the scenarios are evident in Table 8. Note that interchange or flyover designs are needed at three locations in the Conventional Scenario (Highway 55, Glenwood/Gary, and Veterans Memorial Parkway). The High Capacity and Transit Scenarios also require this level of design at Highway 55 and Glenwood/Gary, primarily as a result of the traffic crossing the Boise River that enters and exits State Street at these locations. A similar condition occurs at Veterans Memorial Parkway, but under the High Capacity Scenario, the elevated structure precludes developing an interchange design at this location and the intersection would be in unacceptable conditions during the 2025 P.M. peak hour. For the Transit Scenario, the intersection of Veterans Memorial Parkway is reconfigured into a couplet with State Street that would operate in acceptable conditions. However, under the Transit Scenario, the intersection of 26th/27th Streets would be in unacceptable conditions during the P.M. peak hour and is a result of the slightly lower amount of traffic diverted from the roadway under the Transit Scenario.

Table 8. 2025 PM Peak Hour Level of Service

Intersection	Conventional	High Capacity	Transit
Highway 55	Interchange	Interchange	Interchange
Horseshoe Bend Road	B	C	A
Walmart Entrance	A	D	C
Gary/ Glenwood Lane	Flyover	Flyover	Flyover
Pierce Park Road	A	C	C
Ellens Ferry Road	A	B	B
Plantation/ Bloom Street	A	B	B
Market Place	A	B	A
Collister Drive	B	D	D
Willow Lane	B	C	C
Veterans Memorial Parkway	Interchange	F	D
33rd Street	C	C	C
30th Street Ext.	C	C	B
28th Street	B	C	C
26th/27th Street	D	D	E
23rd Street	B	B	B
Elevated Segment			

While the ability of each scenario to move traffic at acceptable levels in the future is a key factor, it is but one of seven primary criteria that were developed to evaluate the scenarios. As those other criteria (see Table 9 below) were evaluated, the performance of the scenarios became better defined. The chart to the right shows the advantages and disadvantages of the three scenarios. In addition to the disadvantages noted for the Transit Scenario, the north side transitway scenario would require extensive access control and the potential re-location of businesses along the north side of State Street. Table 8 shows the overall evaluation of the scenarios and the cost to construct.

Table 9. Scenario Evaluation Results

Evaluation Criteria	Weight	Conventional Scenario	High Capacity Scenario	Transit Scenario
Moving traffic	20%	Medium(1)	High	Medium
Improving use of transit	16%	Low	Medium	High
Improving use of pedestrians and bicyclists	13%	Low	Medium	High
Beautifying the corridor	11%	Low	Low	Medium
Supporting business activity	13%	Medium	Medium	Medium
Protecting neighborhoods	18%	Low	Low	Medium
Cost(2)	9%	$63M	$51M	$57M(3)

Notes

(1) High, Meduim, Low indicate how well or poorly each scenario satisfies the criteria

(2) Capital cost for roadway only. Presumes average land cost for right-of-way. Excludes relocations costs, transit capital, operation and maintenance costs

(3) Represents transit on both sides of roadway. North side option is slightly higher

	Advantages	Disadvantages
Conventional Scenario		
	Moves more traffic	Greater cross-traffic risk
	Expands at-grade capacity to accommodate future projections	Wider roadway to cross
	Maintains center turn lane & left turn cross traffic movements	Longer wait and crossing times for pedestrians
	Urban interchanges at key intersections improve traffic flow	Transit subject to delay from traffic
	Transit stop improvements	Requires additional Right-of-Way
	Few changes to business access	Continued linear commercial development approach
	Few obstructions (sight/driving)	Visual impacts of an overpass at major intersections
	Accommodates pedestrians and bicyclists	Significant business impacts/re-locations at interchange locations
High Capacity Scenario		
	Moves more traffic	Changes the street's appearance
	Accommodates commuters	Views obstructed by structure
	Limited additional Right-of-Way	Visual and noise pollution increases
	Decreases congestion at grade	Creates separation between north and south sides of State Street
	Encourages development of nodes at access points	Access limitations to elevated lanes
	Improves express transit operation	Multi-level emergency medical services – complex response routes
	Maintains most business access	Reduced business access near ramps
	Promotes pedestrians and bicycles	Greater construction closure impacts to adjacent properties and traffic flow
	Transit stop improvements	
	Provides opportunity for landscaping and public art	
Transit Scenario		
	Dedicated bus and carpool lanes	Funding required to purchase, operate and maintain buses
	Provides alternatives for commuters	Requires higher ridership for efficient use of dedicated lanes
	Encourages redevelopment at nodes	Required additional right-of-way
	Supports incentive programs	Greater cross-traffic risk
	Potentially decreases pollutants	
	Accommodates pedestrians and bicyclists	
	Decreases parking demands downtown	
	Opportunities for landscaping and public art	

The Conventional Scenario and the Transit Scenario have similar construction costs, since both require about the same amount of new right-of-way. The Conventional Scenario is higher because of interchange costs. The High Capacity Scenario, while having higher structure costs, does not have as much right-of-way acquisition cost, since the base roadway would need only minimal widening to accept the elevated structure.

None of the scenarios include redevelopment costs (land acquisition, relocation) or transit capital or operating and maintenance costs. While each scenario has an increased amount of transit service, the Transit Scenario has a higher level of transit service than the other two.

When the scenarios are considered as a whole, the Transit Scenario shows a higher overall level of meeting the objectives of the strategic plan for the corridor. While not as high in terms of moving traffic as the other two, it is still acceptable and it performed better on the other criteria than do the other two scenarios.

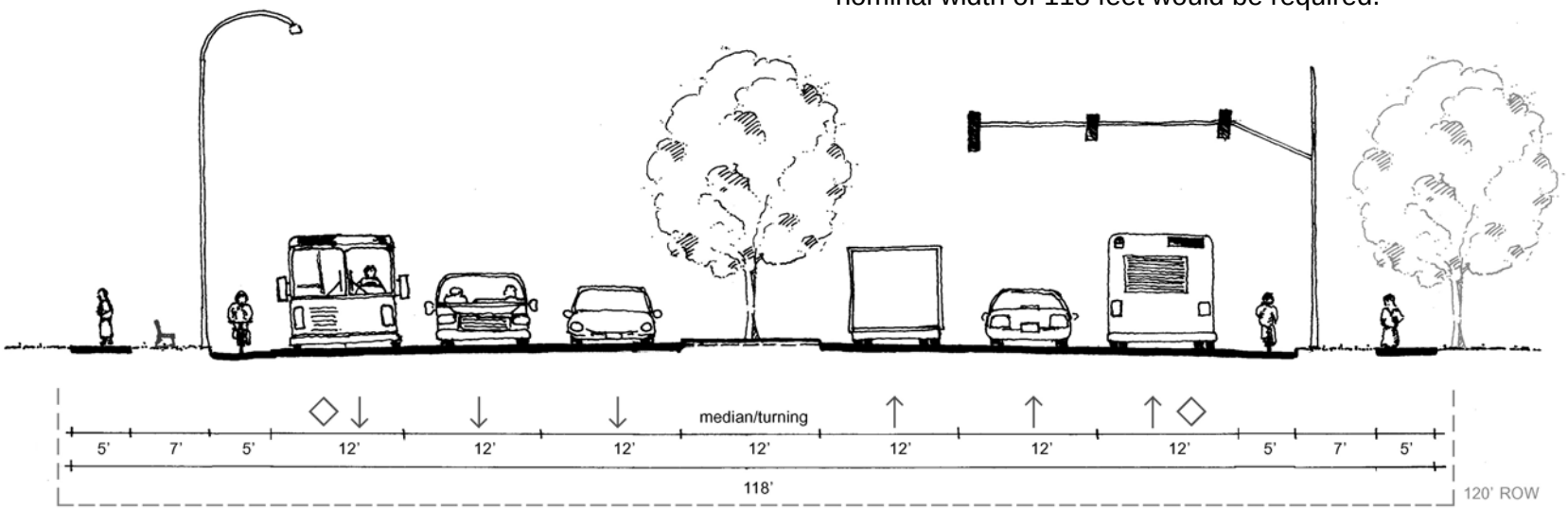
PREFERRED SCENARIO

When the above technical ratings are combined with the stated preferences from the public meetings (see the Public Involvement Chapter), the preferred scenario for the State Street Corridor is shown to be the Transit Scenario. Figure 14, on the next page, illustrates the characteristics of this scenario.

Further review of the findings indicates that the curb lanes are preferred over the transitway on the north side of the roadway. The transitway scenario limits access to the north side of State Street and requires a more substantial impact to business on that side of the roadway, while the scenario with transit in the curb lane does not.

Roadway Requirements

The roadway requirements for the preferred scenario are for a nominal seven-lane cross section that would consist of three travel lanes in each direction and a landscaped median that would be shared with left turn lanes. As shown below, a nominal width of 118 feet would be required.



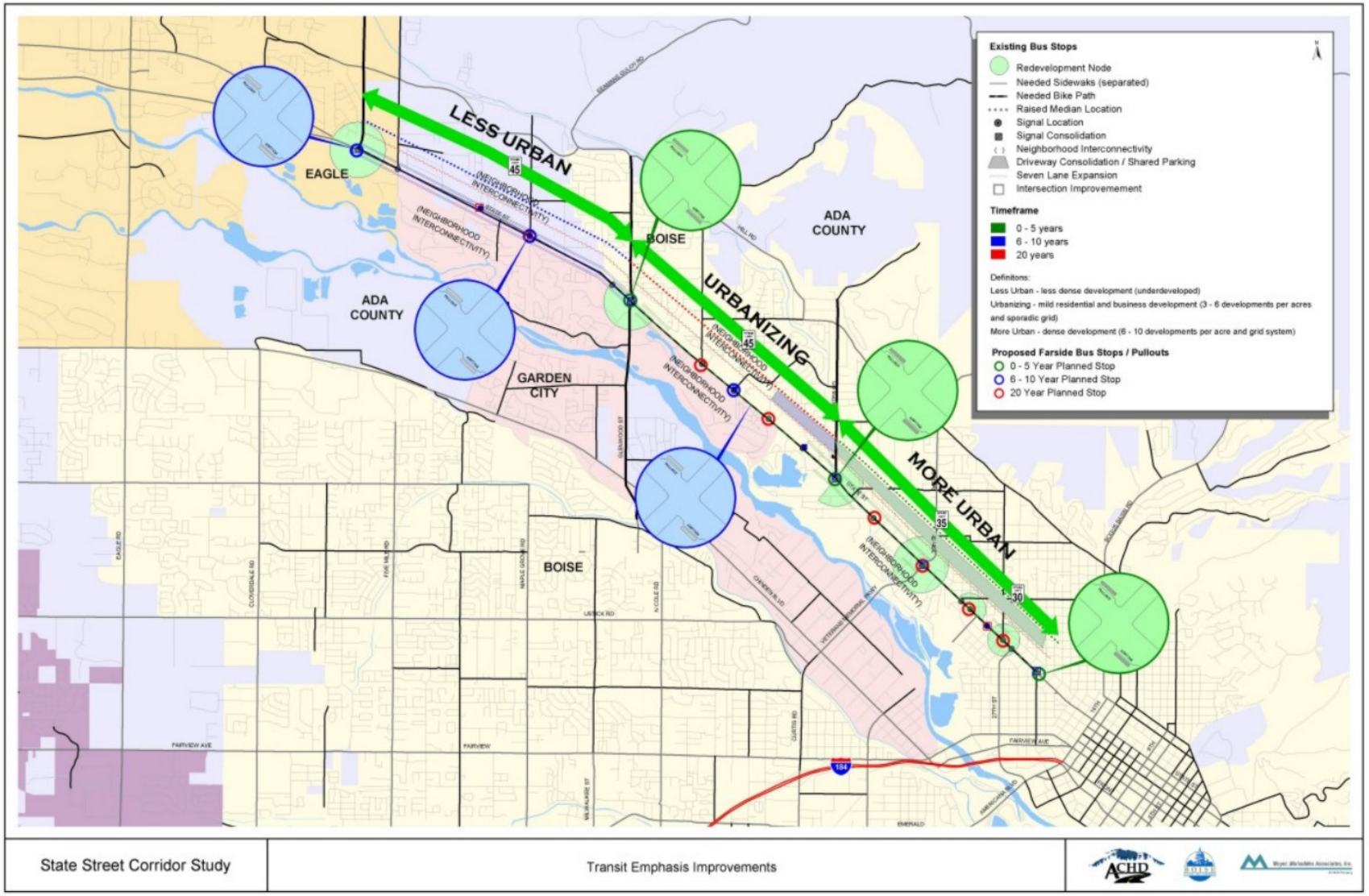


Figure 14. Preferred Scenario

The curb lanes in each direction would be designated for buses and other high occupancy vehicles (carpools and/or vanpools). To the extent practical, right turns would use the curb lanes and separate right-turn lanes would not be needed.

Single left-turn lanes would be adequate in the corridor except at intersections where higher type designs would be necessary. Highway 55 and Glenwood/Gary are two locations that require interchange and flyover ramp treatments to accommodate the future traffic projections. The intersection at Veterans Memorial Parkway would be reconfigured into a couplet and the roadway would divide into two one-way streets for about three to four blocks.

Target speeds would be 30 mph east of 28th Street, 35 mph from Collister Road to 28th Street, and 45 mph to the west. Bicycle lanes would be provided on the roadway and sidewalks would be provided along the roadway separated by a planting buffer.

Transit Operation

- 0-10 years – the current system of limited local routes would be gradually expanded to add fixed route local service on longer portions of State Street. Express bus service would be added to the corridor. Park and rides would be constructed along the western portion of the corridor and linked to major destinations to the east in the corridor and in Downtown.

- 10-20 years – rapid bus or BRT service (10-minute headway, stops limited to ½ mile, special shelters and signal priority) would be introduced starting at the eastern end of the corridor and extending westward. The express bus and local bus service would remain as overlays to the rapid bus routes. As the rapid bus extends westward, some express service may be absorbed into the rapid route.

Stop spacing for the BRT, as shown on Figure 14 (previous page) would be at approximate one-half mile spacing east of Pierce Park Road and would stretch out to one-mile and longer space to the west. Traffic signal priority and next bus information would be provided for the BRT service and unique shelters would identify the BRT stops. With transit in the curb lane, pullouts for buses (installed in the 0-10 year improvements) would not be needed and would be reclaimed into the widened roadway.

Commercial Development - Nodes

The preferred scenario provides the opportunity to shape corridor land use and urban form to encourage transit use by redeveloping the linear commercial character of the street into a series of mixed-use nodes. Concentrating development in mixed-use nodes along the corridor both intensifies the level activity and expands the range of activities present on State Street. The higher level of activity makes the nodes more attractive to retailers and provides the framework for higher density residential adjacent to the corridor and to transit.

The development patterns at the nodes (See Figure 14) should be guided by block size and access spacing that is keyed to the target speed recommendations for the corridor zones. Doing so will provide for a range of urban form in the corridor as block size increases to the west that will allow for a variety of existing and future land uses to be accommodated along the length of the corridor. Specific recommendations for the development nodes follow.

28th Street

- Redevelopment opportunity would be on the blocks adjacent to State Street, centered on the transit stop
- Development type should be mixed use with residential emphasis
- Connectivity should take advantage of the existing City of Boise block pattern with streets approximately every 300 feet or one-eighth mile.
- St. Mary's and Lowell School would remain as focal points for redevelopment
- Density along State Street would taper down to existing neighborhood level away from State Street
- The walkable area would extend into existing neighborhoods and park and ride would be minimized

33rd Street

- The Idaho Transportation Department represents a large employment base for transit riders and the transit stop at this location would be oriented to serving the ITD campus
- Redevelopment potential at this stop is on the north side of State Street as the ITD frontage is unlikely to redevelop
- Realignment of Rose Street may provide the potential for one block on the south of State Street to be redeveloped as the smaller street grid is extended
- Redevelopment would be mixed use with a residential emphasis

Veterans Memorial Parkway/36th Street

- A couplet concept with four smaller intersections replaces the large single intersection and/or multi-level intersection that is needed for high turning traffic volumes in 2025
- Couplet streets are three lanes and target speeds are slower at 30 mph
- Block size is consistent with Boise blocks in adjacent neighborhoods (approx 300 ft)
- The couplet streets form new blocks in the center of a walkable core suitable for redevelopment as mixed use, retail or employment, or public space
- The central blocks need to be porous to allow traffic to circulate through them with parking in the center with visibility from both directions of travel along State Street.
- Transit at the curb operates with traffic on one-way streets.
- Blocks on edges of core provide opportunities for retail/ employment and residential to fit with adjacent uses in neighborhoods in the walkable area.
- Construction of the one-way street grid would impact existing parcels to the north of Veterans Memorial Parkway and 36th Street and the northwest corner of the park
- Limited impact is expected to uses at the southeast corner of the existing intersection
- Existing streets/rights of way could be used for the couplet to minimize new takings

Collister Road

- Redevelopment focuses on Collister Center and moves the node east of the intersection with State Street to form a perpendicular "Main Street" type of retail center for the central block on the north side of State Street.
- Residential mixed use could encircle the retail core and extend across State Street
- Transit would stop at the intersection or could move east to the central block
- The canal would be covered in this concept
- The blocks south of State Street would link to adjacent residential areas to the south to provide connectivity for pedestrians to State Street.
- The core area straddles State Street and the walkable area would extend into adjacent neighborhoods

Glenwood Street/Gary Lane

- A walkable scale at this node requires redevelopment of retail along State Street and Glenwood Street with a pattern of smaller blocks
- Emphasis on State Street would be for a landscaped community boulevard
- Flyover intersection treatments would be inconsistent with the concept for walkable development from a visual and aesthetic standpoint and would continue to be evaluated for alternatives that might include treatments like a ring road or a couplet.
- Inclusion of sufficient park and ride space at this location is important - shared parking concepts should be used to minimize overall parking

IMPLEMENTATION STRATEGY

The preferred scenario for State Street incorporates a multi-modal vision for the corridor—one that includes a progressively increasing level of transit service on State Street, a change in development patterns to take advantage of enhanced transit in the corridor, and an expanded roadway to accommodate both transit and regional traffic increases. ACHD, the cities, and ValleyRide each control a part of the implementation process for State Street. To a certain extent, the actions required of each agency with regard to planning and programming can occur independently of one another. The vision for the corridor, however, would benefit overall from a strategy of aligning the agency actions into a coordinated framework.

A strategy of coordinated actions is recommended for several reasons. The multi-modal aspects of the preferred scenario dictate that improvements to the roadway and to transit occur in a logical sequence. However, planning and programming such regional transportation projects is complicated by the differing timelines and performance criteria that are used to fund implementation of highway and transit projects. Aligning the delivery of such projects within one corridor requires coordination since a competitive process is used year-by-year to allocate transportation funds in the region.

Outside of this process, the three cities control land use and zoning at the local level, but are constrained by the economics of market demand in the corridor and, to a certain extent, by the ability of the corridor to absorb increased traffic volumes. While it could occur independently, the strategy of redeveloping portions of the corridor into transit nodes benefits from the visible enhancement of transit service and from the reconstruction of the roadway to support transit and movement in the corridor.

Accordingly, the framework recommended for implementation identifies parallel activities by the agencies and integrates them into a time sequence that allows for an orderly progression of both redevelopment concepts and transportation projects in the State Street Corridor. The recommended framework is also designed to consider what roadway improvements and urban form changes are necessary to maintain reasonable levels of mobility if the projected levels of transit service take longer than expected to be realized.

Three main activity groups are recommended—one for the physical changes to the roadway that belongs to ACHD, a second for changes to land use and urban form that belongs to the cities, and a third for changes to transit that belongs to ValleyRide. Integration of these three groups requires approaching the highway planning process from the standpoint of aligning roadway decisions with urban design and land use decisions to create a corridor that is organized to be supported by enhanced transit service, as those service enhancements occur over time.

This approach takes the shorter decision-making processes for roadway and urban form and aligns them with the longer timeframe for expanding transit service in the corridor. Inherent within this approach is the need to identify areas in the corridor that are critical interfaces among the activity groups and to make decisions about them early in the process.

The recommended implementation strategy has the following elements:

1. The three cities put in place development guidelines at each transit node that will accomplish the level of density and the urban form necessary to support transit. The cities may also need to engage in redevelopment activities at the nodes to accomplish the desired form.
2. Parallel to the cities, ACHD implements the interim 0-10 year improvements and programs the longer term widening of the roadway to accommodate transit, bicycles and pedestrians, which will require agreement with the Cities on the form and character of the roadway at each node.
3. Parallel to both ACHD and the Cities, ValleyRide increases transit service in the corridor to achieve the levels envisioned in this strategic plan.

This approach provides ACHD with a strategy that develops over time and works toward a common roadway cross-section for the future that accommodates both the dedicated transit lanes as well as separate traffic lanes. The 0-10 year roadway improvements are designed to be additive and to be incorporated into the preferred scenario cross-section with minimal replacement (i.e., the shorter term changes do not need to be replaced by the longer term changes, but rather act as a foundation to build upon). The preferred scenario's seven-lane cross-section provides exclusive lanes for higher-capacity transit operations. Alternatively, the outside lanes on State Street could be managed as HOV lanes providing the District with a high level of flexibility to meet future mobility needs in the State Street Corridor.

From the three cities' standpoints, the implementation strategy provides the opportunity to shape corridor land use and urban form to encourage transit use through the development of mixed-use nodes that both concentrate activity and expand the range of activities present on State Street. Such development patterns are consistent with current zoning in the City of Boise along State Street. Garden City and the City of Eagle will need to address how such a development pattern might shape the future of State Street, particularly in developing areas.

The framework for the corridor identifies three levels of urbanization in the corridor and recommends future design speeds to allow for a consistent level of urbanization in each section of the corridor. Matching development patterns at nodes to the design speed recommendations provides for a range of urban form in the corridor that allows for a variety of existing and future land uses to be accommodated along the length of the corridor.

To effectively coordinate the implementation, it is recommended that a working group of staff from ACHD, the three cities, and ValleyRide be established. The group would maintain a timeline or schedule for critical project areas and would coordinate interagency planning and programming for the corridor. It is likely that memoranda of agreement (MOAs) and/or joint powers agreements may be needed to establish the operating rules for the group and to define the areas of cooperation among the agencies.

The affected agencies are committed to the success of the transit scenario. However, they recognize that several near-term elements of this scenario need to be achieved in order to fully realize the benefits of this new concept. The progress of these achievements will be monitored carefully to determine the timing and scale of any large infrastructure investments by the agencies.

Following are descriptions of the three parallel implementation strategies.

Roadway

The strategy for the roadway involves three elements:

1. Focusing on critical locations where changes are needed in the short term that will influence the long-term design for the corridor. These areas need a coordinated approach and joint decision-making by ACHD, the Cities of Boise, Garden City and Eagle and ValleyRide.
   - Veterans Memorial Parkway/36th
     - Roadway and redevelopment steps needed to achieve a couplet at this intersection
     - Priority location given timing of needed improvements
   - Collister
     - Redevelopment needed to address changing commercial environment
     - Priority location for modifying urban form in corridor
   - Glenwood/Gary
     - This node is a hybrid that needs more definition to determine if higher type roadway improvements should be integrated with changes in development.
     - Second priority
   - Highway 55
     - Intersection changes are tied to new river crossing
     - Lower priority given linkage to other project
2. A time sequence for the operations improvements that are substantially the same in both the short term and in the long term design for the corridor. The individual elements are listed in the Supporting Data Volume III.
   - 0-5 year improvements
   - 5-10 year improvements
     - Identify elements that are consistent with the long-term design
     - Identify elements that will be replaced by the long-term design
3. Staging of the long-term design of the corridor to provide for a seven-lane roadway. Design Guidelines for each corridor segment are in the Supporting Data Volume III.
   - Stepwise approach to corridor widening to accommodate multi-modal vision
   - Design guidelines for the three zones in the corridor
   - Form and character of the roadway for each node
     - Intersection treatment
     - Transit stops/shelters
     - Pedestrian crossings
     - Speed limit/design speed
     - Cross-section/lane widths
     - Median treatment
     - Sidewalks/Transit stops
     - Bicycle accommodation
     - Intersections
     - Access policy
     - Streetscaping guidelines
4. Develop performance measures to determine timing and types of improvements to guide the roadway improvement process. Elements to be considered include transit performance, travel time, air quality, vehicle capacity, pedestrian and bicycle mobility, and land use/urban form.

Land Use/Urban Form

The land use/urban form elements rely upon using a Specific Plan approach to each node area and connecting those nodes with a corridor overlay. Elements to address include:

1. Establish boundaries for Specific Plan areas and for the corridor overlay zone
   - Concentrate on critical nodes first
2. Identify circulation networks associated with the influence area of each node
   - Address connectivity requirements at each
   - Address walkability requirements at each
3. Conduct economic market analyses for the nodes
4. Identify redevelopment potential/mix for the nodes
   - Identify potential land uses for areas between nodes
5. Review zoning tools for each node and for the corridor
   - Recommend zoning changes for Specific Plans and for the Corridor Overlay
6. Develop design guidelines for the nodes
7. Identify catalyst sites for redevelopment
8. Formulate a redevelopment strategy for each node
   - Roles/responsibilities for departments/agencies
   - Role for neighborhoods/non-profits
   - Funding strategy

An example of a work program for one node is included in the Supporting Data Volume III.

Transit

The transit elements are designed to fit within the planning process that ValleyRide is currently undertaking to develop a six-year regional operating plan and a 20-year regional transit plan. The transit elements to address through the current planning process include:

1. 0-5 year elements
   - Expansion of regional Travel Demand Management activities
     - Employer Incentive Programs
     - Carpool/vanpool formation
   - Expansion of local service on State Street
   - Integration of route planning with ridesharing activities to use vanpools as indicators for express service
   - Implementation of limited stop express service that overlays the local service
   - Develop park and ride lots to support express bus use
2. 5-10 year elements
   - Continue to overlay and enhance transit service
     - Increase frequency and coverage
     - Use larger buses
     - Implement technology and equipment improvements to make service more reliable
   - Develop circulator/feeder routes that connect to the express service stops and to identified nodes
3. Post-10 year elements
   - Merge local/express service into rapid bus/BRT service with stops at identified nodes

Figure 15 illustrates the implementation strategy as a flow chart.

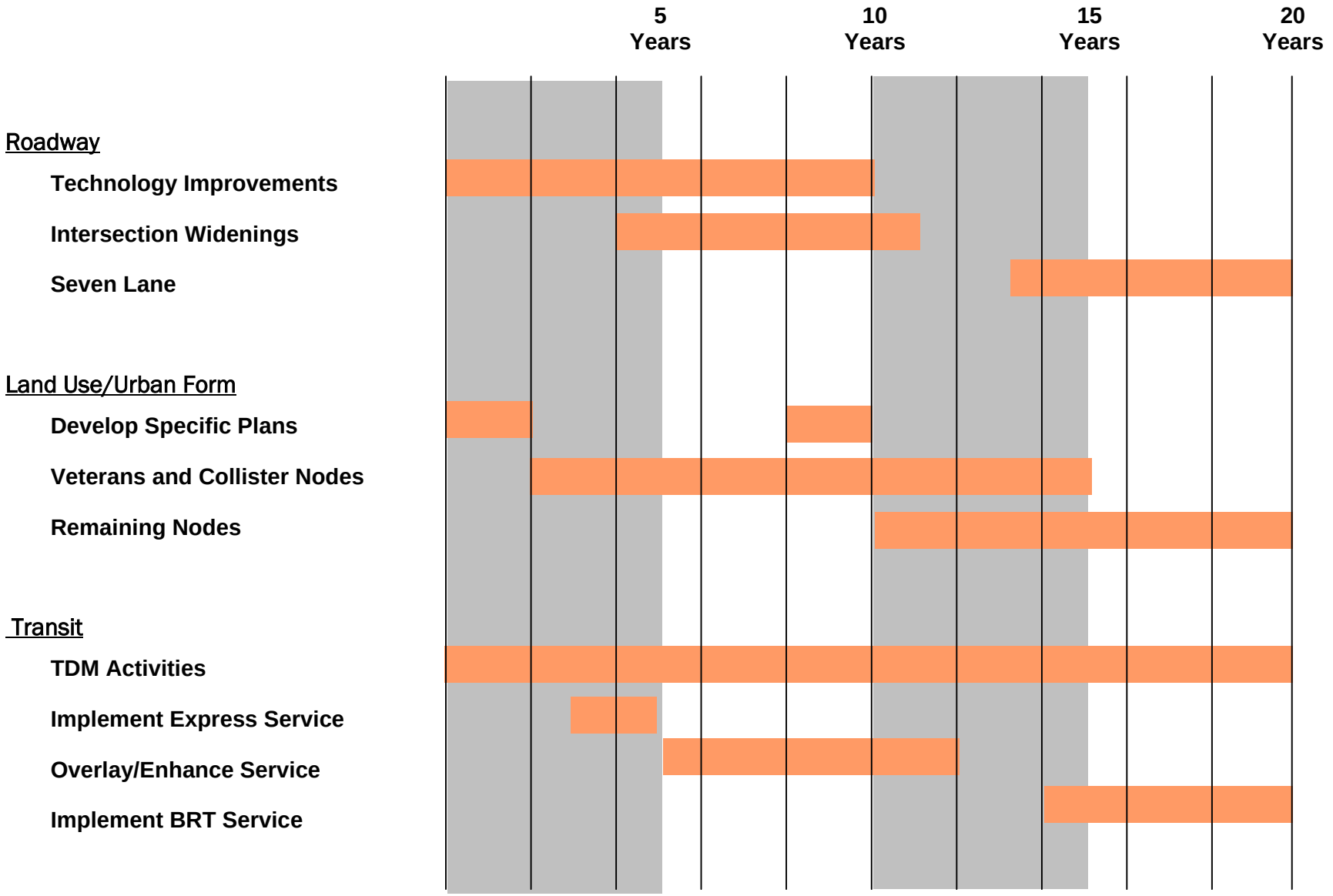


Figure 15. Flowchart for Implementation

RECOMMENDATIONS

The purpose of this study has been to develop a strategic plan for guiding improvements to the State Street corridor. The preceding chapters of this report have discussed the process through which that plan was developed and have presented an implementation strategy for achieving a multi-modal vision for the corridor. The outcomes of the State Street Corridor Study have culminated in a series of recommendations. Those recommendations are summarized below.

ADOPT THE TRANSIT SCENARIO AS THE LONG-TERM VISION FOR STATE STREET

The transit scenario holds the most promise and flexibility for the State Street corridor into the future. Although requiring widening of the roadway, it provides the most opportunity to take advantage of more efficient mode use and more efficient development patterns along the corridor. It is recommended that ACHD and the cities adopt the seven-lane curb-running transit scenario as the long-term vision for State Street.

FORM A JOINT WORKING GROUP TO IMPLEMENT THE VISION

Implementing the vision for State Street requires effective and on-going coordination among the public agencies that have jurisdiction in the corridor. It is recommended that a working group of staff from ACHD, the three cities, and ValleyRide be established via memoranda of agreement (MOAs) and/or joint powers agreements that establish the operating rules for the group and define the areas of cooperation among the agencies. A critical first step for the group will be to develop performance measures to determine timing and types of improvements to guide the improvement process.

FOCUS IMPLEMENTATION ON THE REDEVELOPMENT NODES

Redevelopment at the nodes identified in this study provides the opportunity to shape corridor land use and urban form to encourage more efficient mode use by emphasizing the place-making function of the street. The relationship of the street and place is most prominent at these locations and should be used to define the design parameters for the long-term widening of the roadway. It is recommended that the nodes at Veterans Memorial Parkway and Collister Road be addressed first and that the work program for individual nodes (see Table 10) be used as a model for this process.

PURSUE AN INCREMENTAL APPROACH TO ROADWAY IMPROVEMENTS

One of the key findings of this report is that the widening of State Street, while necessary in the long-term, is not required immediately, as there are a variety of management and technology improvements that can be made to maintain acceptable operating conditions over the next ten years. It is recommended that ACHD implement the 0-5 and 5-10 year improvements through their annual capital project process, starting with the technology improvements as shown in Table 11. It is also recommended that the agencies monitor performance of the corridor for mobility, transit use, and change in urban form to determine timing and types of improvements to guide the roadway improvement process.

ACCELERATE TRANSIT PLANNING FOR STATE STREET

The current plan development activities underway by ValleyRide are defining a transit system for the Treasure Valley. It is recommended that the State Street corridor transit recommendations be incorporated into the regional transit plan and identified for implementation at the soonest feasible date.

Table 10. Land Use/Urban Form Work Program for Individual Nodes[1]

A. Pre-Project Tasks
   1. Define boundaries of study area based on State Street Corridor Study recommendations and concept plans.
   2. Identify affected jurisdictions and agencies within and adjacent to the node:
      a. Boise City
      b. ACHD
      c. ITD
      d. Boise Neighborhood Housing Services
      e. Boise School District
   3. Identify property owners/tenants within node.
   4. Identify property owners/tenants/associations/businesses in a defined radius around the node.
      a. Veteran's Park Neighborhood Association
      b. Sunset Neighborhood Association
      c. Collister Neighborhood Association
      d. North End Neighborhood Association
   5. Conduct public meetings to announce the project and solicit input.
   6. Adopt MOU for coordinated planning process with affected jurisdictions
      a. Adopt project area boundaries
      b. Establish goals for the project and the expected outcome
      c. Agree on levels of participation and responsibility by the jurisdictions
      d. Identify the anticipated regulatory tools that will be considered to be acceptable to all parties (i.e. eminent domain, tax increment financing, specific plans, public/private partnerships, etc)
      e. Establish funding sources for the study and for implementation
      f. Agree on a public involvement process
   7. Retain planning consultant.
   8. Initiate formation of tax-increment financing area (redevelopment area) if appropriate to agreement.

B. Initial Study Tasks
   1. Inventory existing conditions within the node:
      a. Acreage, zoning, lotting pattern, parcel configuration, ownership
      b. Uses – type and amount
      c. Value of improvements
      d. Condition of improvements
      e. Viability of existing businesses
      f. Location and condition of utilities, roadways, irrigation
      g. Location and condition of alternate mode facilities
      h. Presence of hazards or contamination
      i. Presence of environmentally sensitive uses.
      j. Presence of Historic Structures
   2. Inventory existing conditions within radius around node:
      a. Acreage, zoning, uses, density
      b. Demographics
         (1) Total Population
         (2) Age, income, family size
      c. Roadway connectivity and condition
      d. Presence and condition of alternate mode facilities
   3. Prepare preliminary engineering study for recommended roadway improvements to determine general roadway alignment and the properties, roadways, utilities, etc. that will be directly impacted.
   4. Retain consultant to conduct Market Analysis to determine:
      a. Existing and projected demand for commercial services by type and amount within the node
      b. Existing and projected demand for housing by type and price within the node.
      c. Demand for housing and retail services between nodes

C. General Plan Development Tasks
   1. Prepare TOD Land Use Concept Plan:
      a. Range of uses by type and density
      b. General distribution of uses
      c. General design concepts
      d. Connections to existing neighborhoods
      e. Couplet design concepts
      f. Transit facilities
   2. Work with citizen's committee to review and refine plan concepts.
   3. Work with Valley Ride regarding planning of transit facilities
   4. Adopt Comprehensive Plan amendments formally adopting the land use/transportation concept for the study area, through a public hearing process.

D. Specific Plan Development Tasks
   1. Using TOD Concept Plan as the basis, prepare detailed zoning and roadway plans for the node.
      a. Prepare final engineering plan for the Couplet including the precise alignment, dimensions, intersection design, access controls, pedestrian facilities, landscaping, transit facilities, etc.
      b. Prepare zoning standards for new development within the node including type of uses, distribution of uses, density, height, setbacks, parking requirements, fencing requirements, etc.
      c. Prepare design guidelines for new development including building materials, architecture, plant palettes, etc. (Optional)
      d. Prepare utility plans
      e. Prepare phasing plan
   2. Adopt zoning onto property through public hearing process

E. Implementation Tasks
   1. Program roadway construction in TIP
   2. Identify key sites within the node for initial development.
   3. Acquire property through eminent domain where necessary.
   4. Form public private partnerships with landowners of key sites for development.
   5. Activate development incentives if appropriate (fee waivers, public installation of streetscape/ROW improvements, etc.)

Notes
1. Veterans Memorial Parkway/36th Street/State Street Couplet TOD used as an example

Table 11. Five and Ten-Year Roadway Improvements

Five-Year Improvements

Technology Applications

- Optimize signal timing at individual intersections
- Interconnect signals and implement Traffic Management Center links
- Implement signal coordination timing plans

Intersections[1]

Hwy 55
- Southbound approach add one through lane

Horseshoe Bend Road
- Consider and evaluate split phasing
- Southbound approach free-running right turn lane with acceleration lane to convert to a 3-lane widening project extending to Hwy 55
- Correction of southbound approach lane arrows

Wal-Mart
- Southeast bound acceleration lane
- Plan for 4th leg approach development

Glenwood/Gary Lane
- Additional through lane on the northbound leg approach, add receiving lane
- Dual left-turn lanes (add 1 left-turn lane) on the southbound approach to the intersection with sufficient stacking distance
- Free-running right-turn lane on the southbound approach with a deceleration and acceleration lane

Pierce Park
- Dual left turn lane on the southeast bound leg approach with adequate stacking distance
- Deceleration lane on northwest bound leg approach

26th/27th Street
- Provide free-running right with an acceleration/merge lane on the southeast bound leg approach
- Provide a dual left and 1 shared though/right-lane on the northbound leg approach

Collister Drive (subject to change by the node planning process)
- Provide a dual left turn lane on the southbound leg approach
- Provide an exclusive right-turn lane

Veterans Memorial Parkway/36th Street (subject to change by the node planning process)
- Provide a free-running right-turn lane on the northeast bound leg approach with adequate deceleration and acceleration lanes

Ten-Year Improvements

Technology Applications

- Install video detection cameras at signalized intersection
- Install permanent counting stations at Glenwood/Gary Lane, Veterans Memorial Parkway/36th Street, and 23rd Street
- Install dynamic message signs strategically located to provide roadway condition information. Locations may include Glenwood/Gary Lane, Collister Drive, Veterans Memorial Parkway/36th Street, and 26th/27th Street (major access points and river crossings

Intersections[1]

Wal-Mart
- Add southbound approach – Gary Lane Extension, which includes an exclusive left turn lane, a shared through/right lane, and one receiving lane.
- Add northbound exclusive right lane to facilitate right turns on red
- Add westbound exclusive right turn lane and deceleration lane

Glenwood/Gary Lane
- Add westbound 3rd through lane and an adjacent 3rd receiving lane

Pierce Park
- Provide a southbound exclusive, free running right turn lane

30th/Rose Street Extension
- Realign the south leg of Rose to align with 32nd Street, provide dual left turn lanes and a shared through/right lane
- Provide exclusive right, through, and left turn lanes on the southbound leg
- Provide three through lanes, an exclusive left turn lane, and an exclusive right turn lane with proper deceleration lengths for eastbound and westbound approaches

26th/27th Street
- Add an exclusive right turn lane on the northbound approach

Veterans Memorial Parkway/36th Street (subject to change by the node planning process)
- Provide a free-running right-turn lane, dual left turn lanes and dual through lanes for the southwestbound approach with adequate deceleration and acceleration lanes
- Add a 3rd through lane and additional receiving lane on the westbound approach with an exclusive right turn lane with proper deceleration and acceleration lengths

[1] Intersection diagrams that show the specifics of the above changes with regard to lane patterns and storage lengths are in Supporting Data Volume III