



Yakima Urban
Area
Transportation
Plan Update,
2025

Adopted by Yakima City
Council
December 12, 2006



Prepared by the City of Yakima Dept. of
Public Works, 2301 Fruitvale Blvd, Yakima,
WA 98902

With Technical Support and In Association of:



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Yakima Urban Area Transportation Plan, 2025

- Acknowledgements -

The “Yakima Urban Area Transportation Plan, 2025” was adopted by the Yakima City Council on December 12, 2006 with Ordinance 2006-62. The progress of this document was a cooperative effort of the citizens of Yakima, the City of Yakima Public Works Department and with technical support and analysis by Kittelson & Associates. This document is a component of the Yakima Urban Area Comprehensive Plan.

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ORDINANCE NO. 2006-62

AN ORDINANCE adopting by reference amendments to the Yakima Urban Area Comprehensive Plan, including amendments to the Introduction, Action Plan Implementation, Land Use, Housing, Transportation, Parks and Recreation, Natural Environment and Capital Facilities; and establishing an effective date for said amendments.

WHEREAS, the City of Yakima is required to plan under the Washington State Growth Management Act (GMA) RCW 36.70A.040; and

WHEREAS, every seven years, RCW 36.70A.130(1) requires the City of Yakima to take legislative action to review and, if needed, revise its comprehensive plan and development regulations, including its policies and regulations designating and conserving natural resource lands and designating and protecting critical areas to comply with the requirements in Chapter 36.70A RCW; and

WHEREAS, on March 18, 2003 the Yakima City Council adopted Chapter 16.10 of the Yakima Municipal Code (Ordinance Number 2003-19) which became effective on April 20, 2003, establishing a public participation program in accordance with RCW 36.70A.130(2) that identified procedures and schedules for reviewing and revising the Yakima Urban Area Comprehensive Plan and City development regulations; and

WHEREAS, the City of Yakima has followed its adopted public participation program, including multiple opportunities for public participation in the 2006 Comprehensive Plan update, said opportunities being set forth, attached hereto and incorporated herein by this reference as Exhibit "A"; and

WHEREAS, the City of Yakima has sought community-wide participation in the Comprehensive Plan update by providing specific notice of opportunities for comment to the Yakama Indian Nation, WSDOT, WSDOT Aviation, the Yakima Valley Business Times, the Yakima Herald Republic, the EPA, NOAA Fisheries, the Yakima School District, Washington State Department of Agriculture, Department of Health, US Fish and Wildlife, local neighborhood associations, and posting on the Yakima website, to name a few but non-inclusive notice recipients; and

WHEREAS, the City of Yakima has established goals and policies within this Plan to facilitate and guide the development of new regulations, based upon "Best Available Science" (as defined within the GMA), to protect and enhance both critical areas and shorelines, as required; and

WHEREAS, the City of Yakima Public Works Department with technical support from Kittelson & Associates, a professional Traffic Engineering firm, drafted a significant update of the mandatory transportation elements of the Comprehensive Plan, as required by RCW 36.70A.070 (6)B known as the Yakima Urban Area Transportation Plan 2025 and subsequently summarized into Chapter VI of the Yakima Urban Area Comprehensive Plan; and

WHEREAS, the Yakima Urban Area Transportation Plan 2025 includes significant detail related to the Concurrency requirements of GMA as well as the requirements of consistency with land use assumptions for estimating future traffic impacts and a financing plan. These findings and policies have been summarized into Chapter VI of the Yakima Urban Area Comprehensive Plan; and

WHEREAS, notice of all amendments to the Yakima Urban Area Comprehensive Plan and development regulations adopted to fulfill the requirements of RCW 36.70A.130 was sent to the Washington State Department of Community, Trade and Economic Development (CTED) and received by CTED on September 14, 2006, that

date being at least sixty days before the amendments were adopted by the Yakima City Council, in accordance with RCW 36.70A.106; and

WHEREAS, the City of Yakima conducted an Integrated GMA/ Washington State Environmental Review (SEPA) process for public comment on the Yakima Urban Area Comprehensive Plan Update, including the Transportation Plan Update, as provided in WAC 197-11-235. The Final EIS regarding this review was issued on November 15, 2006; and

WHEREAS, under the schedule established in RCW 36.70A.130(4), the deadline for the City of Yakima to comply with the update required by RCW 36.70A.130(1) is December 1, 2006; and

WHEREAS, City planning staff and Reid Shockey, a professional planning consultant hired by the City of Yakima to assist with the Yakima Urban Area Comprehensive Plan update, prepared an analysis of the comprehensive plan and development regulations currently in effect in the City of Yakima to determine the Plan's consistency with the requirements of Chapter 36.70A RCW. Based upon this analysis, planning staff and Mr. Shockey prepared proposed revisions deemed necessary to comply with Chapter 36.70A RCW. At public hearings held on June 26, 2006 and July 10, 2006, planning staff and Mr. Shockey forwarded their analysis and proposed revisions to the Yakima Urban Area Regional Planning Commission; and

WHEREAS, the Yakima Urban Area Regional Planning Commission reviewed the analysis and proposed revisions prepared by City planning staff and Mr. Shockey and then held a public hearing on September 25, 2006 to receive public comments on the analysis and proposed revisions. Based upon its review of the requirements of Chapter 36.70A RCW, the analysis and proposed revisions prepared by planning staff and Mr. Shockey, and the public comments received, the Yakima Urban Area Regional Planning Commission modified the analysis and proposed revisions to more fully comply with Chapter 36.70A RCW and then forwarded their recommendations to the Yakima City Council on October 3, 2006; and

WHEREAS, the Yakima City Council held a public hearing on November 14, 2006, said meeting being continued on December 5, 2006, to receive public comments on the Regional Planning Commission's recommended findings on review and proposed revisions to the Yakima Urban Area Comprehensive Plan; and

WHEREAS, based upon its review of the requirements of Chapter 36.70A RCW, the analysis and proposed revisions prepared by planning staff and Mr. Shockey, the recommended findings on review and proposed revisions forwarded by the Regional Planning Commission, and the public comments received, the Yakima City Council finds and declares that the review and needed revisions have been prepared in conformance with applicable law, including Chapter 36.70A RCW, Chapter 43.21C RCW, and the process set forth in Chapter 16.10 of the City of Yakima Municipal Code for the provision of public participation and adoption of Comprehensive Plan amendments; and

WHEREAS, based upon its review of the requirements of Chapter 36.70A RCW, the analysis and proposed revisions prepared by planning staff and Mr. Shockey, the recommended findings on review and proposed revisions forwarded by the Regional Planning Commission, and the public comments received, the Yakima City Council modified the analysis and proposed revisions to more fully comply with Chapter 36.70A RCW and hereby finds and declares that the City of Yakima's comprehensive plan and development regulations, as revised by this ordinance, comply with the requirements of Chapter 36.70A RCW; Now, Therefore,

BE IT ORDAINED BY THE CITY OF YAKIMA:

Section 1. Findings, Analysis and Conclusions. After reviewing the record and considering the arguments in the record and at public meetings, the Yakima City Council hereby adopts the findings, analysis and conclusions contained in Exhibit "B", attached hereto and incorporated herein by this reference as if set forth in full.

Section 2. Revision of Sections of Existing Comprehensive Plan Elements. The Yakima Urban Area Comprehensive Plan is hereby amended to revise the text, policies and related provisions of the specific sections of the Plan set forth in Exhibit "C", attached hereto and incorporated herein by this reference, as if set forth in full.

Section 3. Amendments to Replace and Supercede. The Yakima Urban Area Comprehensive Plan is amended by these changes and all such changes are intended to replace and supercede all sections of the Comprehensive Plan that are or may be inconsistent with the amendments contained herein. Amendments to the Comprehensive Plan include related documents adopted by reference such as the Yakima Urban Area Transportation Plan 2025, the Yakima Parks Plan 2006-2011, Water Master Plan, 2004; Sewerage Comprehensive Plan, 2005 and other documents listed in Appendix D of the Yakima Urban Area Comprehensive Plan, 2006.

Section 4. Transmittal to State. Pursuant to RCW 36.70A.106, this Ordinance shall be transmitted to the Washington Department of Community, Trade and Economic Development as required by law.

Section 5. Preparation of Final Comprehensive Plan Document. City staff are hereby directed to complete preparation of the final Yakima Urban Area Comprehensive Plan document, including the Final Transportation Plan Update and the correction of any typographical edits, and inclusion of appropriate graphics and illustrations.

Section 6. Severability/Validity. The provisions of this ordinance are declared separate and severable. If any section, paragraph, subsection, clause or phrase of this ordinance is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portion of this ordinance. The Yakima City Council hereby declares that they would have passed this ordinance and each section, paragraph, subsection, clause or phrase thereof irrespective of the fact that any one or more sections, paragraphs, clauses or phrases were unconstitutional or invalid.

Section 7. Ratification. Any act consistent with the authority and prior to the effective date of this ordinance is hereby ratified and affirmed.

Section 8. Effective Date. This ordinance shall be in full force and effect 30 days after its passage, approval, and publication as provided by law and by the City Charter.

PASSED BY THE CITY COUNCIL, signed and approved this 12th day of December, 2006.

/s/ David Edler

ATTEST:

David Edler, Mayor

/s/ Deborah J. Moore

City Clerk

Certified to be a true and correct copy of the original filed in my office.

Publication Date: 12-15-06

Effective Date: 1-14-07

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Chapter 1

Transportation Plan General Overview

Chapter 1: Transportation Plan General Overview

The Yakima Urban Area Transportation Plan provides the policy foundation to guide City decision makers, staff, advisory bodies, and citizens on transportation priorities and projects over the next twenty years. The goals, objectives, and policies of the Plan should be reviewed in the context of all decision making processes that impact the transportation system, including land use actions and development review, capital investments, funding priorities, and transportation programs.

The Plan describes both policies and actions that are required by the City to implement the intent of the transportation plan. It is essential that the Plan be coordinated with the Yakima Urban Area Comprehensive Plan, the 20-year Capital Facilities Plan, the 6-year Transportation Improvement Program and the Regional Transportation Plan. The projects and priorities contained in each of these plans should be reviewed on an annual basis to ensure consistency amongst the many transportation-related activities and projects that the City and Region are engaged in. Further, the Transportation Plan should be reviewed on a five-year basis to assess any potential changes in the anticipated land use growth patterns and/or any impacts that major transportation projects have had on the operating characteristics of the system.

The Transportation Plan is a requirement of the Washington State Growth Management Act (GMA). Per the GMA, the Transportation Plan includes an inventory of existing facilities, Level of Service Standards, Capacity and Concurrency Analysis, a bicycle and pedestrian component, 20-year projections of traffic and land use need, and a funding plan for required improvements. The Yakima Urban Area Transportation Plan includes additional information about neighborhood streets, street maintenance, freight and safety needs.

KEY TRANSPORTATION PLAN CONCEPTS

A number of key concepts and implementation recommendations from the plan are highlighted below.

Consistency and Coordination

Consistency and coordination between Comprehensive Plan, 6-year Transportation Improvement Program (TIP), Capital Facilities Plan and Transportation Plan is essential. Prioritization of projects included in each plan should be reviewed and refined on an annual basis. This ensures that all city transportation projects are consistent with the goals, objectives, policies, needs, and priorities outlined in the Transportation Plan and that the city is responsibly spending its limited transportation funding.

Regular Plan Update

The Transportation Plan should be a document that is regularly reviewed and updated to reflect and serve as a decision-making tool for transportation policy, planning, and construction efforts within the city over the next twenty years. This should be accompanied by a regular review and update of the Yakima Municipal Code to ensure that the goals and projects contained in the Plan are implemented.

Priority Listing of Street Capacity Projects

The Transportation Plan contains a listing of near, mid and long-term capacity-related improvements needed to ensure that the system operates acceptably during the next twenty years. This list should be incorporated into the City's 6-year TIP. Priority should be given to funding those projects that provide for the economic stability and growth of the community.

Funding

Identifying and securing the necessary funding for multimodal transportation projects is essential. Current projects reflect a short-fall in needs versus revenue sources. The city needs to pursue wide range of potential funding sources at the local, regional, statewide and national level to address future capacity constraints and multimodal needs, preserve system integrity, address safety concerns and promote responsible economic development. Securing these funds will require collaboration with regional partners to prioritize and jointly pursue funding for projects within the Valley.

Development Standard Revisions

Development standards and guidelines should be revised to improve comfort, convenience and quality of service provided to all users of the transportation system. New street design standards and modifications to the functional classification system should be adopted that reflect multimodal user needs, neighborhood livability issues and promote a more efficient and environmentally-responsive transportation system. These new street standards will provide direction to the City Engineer's Division for capital project design. In addition, coordination with Yakima County is needed to ensure consistency of standards within the Yakima Urban Area.

Multimodal Provisions

Multimodal facilities need to be included in all future capacity and system projects completed within the city. Recommended street standards outline sidewalk and bike lane requirements that should be adhered to for all projects. Coordination and consideration of freight, transit, and intermodal connection needs should be incorporated as part of all project development.

Infrastructure Cost Sharing

A cost-sharing program for property owners and City should be developed to systematically repair/replace hazardous sidewalk sections. All development should be required to review their frontages to establish that obstacles do not exist for pedestrians, cyclists, and/or individuals covered under the Americans with Disabilities Act.

Infrastructure Development Requirements

All development/redevelopment within city should be required to construct half-street improvements (including sidewalks, curb, and gutter) along all site frontages.

Transportation Concurrency Update

The City needs to update the Transportation Concurrency Program to include project level coordination with SEPA mitigation and other off-site improvements. This will include formalized guidelines for the preparation of transportation impact analyses to identify project impacts and associated improvement needs.

In addition, the Transportation Plan recommends revisions to the existing definitions and procedures related to Concurrency. The City needs to review the existing ordinance to determine if the recommended revisions are appropriate.

Municipal Code Revisions

The city needs to revise the Municipal Code to expressly allow for shared private-partner funding. This can come in the form of fee-in-lieu of construction, proportionate sharing agreements, etc. Today, these efforts are considered on a case-by-case basis with no formal mechanism for collection and application.

A number of other necessary Municipal Code revisions are outlined in this Plan to ensure implementation of the projects and priorities identified herein.

Access Management Policies/Ordinances

The Transportation Plan recommends the adoption of access management strategies through policy or ordinance revisions. Access management strategies are effective in preserving and enhancing the operations and safety of key arterial corridors throughout the City. These strategies would be implemented at the time of development/redevelopment, when the City engages in a major facility improvement project, and/or if a safety deficiency is documented.

Neighborhood Traffic Program

Traffic speed and volumes are of concern to citizens on many of the neighborhood streets. The City needs a systematic approach to evaluate, prioritize and fund needed engineering, education and enforcement related projects to

address “traffic calming” projects. This type of program should be adopted and implemented by the City to ensure neighborhood livability.

Corridor Plans

The Transportation Plan indicates that corridor plans will be developed for 40th Avenue, 16th Avenue, Nob Hill Boulevard and a portion of South First Street. These plans will provide the footprint for future capital projects to address capacity and safety improvements as well as a “sense of place” for each of these corridors. In this way improvements that are both functional and aesthetically pleasing may be developed.

PLAN ORGANIZATION

The details of the Plan elements are summarized in the remainder of the chapters. The eleven chapters include:

- Chapter 1. General Overview
- Chapter 2. Local Streets
- Chapter 3. Pedestrians and the Walking Environment
- Chapter 4. Wheeled Access, Bicycles and Other People Powered Vehicles
- Chapter 5. Arterial and Collector Street System
- Chapter 6. Signalized and Other Major Intersections
- Chapter 7. Freight Transport and Economic Development
- Chapter 8. Public Transit
- Chapter 9. State and Regional Street System
- Chapter 10. Finance Element
- Chapter 11. Plan Implementation and Updating

Chapter 2

Local Streets – Neighborhood Safety and Livable Streets

Chapter 2: Local Streets – Neighborhood Safety and Livable Streets

Neighborhood streets bring the transportation system home. They connect neighbors and provide access to the community. Beyond providing access, utility corridors, pedestrian networks, and enhanced aesthetics, these streets often define a neighborhood.

LOCAL STREET GOALS AND POLICIES -

Goal (T-2.1): Develop Streets that Encourage Neighborhood Safety and Livability

Policies:

1. Discourage through traffic and vehicular speeding on local streets, where desired by the residents, through a combination of enforcement of speed limits, community education, and selected engineering modifications.
-
2. Ensure that neighborhood streets have good connectivity with the Collector Street System to allow traffic to flow and disperse without concentrating through trips. Where possible, grid pattern streets should be encouraged.
 3. Require sidewalks on the local streets associated with all new developments.
 4. Enforce intersection clear-view standards and other spot safety improvement projects. Actively seek funding to address issues at locations with hazardous conditions.

Goal (T-2.2): Develop Maintenance Strategies that Maximize Efficiencies

Policies:

1. Provide funding to preserve, re-construct, and maintain the existing street system, including street surfaces, drainage, sidewalk repairs, street lighting, and traffic signals.

2. Enhance and improve street signage and lane markings to heighten traffic safety and community image, where appropriate.

THE CONDITION OF OUR LOCAL STREETS

The City of Yakima has over 250 miles of Local Access streets out of nearly 350 total miles of streets. Because these streets are not classified as Arterial or Collector Streets, State and Federal funds are not available for maintenance. The City of Yakima has sole responsibility for the maintenance of these streets. Due to the limited funds available for Local Access Street maintenance, even basic preservation tasks are a challenge.

The goal of standard maintenance practices for asphalt streets is to maintain a watertight surface. Environmental forces, coupled with the wear and tear of vehicle traffic, erode and break down the original impervious surfaces. Therefore, regular resurfacing is necessary to maintain the impervious surface. Regular intervention with pothole repair, crack-filling and seal-coating is required to preserve the surface condition of the asphalt. Industry standards recommend asphalt surfaces receive preventative surface treatment every eleven years.

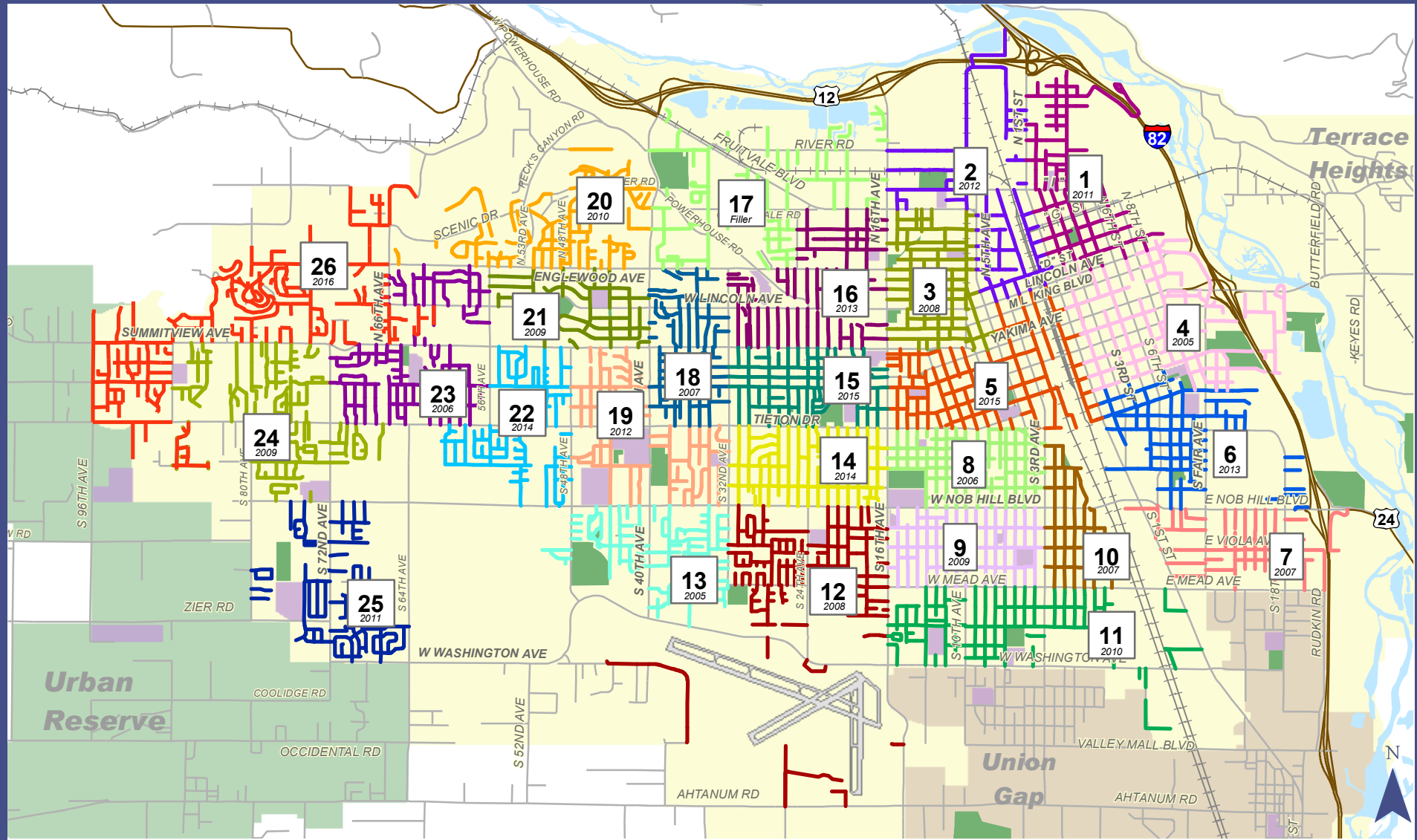
The preservation of the Local Access Street System requires a dedicated effort and funding source. The City of Yakima estimates the total cost for the maintenance of unclassified streets at \$600,000 per year.

Map 2-1, the Local Street Maintenance Plan, illustrates the proposed 11-year cycle of preserving Yakima's neighborhood streets. Approximately 20 to 25 miles of Local Access Streets will receive a Chip-seal treatment each year, at an average annual cost of \$300,000. In 2005, City Council dedicated \$200,000 annually from the Second Quarter Percent Real Estate Excise Tax (REET2) toward a maintenance program for unclassified streets.



MAP 2-1

Local Street Maintenance Plan



MAP LEGEND

- Urban Reserve
 - Urban Area
 - Schools
 - Parks
 - Union Gap
- 25**
2011

Maintenance Sub- Area

Target Year

Beginning in 2005, the City of Yakima implemented an annual program of chip-seal surface treatment for nearly 250 miles of Local Access Streets. Annual maintenance sub-areas have been identified and distributed throughout the city limits. A complete cycle of chip-seal for all Local Access Street will take approximately 12 years. Each year an average of 20 miles of local streets will be chip-sealed at an annual cost of approximately \$280,000.

1 inch equals 0.90 miles

INTERSECTION SAFETY AND CLEARVIEW AREAS

Many factors contribute to traffic safety on Local Access Streets. Adequate sight distance at intersections is a critical safety issue. Drivers must be able to anticipate and avoid potential conflicts with crossing and merging vehicle traffic, as well as with pedestrians and cyclists.

Intersections of Local Access Streets may not have any traffic control in the form of a STOP or YIELD sign. Basic “rules of the road” require vehicles on the left to yield to vehicles on the right when no control device is in place. A STOP sign may be placed at the intersection of two Local Access Streets when such placement would assist in defining the assignment of right of way for vehicles approaching the intersection or when other factors create the need for traffic control, such as a history of broadside collisions.

In cases where clear sight distances can not be provided, a STOP sign may be installed on one or more approaches to improve traffic safety. The City of Yakima enforces regulations that place the responsibility for trimming of vegetation at street intersections on the property owners to ensure adequate sight distance. In addition, the City is responsible for ensuring that buildings, fences, utilities, on-street parking, and monument signs are located appropriately to ensure adequate lines of sight.

Streetlights along neighborhood streets provide illumination for intersections and help maintain a safe environment for drivers, pedestrians, and cyclists. Many intersections within Yakima do not have adequate street lighting. Funding for intersection lighting is currently budgeted at \$25,000 per year for installation of new street lighting.

MANAGING NEIGHBORHOOD TRAFFIC

Traffic speed and volume have become a concern on many neighborhood streets. Citizens regularly express concern regarding “cut-through” traffic within neighborhoods, and vehicles with excessive speeds that threaten safe and quiet residential areas. Well thought-out initial design of neighborhood streets will consider and incorporate principals of traffic control that will reduce speeds and “cut-through” traffic. In some areas of the Yakima community, these principals were not observed with initial construction and residents now seek to retrofit solutions to the existing streetscape problems. A map of recent traffic calming requests is shown in Map 2-2.

The need for traffic calming to address neighborhood livability is widespread in Yakima and throughout urban America. Examination of the streets where neighborhoods complain about speeding indicates that many of these streets lack sidewalks. The relationship of pedestrian safety to the citizen concerns to “calm” traffic is clear. Many cities have implemented programs to assist neighborhoods in re-claiming their streets. Common traffic calming measures include traffic circles at intersections, narrowing devices, such as chicanes and chock-points,

one-way streets, barricades, and other physical measures. All successful programs also include community education and enforcement measures.

Provision of access for emergency services is a primary consideration for retrofitting neighborhoods with traffic calming measures. The City Council established a citizen-based petition program to initiate traffic calming measures in 1995. However, due to budget limitations, program funding or cost sharing is not available to neighborhoods wishing to implement traffic calming. Therefore, few petitions have been processed and neighborhoods generally do not pursue the program due to the costs.

New neighborhood residential streets should be designed for low travel speeds to discourage cut-through traffic. Neighborhood street systems should be designed to allow motorists to exit the low-speed environment onto an Arterial or Collector Street. Wide, straight residential streets invite speeding and generally do not promote a pedestrian friendly environment.

SIDEWALK INFILL

Existing neighborhoods may experience redevelopment of single or multiple lots, due to economics, land use changes, or other factors. Redevelopment is characterized as the demolition and replacement of a previously existing building with a new structure or land use. The City of Yakima has not consistently required the construction of sidewalks with redevelopment, therefore not implementing infill of missing sidewalk segments. A sidewalk is required if one exists within 200 feet of the development site and an exception is granted to single family homes constructed on in-fill lots.

Citizen preference is supportive of sidewalk construction to address this community safety and quality of life issue. Future redevelopment projects should be required to construct frontage sidewalks. In some locations, sidewalk construction is difficult due to steep slopes, proximity to water or drainage features, or other topographical limitations. Other unusual circumstances may exist that may require site-specific solutions to providing a sidewalk or pathway. Sidewalk construction should be incorporated with all new and major redevelopment projects.

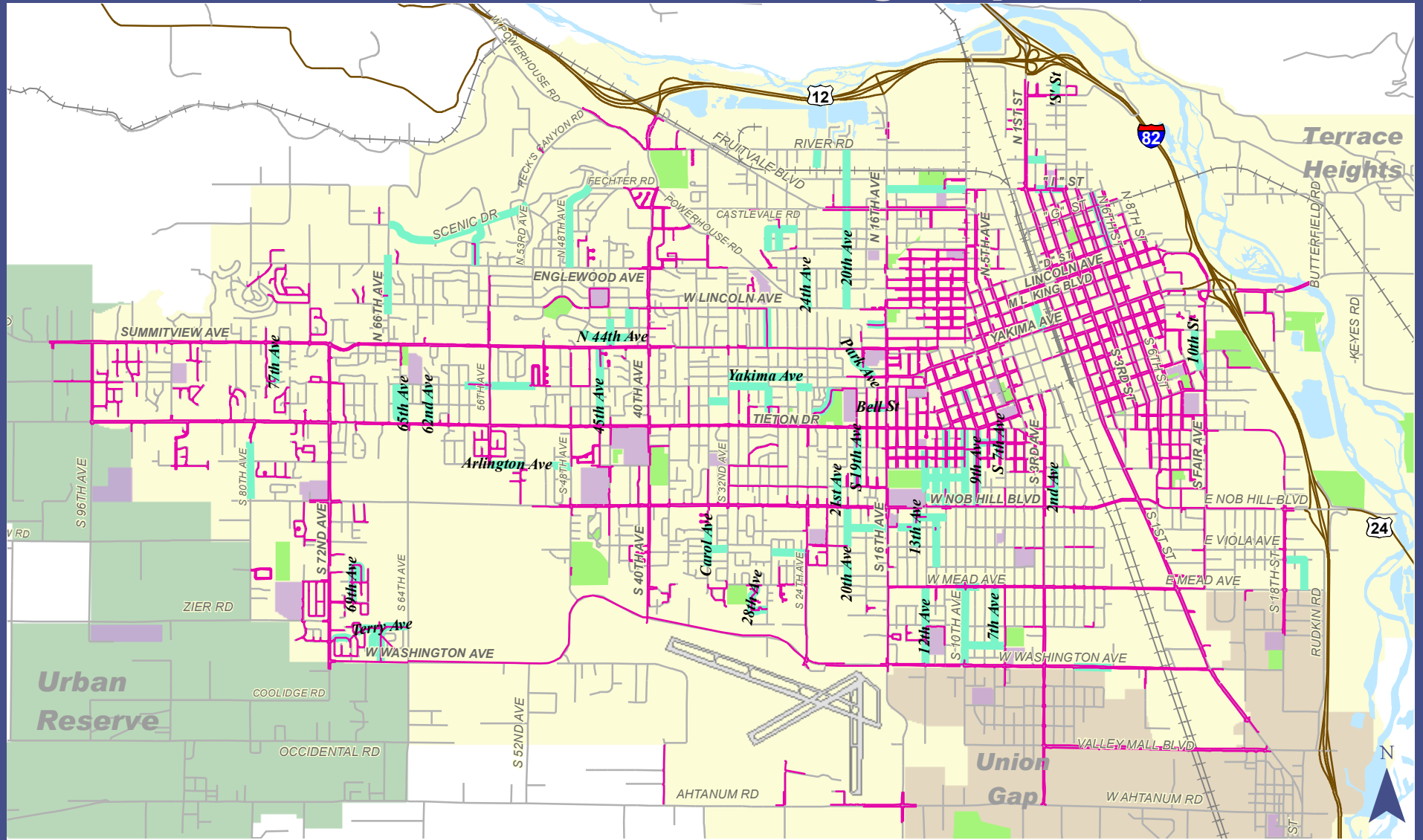
LOCAL STREET STANDARDS

New streets are constructed primarily with the subdivision of land by private developers. The cost of local street construction is a factor in affordable housing and quality of life in the neighborhoods. Local housing providers have requested more flexibility in design standards, including street width.

Neighborhoods with shorter block lengths and connectivity to the existing street network experience less cut-through traffic and are considered to be safer. Streets that encourage pedestrian use promote a secure and healthy environment. Lower property crimes, higher resale value, and neighborhood stability are all potential benefits of these design standards.

MAP 2-2

Traffic Calming Requests, 2000-2005



MAP LEGEND

- Urban Reserve
- Urban Area
- Schools
- Parks
- Union Gap
- Existing Sidewalks
- Traffic Calming Requests

Citizens frequently complain about vehicles speeding on neighborhood streets and "cut-through" traffic. The Yakima Police Department confirms that this is one of the most common requests to which the Traffic Patrol Unit responds. Since 2000, the Traffic Engineering Division of Public Works has had over 90 requests for speed bumps or other "Traffic Calming" measures on public streets. Unfortunately, there is presently no city funds to respond to these requests or no clear policy on preference of Traffic Calming Measures, or priorities. This map compares sidewalk locations to areas where neighbors are concerned about traffic calming.

1 inch equals 0.90 miles

Local street construction standards should be flexible enough to allow unique neighborhood identity and characteristics to be incorporated while providing for minimum safety standards. These factors include constructing narrow travel lanes that encourage livability; sidewalks with curb, gutter, and street lighting; and parking either on-street, in alleys, or on the private lot.



As storm water requirements are developed for the Yakima Urban Area, local street standards and policies may be revised to allow for “low impact streets” and other similar techniques. Recommended street standards are included in Chapter 5 of this Plan.

ALLEYS

The City of Yakima currently has 44 miles of public alleys; just over 25 miles of these are unpaved. Alleys have unique transportation functions, providing immediate access to residential garages and public services such as garbage pick-up. Frequent use by both light and heavy vehicles requires construction to address these special needs.

Maintenance for the paved system consists only of pothole patching operated as a complaint based program. Due to the heavy use by garbage trucks and delivery trucks, many of the paved alleys are in need of major repairs/reconstruction. Repair and reconstruction costs are funded by local funds. There is no existing maintenance program similar to those that exist for the classified and unclassified streets.

The unpaved alleys receive an annual grading and grooming, typically in the fall. In recent years, City council members have expressed an interest to hard surface the unpaved alleys. Unfortunately, the Bituminous Surface Treatment program used to hard surface unpaved residential streets does not provide for drainage needs that are inherent with the City’s alley system. For this reason, alley surfacing will require a different approach. The methods listed below provide for drainage and reduce the dust associated with the unpaved surface; cost estimates shown are collected from work completed by the Puget Sound Action Team, Office of the Governor. Additional methods of dealing with the unpaved alleys may be discovered when the community addresses this issue.

- **County Lanes** – This treatment is considered a permeable pavement and therefore addresses drainage issues. County lanes feature two narrow strips of concrete that provide a smooth driving surface. A plastic grid is placed between and beside these concrete strips and covered. Research would be required by the City to determine a

viable treatment for the area between and beside the concrete strips. It may require some local test cases to determine the best treatment. In Vancouver, B.C., a tough structural grass has been used. The alley base is a mixture of aggregate, which provides structural stability and a sand/soil mixture that allows for drainage and provides the soft components required for the structural grass. Benefits noted with this treatment include: control of storm water at the source, surface water infiltration recharges groundwater, the treatment filters pollutants naturally, if grass is used it improves air quality, and reducing the asphalt surface reduces the heat effect of asphalt to a neighborhood. The cost of the county lane is 50 percent higher than conventional paving.

- Pervious Concrete – Builders have used pervious concrete nationally for more than 20 years. In the 1980's several projects were built in the Puget Sound area, including at Husky Stadium, parking lots at Fort Lewis, alleys in Bellingham, and a park in Redmond. The use continues to increase. Pervious concrete is a special structural concrete with the fine particles removed. The concrete has 15 to 20 percent voids. The pavement will support traffic and allows water to pass through to a gravel layer underneath. The surface is suitable for alleys. Special training is recommended for designers and installers to ensure the structural integrity and porosity of the material. Post-placement testing is important. The cost for pervious concrete is comparable to conventional concrete.
- Gravelpave2 – The Gravelpave 2 porous system provides a geotextile fabric that is molded directly to a one-inch high, integrated ring and gird system. The Gravelpave2 is placed on top of an engineered porous base course and is anchored down with galvanized anchors. Gravel is raked to provide a smooth driving surface. Alley construction has been completed in Chicago with this product.

Funding for alley improvements may be available using Federal funds through the Congestion Mitigation Air Quality (CMAQ) funds or Real Estate Excise Tax funds (REET2).

LOCAL STREETS IMPLEMENTATION TASKS

The City should implement the following measures related to local streets:

- Provide a dedicated funding source for local street maintenance.
- Consider the adoption of a traffic-calming program to evaluate, prioritize, and fund appropriate engineering, education and enforcement measures that reduce traffic speeds and cut-through traffic in neighborhoods.
- Modify the Yakima Municipal Code to require the construction of half-street frontage improvements (including sidewalks, curb, and gutter) as part of all site development/redevelopment activities in the City. Provisions should be included in the Code to address situations where sidewalk construction is infeasible due to topographic, wetland or other constraints.
- Modify the Yakima Municipal Code to adopt new street design standards that preserve neighborhood safety and livability. Recommended standards are provided in Chapter 5.
- Modify the Yakima Municipal Code to encourage shorter block lengths and increased local street circulation to preserve neighborhood livability.
- Create a program (including a designated funding source) for the ongoing maintenance of alleyways.
- Investigate alternative treatments (such as County Lanes, pervious concrete, Gravelpave2) to address the system of unpaved alleyways within the City.

Chapter 3

Pedestrians and the Walking Environment

Chapter 3: Pedestrians and the Walking Environment

The pedestrian and walking environment provides a vital link between all modes of transportation. Walking is the most basic mode of all of the transportation systems and available to users of all ages, economic levels and lifestyles. It may help to reduce motor vehicle trips and promotes the health of our community. The local government has been financially challenged to provide this walking link within the community.



PEDESTRIAN AND WALKING ENVIRONMENT GOALS AND POLICIES -

Goal (T-3.1): Develop and Improve the Pedestrian Network in the Yakima Urban Area

Policies:

1. Require sidewalks on both sides of all streets with all new development.
2. Encourage sidewalk or pathway construction on existing streets using public and private funding sources.
3. For infill or redeveloped projects, a sidewalk shall be constructed along the street frontage, if curb and gutter currently exist. If no curb and gutter is present, a pathway, paved shoulder or other alternative walkway may be acceptable as an interim measure.
4. Continue to improve the Sidewalk Inventory for location and condition of existing sidewalks.
5. Prioritize improvement projects and seek funding to implement repair and construction projects.
6. Work closely with public and private schools in the Yakima Urban Area to create safe "Walk to School Routes". Highest priority should be given to projects that support elementary school routes.
7. Support education and enforcement efforts to improve pedestrian safety.
8. Improve pathway linkages to the Yakima Greenway, Canal Pathway and other off-street trail systems.

9. Support efforts such as grant applications to provide amenities at trail-head locations to support safe, clean and efficient trail use. Such amenities include parking and lighting, ADA accessible pedestrian facilities, or restrooms where feasible.

Goal (T-3.2): Consider Special Population Needs with Street Improvement Projects

Policies:

1. Determine the need for or accommodating special population groups at the Street Improvement Project level such as accessibility and ADA requirements, transit stops, concentration of school age or elderly residents or other unique land use issues.
2. Implement ADA sidewalk ramp repair and construction program, on an annual prioritized basis.
3. Facilitate placement of accessible, audible traffic signals in the vicinity of areas with high pedestrian traffic, near shopping centers, schools, and other locations where there is a demonstrated need.



Goal (T-3.3): Support the Downtown Area as a Pedestrian Friendly Place

Policies:

1. Support the economic vitality of downtown with the Yakima Downtown Futures Initiative Project and other special events and projects, such as Farmer's Market, Capitol Theatre, Front Street, Visitor's and Convention Center and others.
2. Prioritize streetscape and pedestrian improvements.

Goal (T-3.4): Revise Street Standards and Guidelines to Improve the Pedestrian Use and Safety

Policies:

1. Sidewalks shall be constructed on both sides of all new streets.
2. New development or redevelopment on existing streets shall be required to install sidewalk along their street frontage. All new curbing shall be

barrier curb type design. Rolled curb does not provide adequate pedestrian safety or storm drainage.

3. Provide options to standard concrete sidewalks as interim measures where sidewalk construction is not available, or not feasible due to topography, presence of existing mature trees or other special design features.
4. Implement an active sidewalk repair program
5. Create and enhance a sense of place through the transportation system. Modify design standards to provide gateway treatments on major arterials and near freeway interchanges to include landscaping, pedestrian accommodations and street lighting.
6. Balance needs of pedestrians with vehicle circulation at traffic signals.

EXISTING CITY POLICIES REGARDING PEDESTRIANS

Sidewalk Maintenance

Keeping sidewalks in good condition has many social and health benefits, such as promoting walking, reducing safety risks from tripping hazards, and improving the appearance of the neighborhood. Property owners are responsible for keeping the sidewalk adjacent to their property free from weeds, leaves, debris and snow. Repair of broken or damaged sidewalk is also the responsibility of adjoining property owners.

Limited funding exists to assist property owners in the repair and reconstruction of damaged sidewalks. The City has an annual cost-sharing sidewalk repair program, operated by the Public Works Department. Other funding sources may include the Community Development Block Grant Program, Local Improvement District programs, and limited other public-private opportunities.

Properties that are subject to redevelopment may be required to reconstruct or repair existing sidewalks in conjunction with the remodeling, reconstruction or other new development permit.

Arterial street projects that include reconstruction of curbs or additional street capacity are also required by Washington State law to upgrade pedestrian facilities.

Alternative Sidewalk Materials

The minimum sidewalk requirement in the City of Yakima is a five-foot wide, four-inch depth of concrete. Driveway crossings require a six-inch depth of

concrete. Wider sidewalks (i.e., 7 feet) are currently required along Principal and Minor Arterial streets.

In some instances, a standard concrete sidewalk is not practical. Physical limitations of topography, locations where curb-line has not been established and streets subject to future reconstruction may limit the installation of pedestrian facilities other than the standard concrete sidewalk. For example, an asphalt path located adjacent to the travel lane and accessible to the public would be considered a viable temporary alternative to the concrete sidewalk requirement.

Developers in some locations may request special decorative sidewalk materials in order to establish a particular design theme of the development. These treatments would be acceptable if they are durable and the material meets the minimum safety requirements as established by ADA and other state and federal requirements.

Sidewalk repair or construction near trees may be problematic due to root damage. Options are available to address this problem. Where new sidewalks and new trees are installed at the same time, adequate tree vaults and grates, irrigation and root protection should be incorporated. Where sidewalks are being installed or re-constructed adjacent to existing trees, materials such as rubberized sidewalk may be considered as a means to preserve the tree and establish a smooth walking surface. However, any alternate treatment must meet ADA, and other state or federal requirements.

New sidewalks

Sidewalks of at least five feet in width are currently required within the Yakima Urban Area boundary on both sides of all public streets. New development must provide sidewalks along all public street frontages. For new streets within a subdivision or other development, sidewalks are required on both sides of the street. State and federal safety laws require a minimum of four feet of clear, unobstructed area within the five foot sidewalk envelope. This means, no utility poles, mail boxes, signs, fire hydrants or other obstructions should be allowed within this four foot zone. These standards also encourage the sidewalk surface to be free of manhole covers, utility meters, sidewalk grates or other uneven materials.

Accessibility and ADA requirements

We are all pedestrians, whether walking through a park, using a wheelchair to access a transit stop, walking to school, or pushing a stroller on a neighborhood street. All pedestrian facilities must be constructed to accommodate people with varying abilities. The Americans with Disabilities Act (ADA) is a civil rights law that prohibits discrimination on the basis of



disability. Under this law, there shall be no discrimination in transportation and access to facilities.

Designing and constructing pedestrian facilities for people with disabilities is not only essential to people for their independence and safety, but it also benefits all users. Curb ramps aid wheelchair users, strollers, and people with mobility issues. Visible crosswalks and truncated domes help people with vision challenges to determine appropriate street crossings and warn motorists that pedestrians may be in the roadway. Clear zones of four feet on sidewalks allow all users to comfortably share the walkway. The City of Yakima will meet or exceed minimum standards for the benefit of all sidewalk users when designing new facilities. Redevelopment or new development projects, as well as publicly funded street projects are required to conform to current ADA standards, including truncated domes, audible signals and slope requirements.

EXISTING PEDESTRIAN FACILITIES

Existing Facilities

The sidewalk and path system in Yakima is discontinuous and inadequate for the needs of pedestrians in many areas of the City. According to a 2005 inventory conducted by the City of Yakima, only 198 linear miles of sidewalk currently exist. A total of 112 miles of these sidewalks are adjacent to



classified streets. This represents 58 percent of the 190 total linear miles of classified street frontages. Sidewalks on local access streets represented 86 linear miles, or 17% percent of the 500 linear miles of local street frontages. Map 3-1 illustrates the existing and planned sidewalks and pathways within the City.

The most interconnected pedestrian system is in the downtown area. Although there are sidewalks along many of the streets in the downtown, many sidewalks do not have ramps or other ADA facilities and are in poor repair. Many of the older residential neighborhoods east of 18th Avenue have sidewalks, but they were rarely constructed with curb ramps. Many streets lack both sidewalks and curbs. Some streets on hills do not have sidewalks and retrofitting them with sidewalks would not be possible without a large investment in supporting structures such as retaining walls.

Arterial and collector streets are major routes for not only for motorized vehicles but also for pedestrians. Many arterial and collector streets have large sections of missing sidewalks and areas with sidewalks often lack ramps or have earlier versions of ADA ramps that lack recent innovations. Discontinuous sidewalks restrict pedestrian uses and force pedestrians to walk in the street or along the uneven or dirt shoulders.

Connector pathways such as the Powe rhouse Canal Pathway, Yaki ma Greenway and several un-nam ed neighborhood connector paths suppo rt pedestrians. These primarily asphalt pathways provide pedestrians a walkway separate from vehicles. Some were designed to link neighborhood dead end streets to an arterial, such as the path connector from 23rd Avenue to L incoln or to provide a more direct path for school children to access schools, such as those connectin g Gilbert Elementary, Whitney Elementary and West Valley Middle School Com plex. The Canal Pathway provides both a pleasant recreational w alk and connector to Robertson Elementary as well as several medical and office complexes.

The m ost heavily walk ed areas in the City are those walk ing routes taken by students attending the City’s schools. The 18 elementary schools within the City of Yakima have designated W alk-to-School Routes with warning signs, flashing lights and reduced speed zones. S tudents walk along m any areas without the benefit of pathways or sidewalks.

Pedestrian Safety

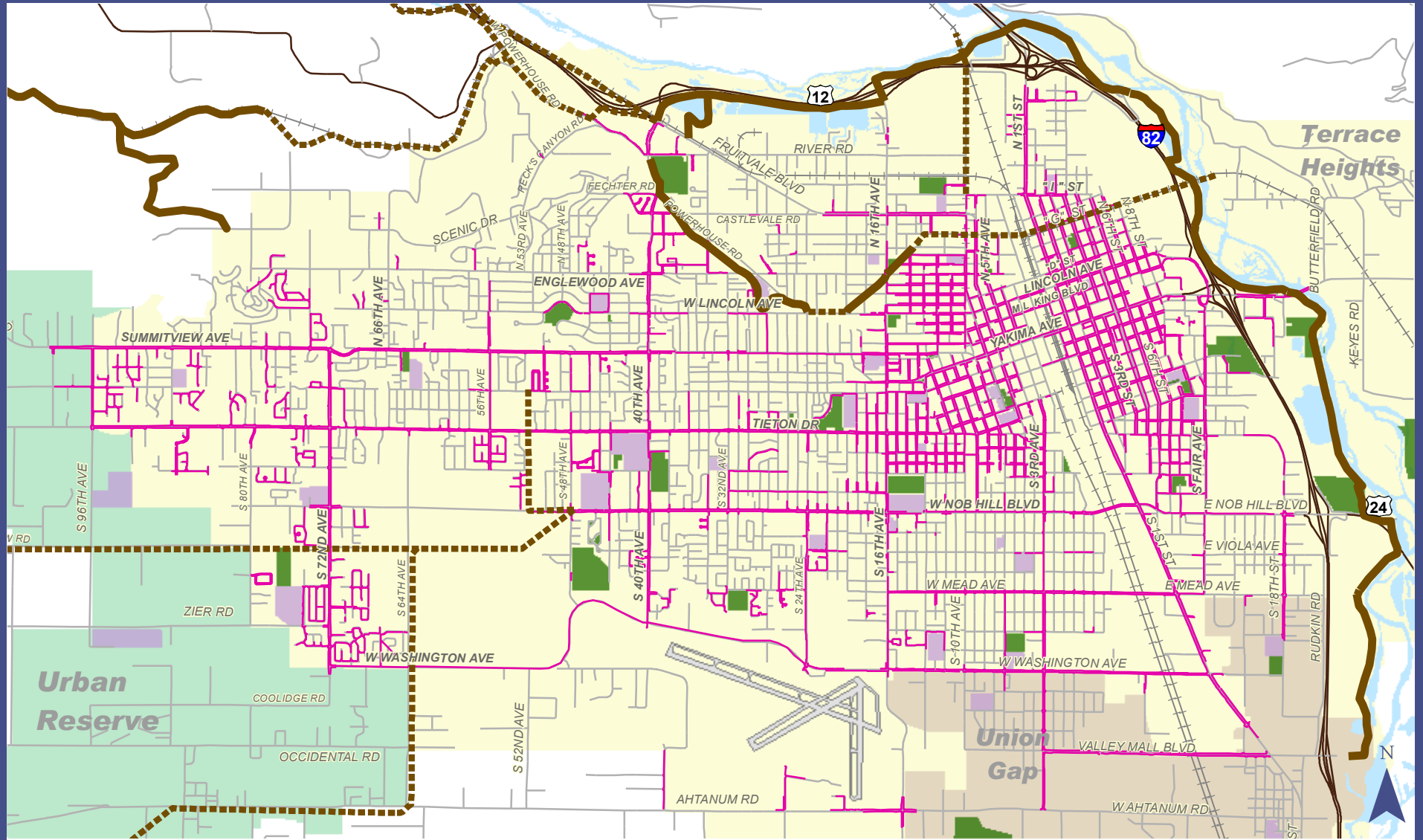
Between 1998 and 2004, 241 pedestrians were involved in a collis ion with a vehicle at 1 97 locations . Annual co llisions between pedes trians and motorists averaged 34 per ye ar within the City of Yakima. Vehicle c ollisions involving a pedestrian represent 1.8 per cent of all repor ted collisions. This is slightly higher than the statewide average of 1 per cent reported by the W ashington State Department of Transportation (2002 data). Locations that are subject to multiple pedestrian collisions should be review ed for safety improvem ents. Often, vehicular turning m ovements create safety concerns for pede strians. Likewise, pedestrians that do not cross a busy arterial street at a signalized intersection are at greater risk. Locations where sidewalks do not exist on both sides of the street are also especially hazardous. Table 3-1 highlights the list of locations that have had 3 or m ore pedestrian collisions be tween 1998 and 2004. Map 3-2 graphically summarizes this data.

**Table 3-1
High Pedestrian Collision Locations**

Location	# Pedestrian Collisions	Intersection Served by Traffic Signal?	Left Turn Lane on Minor Rd?	Protected Left Turn Phase?	Right Turn Lane?
N 1st St / ML King Jr	5	Yes	No	Yes / No	No
S 3rd Ave / Washington Ave	4 Yes		Yes	Yes	No
S 16th Ave / Tieton Dr	3 Yes		Yes	Yes	No
N 1st St / "N" St	3 No		No	NA	No
S 3rd Ave / Nob Hill Blvd	3 Yes		Yes	Yes	No
S 5th Ave / Nob Hill Blvd	3 No		No	NA	No

MAP 3-1

Sidewalk and Pathway Facilities



MAP LEGEND

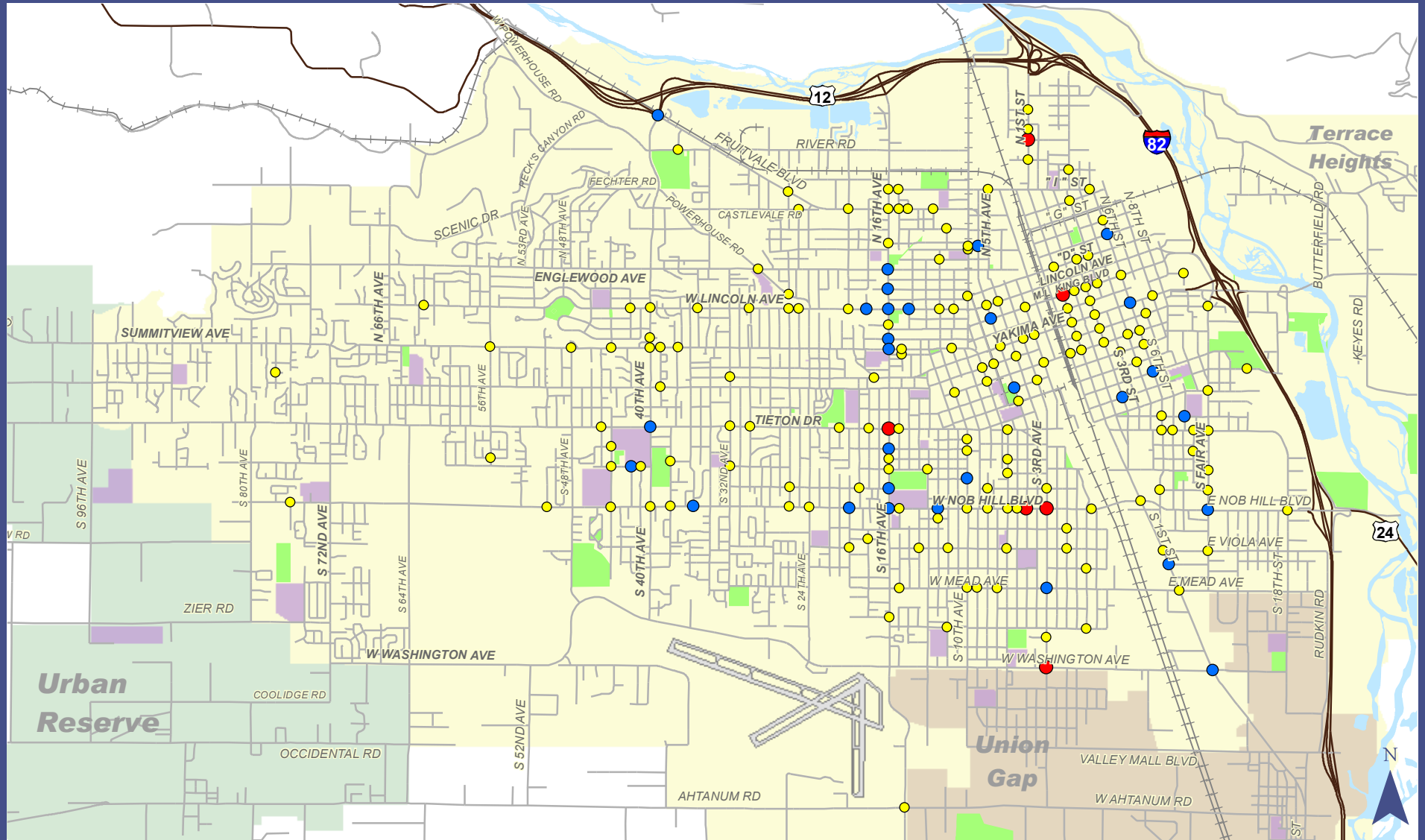
- Urban Reserve
- Urban Area
- Schools
- Parks
- Union Gap
- Existing Paths
- Future Paths
- Existing Sidewalks

Existing sidewalks and pathways are identified on this map, as well as major planned pathway projects. A sidewalk inventory was conducted in 2005 based upon aerial photo interpretation and limited field verification. Additional inventory work is necessary as development occurs within the Yakima Urban Area in order to complete the inventory.

1 inch equals 0.90 miles

MAP 3-2:

Pedestrian Accident Locations 1998-2004



MAP LEGEND

	Urban Reserve		Pedestrian Accidents
	Urban Area		1
	Schools		2
	Parks		3 - 5
	Union Gap		

Between 1998 and 2004, 241 pedestrians were involved in a collision with a vehicle at 197 locations, as illustrated on this map. Annual collisions between pedestrians and motorists average 34 per year, or 1.8% of all reported vehicle collisions. Each location is unique and requires site specific treatment to improve pedestrian safety. Priority for safety improvements should be studied at the locations with more than one pedestrian collision, or proximity to schools, parks and public buildings or other significant features.

1 inch equals 0.90 miles

Each location identified in Table 3 -1 has unique issues and requires site-specific treatments. For example, the intersection of N. 1st Street and Martin Luther King Jr Boulevard is adjacent to the Yakima County Courthouse and experiences frequent day-time pedestrian traffic. Modifications to the traffic signal pedestrian phase were implemented and additional warning signs posted in 2004 to improve pedestrian safety. Two of the intersections identified above are not signalized and pedestrians are crossing four lanes of busy arterial traffic. The presence and condition of sidewalks as well as other safety features will need to be examined.

PRIORITIZING PEDESTRIAN IMPROVEMENTS

Public Sidewalk Construction

Limited public funding is available for construction of new sidewalks. The program for construction depends upon a priority ranking to evaluate the relative benefit of the sidewalk location that includes the factors outlined in Table 3-2, based on a scoring system with a maximum of 20 points.

**Table 3-2
Priorities for Sidewalk Construction**

Category Evaluation	Criteria
Safety (Maximum of 8 Points)	<ul style="list-style-type: none"> • Is there a history of pedestrian collisions in the vicinity? • Is the location on a designated Walk-to-School Route? • Is the street a Classified Street with a posted speed limit of 30 mph or more and no sidewalk on either side of the street?
Connectivity- (Maximum of 2 Points)	<ul style="list-style-type: none"> • Does the location fill in a missing link between existing sidewalks? • Is the location a connector between off-road pathways and the sidewalk network? • Is there evidence of an informal pedestrian pathway with no improvement ("the beaten path", tracks in the snow)?
Transit Connections – (Maximum of 3 Points)	<ul style="list-style-type: none"> • Is the location serviced by Yakima Transit or within a 2-block radius of a bus stop?
Ready to Build – (Maximum of 3 Points)	<ul style="list-style-type: none"> • Does the location have adequate right of way for sidewalk construction? • Are there obstructions that would require relocation or removal, such as power poles, phone vaults, retaining walls, canals? • Can the final grade and curb location be determined at this time?
Pedestrian Usage – (Maximum of 4 Points)	<ul style="list-style-type: none"> • Does the location serve a park, library, hospital, school or government building? • Is the location near a pedestrian generator or destination, such as a shopping area, theater, retirement home, medical office? • Is the location near a major employer?

Curb Ramp Transition Plan

Curb ramps or wheelchair ramps provide access between the street and sidewalk and driveways and sidewalk for people who use wheelchairs. Without ramps, wheelchair users may be forced into the street. Pedestrians with sight impairments use the curb to identify the end of the sidewalk and beginning of the street, the ramps also provide a directional route guide. Therefore, curb ramps are beneficial to both ADA user groups.

In 2005, an inventory of existing curb ramps on transit routes was conducted. The study identified the locations that had existing sidewalks with no curb ramps, as well as those that had broken or obstructed ramps. Additionally, locations that had ramps were investigated regarding their conforming status with current regulations. The inventory found 25 corners with broken or obstructed ramps; 1,002 corners with sidewalks and no ADA ramps; 623 corners with no sidewalks or ramps; 1,112 with existing ramps that do not conform to current standards and 85 corners that conformed to all current standards. In total, only three percent of the locations surveyed had adequate curb ramps.

The implementation regulations for Title II of the ADA specifically require curb ramps at all intersections and mid-block crossings. Curb ramps should align with the crosswalk with two ramps per corner, rather than a single ramp for both crosswalks. Dual ramps provide orientation for the sight-impaired pedestrians by providing a direct path to the opposite side of the street instead of directing them toward the center of the intersection. The Federal Title II ADA regulations for cities require the local government establish a “Transition Plan” that lays out the program for meeting new standards. This is outlined in Table 3-3.

**Table 3-3
Priorities for ADA Ramp Transition Plan
(maximum point value of 20 points)**

Category Evaluation	Criteria
Safety (Maximum of 8 Points)	<ul style="list-style-type: none"> • Is there a history of pedestrian collisions in the vicinity? • Is the location on a designated Walk-to-School Route? • Is the street a Classified Street with a posted speed limit of 30 mph or more and no sidewalk on either side of the street?
Connectivity- (Maximum of 2 Points)	<ul style="list-style-type: none"> • Does the location fill in a missing link between existing ADA ramped sidewalks? • Has this location been reported by a citizen or service provider?
Transit Connections – (Maximum of 3 Points)	<ul style="list-style-type: none"> • Is the location serviced by Yakima Transit Route or within a 2-block radius of a bus stop?
Ready to Build – (Maximum of 3 Points)	<ul style="list-style-type: none"> • Does the intersection have a sidewalk? • Does the location have adequate right of way for ramp and landing construction? • Are there obstructions that would require relocation or removal, such as power poles, phone vaults, retaining walls, canals?
Pedestrian Usage – (Maximum of 4 Points)	<ul style="list-style-type: none"> • Does the location serve a park, library, hospital, school or

	<p>government building?</p> <ul style="list-style-type: none"> • Is the location near a pedestrian generator or destination, such as a shopping area, theater, retirement home, medical office? • Is the location near a major employer?
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Funding Plan to Implement ADA Transition Program

There are limited grant opportunities to use for upgrading ADA ramps, which the City of Yakima will actively pursue. In order to implement the program in a responsive manner, additional funding should be dedicated on an annual basis to continue an on-going program. Possible resources include property taxes, REET2 Funds, Gas Tax, Utility tax, bonds or Arterial Street funds. An allocation of \$25,000 annually was provided in the 2006 City Budget which will address approximately 3 to 4 corners each year and provide the foundation for the Transition Plan.

Accessible Pedestrian Signals

Audible or “Accessible Traffic Signals” provide safety information to sight impaired pedestrians regarding safe crossing at signalized street intersections. The Yakima Central Business District has 36 signalized street intersections that are equipped with audible, “accessible” traffic signals. In addition, a few other locations throughout the City have accessible traffic signals, where conditions warranted installation.

Accessible traffic signals should be installed with new or upgraded traffic signal systems where locations are near schools, major shopping areas, government buildings, parks and other land uses where there is a demonstrated need. Intersections for consideration of Accessible ADA traffic signal facilities will be considered at the project design phase of construction. A preliminary list of candidate intersections for Accessible Traffic Signals includes:

- 72nd Avenue / Nob Hill Boulevard;
- 72nd Avenue / Tieton Drive;
- 16th Avenue / Tieton Drive;
- 40th Avenue / Tieton Drive;
- 56th Avenue / Summitview Avenue;
- 40th Avenue / Fruitvale Boulevard;
- 40th Avenue / Summitview Avenue;
- 48th Avenue / Nob Hill Boulevard; and
- 16th Avenue / Mead Avenue.

Improved Pedestrian Crossings

Well-designed street crossings are critical components of a pedestrian network. Street crossings are the most challenging aspects of pedestrian travel, and are

where nearly all pedestrian/motorist collisions occur. The Revised Code of Washington (RCW) defines crosswalks, (marked or unmarked) as follows:

There is a crosswalk at every intersection, even if painted lines do not mark it, unless the area that would normally take you to a crosswalk is barricaded or signed as closed to pedestrian traffic.

To be most effective, crosswalk installation should be limited to locations with high pedestrian presence. Otherwise, marked crosswalks are ignored by drivers. The Manual on Uniform Traffic Control Devices (MUTCD) states that crosswalk marking should not be used indiscriminately.

In Yakima, marked crosswalks are used primarily at signalized intersections and at patrolled school crossings. Citizens often request a marked crosswalk in an effort to increase pedestrian safety. Federal guidelines from the (US Federal Highway Administration) recommend the following to increase pedestrian safety:

Marked crosswalks alone are insufficient (i.e. without traffic-calming treatments, traffic signals, pedestrian signal or other substantial crossing equipment) and should NOT be used under the following conditions.

1. Where the speed limit exceeds 40 mph;
2. On a roadway with four or more lanes, without a raised median or crossing island that has (or will soon have) an ADT of 12,000 or greater;
3. On a roadway with four or more lanes with a raised median or crossing island that has (or will soon have) an ADT of 15,000 or greater.

Treatments in Addition to Marked Crosswalks

Other treatments may be considered to provide safer and easier street crossings for pedestrians. These treatments are sometimes used in combination with traffic calming measures within neighborhoods. Some examples are outlined below.

- *Bulb-out or median islands* - Raised, hard-surface area that provides a pedestrian refuge either in the middle of the street or narrows the pavement at the lane edge to reduce the distance the pedestrian crosses the travel lane.
- *Raised crosswalk* - marked crosswalk on a raised speed table that slows the vehicular traffic.
- *In-pavement lighting* - Warning lights installed along the crosswalk, embedded in the street surface activated by pedestrians crossing the street. May be accompanied by warning signs.
- *Illumination* – Street lights should be placed to provide adequate lighting in areas with night-time pedestrian activity.
- *Pedestrian signals* – According to the MUTCD, pedestrian-only signals can be installed to facilitate mid-block crossings in areas where pedestrian and vehicular volumes warrant.

- *In-Street “Yield to Pedestrian Signs”* - Temporary warning signs to remind drivers of the location of a crosswalk. Recommended only for low volume, low speed 2-lane streets, often at or near schools. Usually removed in winter.
- *Audible signals* - Alternative enhancement to signalized intersections that emit audible warning sounds for sight impaired pedestrians. Should be installed where pedestrian use or nearby land uses indicates needs, as determined by a design study.

School Zones, Pedestrian Education and Enforcement

Twenty-five public schools, five private schools, the Yakima Valley Community College and a number of technical/ trade schools are located within the City of Yakima. School-related pedestrian traffic creates safety concerns, especially in the vicinity of elementary schools where many children walk to school. The Yakima School District has a “Walk to School” zone of one-half mile from each school. West Valley School District has a one-mile “Walk to School” zone. Map 3-3 illustrates the school zone locations.



The City of Yakima has a priority emphasis on classified streets within the Walk to School zones where the posted speed limit exceeds 25 miles per hour (mph). These classified streets within school zones are considered highest priority for speed enforcement, safety improvements and sidewalk construction. Most of the patrolled school crossings on these classified streets are improved with safety flashers to designate the limits of a reduced speed area. For these patrolled school crossings, Washington State Law (RCW 46.61.120) authorizes a maximum 20 mph speed limit during school crossing times when the zone is either flagged or a school flasher in effect.

The visibility of the school safety zones has been enhanced with uniform installation of the “strong green” school zones warning signs in the community. Improvements in the school zones have been funded largely through grants from the Washington Traffic Safety Commission.

Pedestrian education of school age children has largely been a function of the School Districts and their related Parent Teacher Associations. The City works closely with each school principal to ensure that Walk to School zones, as well as the location of school patrolled crossings are coordinated for enforcement and adequate signs with pavement markings. The Yakima Police Department sponsors media campaigns in late summer prior to school opening to remind motorists of the presence of children walking to school, as well as the fines to motorists who disregard school zone speed limits.

Additional media coverage and public education is necessary to remind motorists to yield to pedestrians within a legal crosswalk (whether marked or unmarked).

Analysis of pedestrian collisions indicates a safety problem may exist in this area. Likewise, pedestrians should be educated about the dangers of crossing a street in mid-block situations, especially on busy, high volume arterial streets, such as Nob Hill Boulevard and First Street.

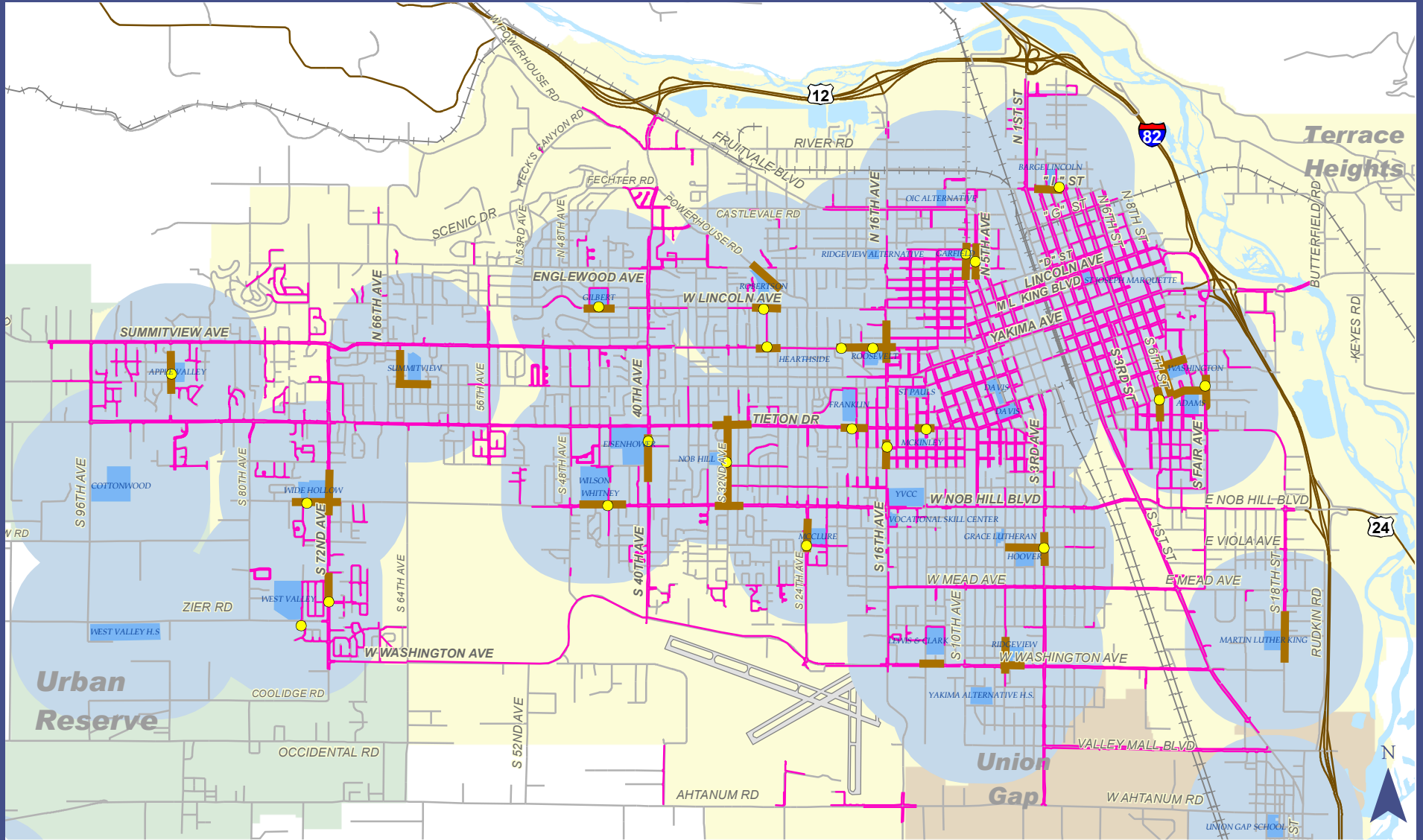
Pathways and Regional Trail System

The Yakima Urban Area has a number of off-road trail and pathway facilities that enhance pedestrian and cycling opportunities. The linkages between the pathways and public streets require improvement in the future to promote safety and usage.

- **The Greenway Trail** - The Yakima Greenway Foundation maintains a 10-mile paved path adjacent to the Yakima and Naches Rivers that connects a series of parks, public landings, playgrounds and habitat areas. Access to the Greenway is provided from several paved parking lots and street connections. The Greenway Foundation is a private, non-profit organization with a 25-member citizen board, a Master Plan and a Trust that administers the finance and operations.
- **Canal pathways** – The City of Yakima has several miles of irrigation canals that have been improved with a paved pathway for bicyclist and pedestrians. The canal pathway connects parks, schools, neighborhoods and business areas. Expansion of the canal system is planned since it offers both recreational and safety benefits.
- **Cowiche Canyon Trail** – Developed in 1986, the Cowiche Canyon Conservancy (a private, non-profit organization) converted a closed railroad to a trail in the northwest portion of the Yakima Urban Area. Currently the Conservancy has three parking areas to access the trail that extends for nearly five miles. Improvements from the Cowiche Canyon Trail to the Urban Area are planned in the future.
- **Trolley/YVT ROW** - The City of Yakima maintains the right of way from the Yakima Valley Trolley Lines. Although not currently used for a pathway, this right of way offers the potential for trail and pathway development.
- **William O. Douglas Pathway** – The William O. Douglas Foundation, a private, non-profit organization, began implementation of a pathway program that extends from Yakima to Mount Rainier. The portion of the W. O. Douglas Path located in the Yakima Urban Area begins at Davis High School and extends along 5th Avenue to the Fruitvale Boulevard Roundabout, then continues north on North 6th Avenue and connects to the Greenway Path. The path continues west to 40th Avenue and connects to the Powerhouse Road Pathway and the Cowiche Canyon Trail.
- **Naches Trail Connector** – A railroad spur line of the BNSF facility runs along Fruitvale Boulevard to the community of Naches. Some citizen interest in converting the rail line to a trail has been expressed. No facility plans have been developed at this time.
- **Powerhouse Path** – Follows Powerhouse Road, west of 40th Avenue to Painted Rocks and Cowiche Canyon Road.

MAP 3-3

Reduced Speed Limit School Zones



MAP LEGEND

- Urban Reserve
- 1/2 Mile Walk to School Zone
- Urban Area
- Reduced Speed Limit Zones
- Schools
- Existing Sidewalks
- Parks
- Union Gap
- School Flashers or Signals

Reduced speed limit zones are allowed around designated school crosswalks that are patrolled and marked. Establishing the locations of the school speed zones is a cooperative process between the schools and the City of Yakima. State law governs the signing and regulation of the zones (RCW 46.61.440, Maximum speed limit when passing school or playground crosswalks). Warning signs, safety flashers, painted crosswalks and traffic signals help to identify the location of school safety zones. The Walk-to-School area is generally one-half mile.

1 inch equals 0.90 miles

Fulfilling the Vision of the Community

Safety, access, quality of life, and effective implementation are imperative elements for the City of Yakima's success as a pedestrian friendly community. Safety is the number one concern of citizens, whether they are avid or casual recreational walkers or pedestrian commuters. In many cases pedestrians must share narrow high volume streets with motor vehicles of all sizes and bicycles. They cross busy intersections with multiple conflict points. A consistent pedestrian sidewalk system is not present along many sections of classified streets. The lack of a continuous sidewalk system along busy streets forces pedestrians to walk in the street.

Access improvements for pedestrians are important to help improve the ability to take trips to destinations like schools and transit stops. Currently, the City lacks a system of continuous and connected walking areas along the classified street system. Where sidewalks do exist, many have barriers such as irrigation boxes, utility poles, and missing ADA facilities.

With this plan the City can take measurable steps toward the goal of improving every citizen's quality of life by creating a safer walking environment. The importance of developing a pedestrian system that is attractive and inviting is a key element in preserving Yakima as a place where people want to live, work and visit. This plan proposes a strategy for implementing a priority system of physical improvements through grants and competitive funding sources.

IMPLEMENTATION TASKS

The City should implement the following measures related to the pedestrian element of the plan:

- Provide a dedicated funding source for sidewalk, trail, and pathway construction and maintenance.
- Modify the Yakima Municipal Code to require the construction of sidewalks along property frontages as part of all site development/redevelopment activities in the City. Provisions should be included in the Code to address situations where sidewalk construction is infeasible due to topographic, wetland or other constraints.
- Continue collaboration with the School District on the "Walk to School" program to prioritize and implement needed sidewalk, curb-ramp and other pedestrian-related improvements, especially in the vicinity of elementary schools.
- Pursue state and federal grants to construct/upgrade ADA-compliant curb ramps at key intersections throughout the City. Provide a guaranteed local match for these improvements.

Chapter 4

Wheeled Access – Bicycles and Other People Powered Vehicles

Chapter 4: Wheeled Access – Bicycles and Other People Powered Vehicles

The bicycle is the vehicle most commonly used as an alternative to the automobile. Yakima's climate and topography is favorable to many months of recreational cycling and commuting to work or school on a bicycle. Other wheeled users, such as wheelchair dependent individuals, also benefit from improvements to the bicycling network.

BICYCLE GOALS AND POLICIES -

Goal (T-4.1): Create a street network that encourages safe bicycle connections and routes

Policies:

1. Develop and maintain a map of planned bicycle route improvements including selected Arterial Street Bicycle Lanes, Arterial Street Shared Bike Lanes, and Local Access Streets designated as Bicycle Routes.
2. Assign high priority to bicycle improvements that address safety or hazardous conditions, provide access to activity centers, provide linkages to transit and school facilities, and complete planned facilities/trails.
3. Seek funding to implement the development of a bicycle friendly street system.
4. Improve connections between City streets and the Yakima Greenway and other pathways systems.
5. Educate cyclists as well as drivers regarding safety, "sharing the road", and Rules of the Road.
6. Encourage conversion of 4-lane streets to 3-lane streets with bicycle facilities on Minor Arterial or Collector Arterial streets, where appropriate, with consideration of safety and future traffic volumes.
7. Include dedicated bike lanes or 14 foot shared lanes on all new or rebuilt Arterial Street projects.

Goal (T-4.2): Consider Bicycle Needs at Street Intersections

Policies:

1. Incorporate treatments at signalized intersections to enhance the safety and comfort of cyclists.

Goal (T-4.3): Promote Bicycle Use for Recreation and Economic Development Benefit

Policies:

1. Integrate bicycle facilities into the Yakima Downtown Futures Initiative Project and other special design projects.
2. Promote and support special events that encourage bicycling and safety, such as the Gap-to-Gap event or bicycle rodeos for children.
3. Work with local agencies and private organizations to promote and support hosting bicycle races and events in the Yakima Valley.
4. Include bike rack installation as a requirement of new commercial development approvals.
5. Install bike racks on all Yakima Transit buses.

EXISTING CITY POLICIES REGARDING WHEELED ACCESS

Bicycling

It is legal to ride a bicycle on all streets within the City of Yakima. When riding on the street, cyclists must observe the rules of the road. However, some streets are not recommended for cyclists due to high traffic volumes, travel speed, and the lack of facilities to separate cyclists from motor vehicles. It is legal to ride a bicycle on any sidewalk within the City, except within the Yakima Central Business District. Bicyclists must yield to pedestrians. At street intersections, cyclists may choose to cross the street as a pedestrian or as a motorist, but must obey the traffic laws of the chosen group.

Skateboards and Roller Skates

Skateboards, roller-skates, and in-line skates are not permitted on any street within the City of Yakima, except when crossing an intersection. They are permitted on sidewalks on areas outside of the Central Business District. If riding along sidewalks, these modes must yield to pedestrians. A recreational skateboard

park has been provided at Chesterley Park. Another skateboard park is planned at Kiwanis Park in the future.

Baby Strollers and Walkers

The Yakima Municipal Code is largely silent with respect to persons using baby strollers or walkers. These are normally accepted means of transporting the very young and assisting the elderly or infirmed and are typically considered as types of pedestrian travel. The safety and use of walkers and strollers are greatly enhanced in areas with sidewalks. Unfortunately, many streets in Yakima do not have sidewalks or adequate ADA accessible ramps at intersections, which forces these users into the street, travel lane, or shoulders.

Wheelchair Use

Both motorized and non-motorized wheelchairs are frequently used for the transportation of a physically or medically impaired person. Where sidewalks do not exist or lack adequate ADA accessible ramps at street intersections, wheelchair users are often forced to use the street for travel, placing themselves at significant risk. Motorized wheelchairs are permitted as an exception to many other restrictions related to motorized vehicles. A motorized wheelchair may be used on sidewalks, pathways, and within public parks where other motorized vehicles are prohibited.

Motorized Foot Scooters

In recent years, the popularity of motorized, two-wheeled scooters has increased. While motorized scooters are relatively inexpensive and readily available, they pose certain safety concerns and create often unwelcomed noise. In 2004, the Yakima City Council adopted regulations to limit the use of motorized scooters. Motorized scooters are not permitted for use in Yakima Parks, including the Yakima Greenway, or on public sidewalks. In addition, motorized scooters may only be used on streets with a posted speed limit of 25 miles per hour or less. Operators of the motorized scooters must wear a helmet and have a valid driver's license.

Bicycle Parking and Support Facilities

Currently, the Yakima Municipal Code does not require a minimum number of bicycle parking (secure or non-secure) spaces to be provided as part of a site design and development. Although under the Commute Trip Reduction program, major employers are required to provide bicycle parking facilities, lockers, changing areas, and showers for employees who walk or bicycle to work.

BICYCLIST RESPONSIBILITIES AND SAFETY PRACTICES

Because cyclists are more susceptible to injury than motorists, the cyclist should take all necessary precautions when riding. Safety practices include the following.

1. Always wear a helmet.
2. Never wear headphones when riding.
3. Obey signs and signals. Bicyclists must drive like other vehicles if they are to be taken seriously by motorists.
4. Never ride against traffic. Motorists aren't looking for cyclists riding on the wrong side of the road.
5. Use hand signals. Hand signals tell motorists what you intend to do.
6. Follow lane markings. Don't go straight in a lane marked turn only.
7. Don't pass on the right. Motorists are not looking to see a cyclist passing on the right.
8. Stay in the middle. Ride in the middle of the lane in slow traffic and at busy intersections.
9. Beware of car doors. Ride a car door's width away from the parking aisle.
10. Use lights at night. Never ride without headlights after dark.
11. Stop at all STOP signs!
12. Be aware and yield to all pedestrians.

DESCRIPTION OF EXISTING FACILITIES

Today, Yakima has three levels of bicycle facilities along its public streets. These are illustrated in Map 4-1 and described below.

- Level 1 bike facilities are dedicated bicycle lanes, a minimum of 5-feet in width for each direction of travel. Currently, Level 1 facilities are provided on Lincoln Avenue, Martin Luther King Jr Boulevard, and Powerhouse Road.
- Level 2 bike facilities are lanes that are specifically designated to be shared between bicycles and motor vehicles. These lanes are typically 14 feet in width and have a marked BIKE symbol. Shared facilities are located on North 5th Avenue, Mead Avenue, and Washington Avenue.
- Level 3 bike facilities are signed bike routes, with no specified lane designated for cyclists. Examples of signed bike routes include 6th Avenue, Chestnut, Front Street, and 37th and 38th avenues.

TRANSIT ACCOMMODATIONS FOR BICYCLES

Many of the Yakima Transit Buses are equipped with bike racks. Citizens can use Yakima Transit connections to make cycling part of their regular commute or for traveling to recreational areas. There is no extra charge for loading a bicycle on the transit bus.



SUPPORT FACILITIES

Supporting bicycles as viable alternatives to the automobile requires the provision of bicycle lanes, signed routes, transit accommodations, and supportive facilities such as bike racks, secure parking, and worksite changing facilities. Today, the installation of support facilities is encouraged by the Commute Trip Reduction Plan and required for major employers within the City of Yakima. In addition, bike racks are included as part of the street improvements within the Yakima Downtown Futures Project. Parks and schools have bike racks and various other private businesses have provided bike racks with new development. The Bicycle Pedestrian Advisory Committee recommends new commercial development be required to install bike racks with site design standards.

BICYCLE SAFETY

A total of 216 collisions involving cyclists and motorized vehicles were reported between 1998 and 2004. This averages 31 crashes involving cyclists each year. Vehicle collisions involving a bicyclist account for approximately 1.2% of all reported accidents, which is consistent with the statewide average reported by Washington State Department of Transportation (2002 data) of 1%. In Yakima, these collisions occurred at 170 intersections and the majority occurred along classified streets with speed limits of 30 mph or more, and without any bicycle facilities. Locations where multiple bicycle collisions have occurred should be reviewed for safety improvements. Table 4-1 summarizes the locations where 3 or more collisions have occurred since 1998 while Map 4-1 illustrates these locations graphically.

**Table 4-1
High Bicycle Collision Locations**

Location	# Bike Collisions	Intersection Signalized?	Bike or Shared Lane?	Left Turn Lane on Minor Rd	Protected Left Turn Phase?	Right Turn Lane?
N 1st St / Yakima Ave	6	Yes	No	Yes	Yes	No
16th Ave / Lincoln Ave	4 Yes		No	Yes	Yes	No
3rd St / Yakima Ave	4 Yes		No	No	No	No
1st St / Walnut St	3	Yes	No	Yes	Yes	No
S 1st St / Washington Ave	3	Yes	No	Yes	Yes	No
40th Ave / Nob Hill Blvd	3 Yes		No	Yes	Yes	No
5th Ave / Walnut St	3 Yes		No	Yes	Yes	No
6th St / Walnut St	3	Yes	No	No Yes	No	
Custer Ave / Lincoln Ave	3	No	No	No NA	No	

None of the bicycle collision locations identified in the table above have facilities such as a dedicated bike lane or shared travel lanes. Some of the locations have on-street parking. Consideration may be given to removing or modifying on-street parking as one possible measure to improve bicycle safety near signalized intersections or site-specific locations. Only one of the locations is not at a signalized intersection. The details of each of these bicycle collisions should be reviewed to determine if there are patterns or commonalities for these collision locations in order to determine the appropriate treatment at each intersection.

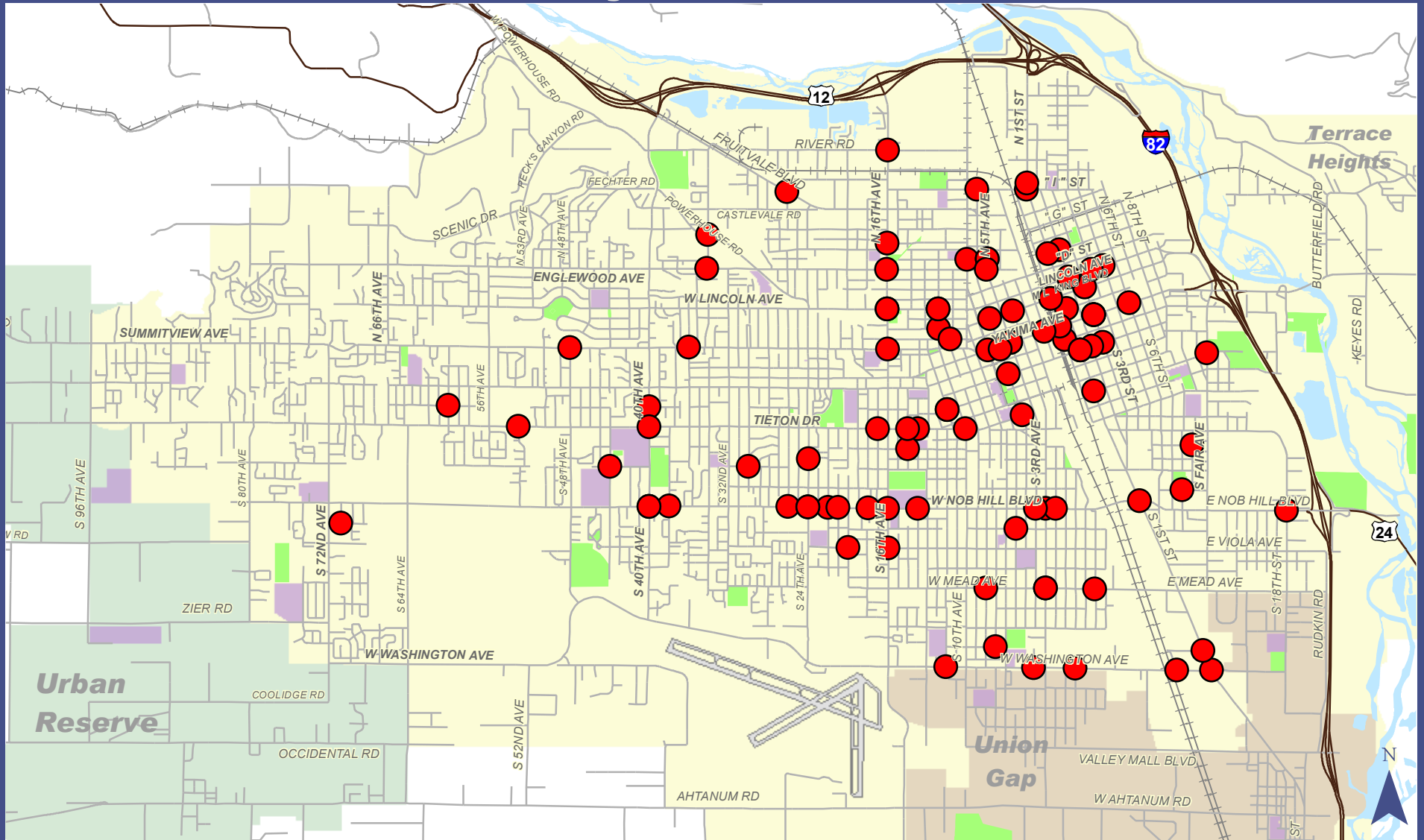
IMPROVEMENTS TO THE BICYCLE NETWORK

The Yakima Municipal Code states that bicycle facilities shall be installed on all new or re-built Arterial Streets. Existing streets should be retrofitted to accommodate bicycles where possible. Recommended changes to the Street Standards of the Yakima Municipal Code include a combination of either dedicated bike lanes or shared facilities for all classified streets.

All bike lanes must be a minimum width of 5-feet and are recommended on streets where traffic volumes (planned or future) exceed 20,000 Average Daily Trips. Other classified streets may have a 14-foot wide outside curb lane to accommodate shared cyclist-motorist use. Street standards are discussed in detail in Chapter 5 of this Plan.

MAP 4-1:

Bicycle-Vehicle Accidents 2001-2004

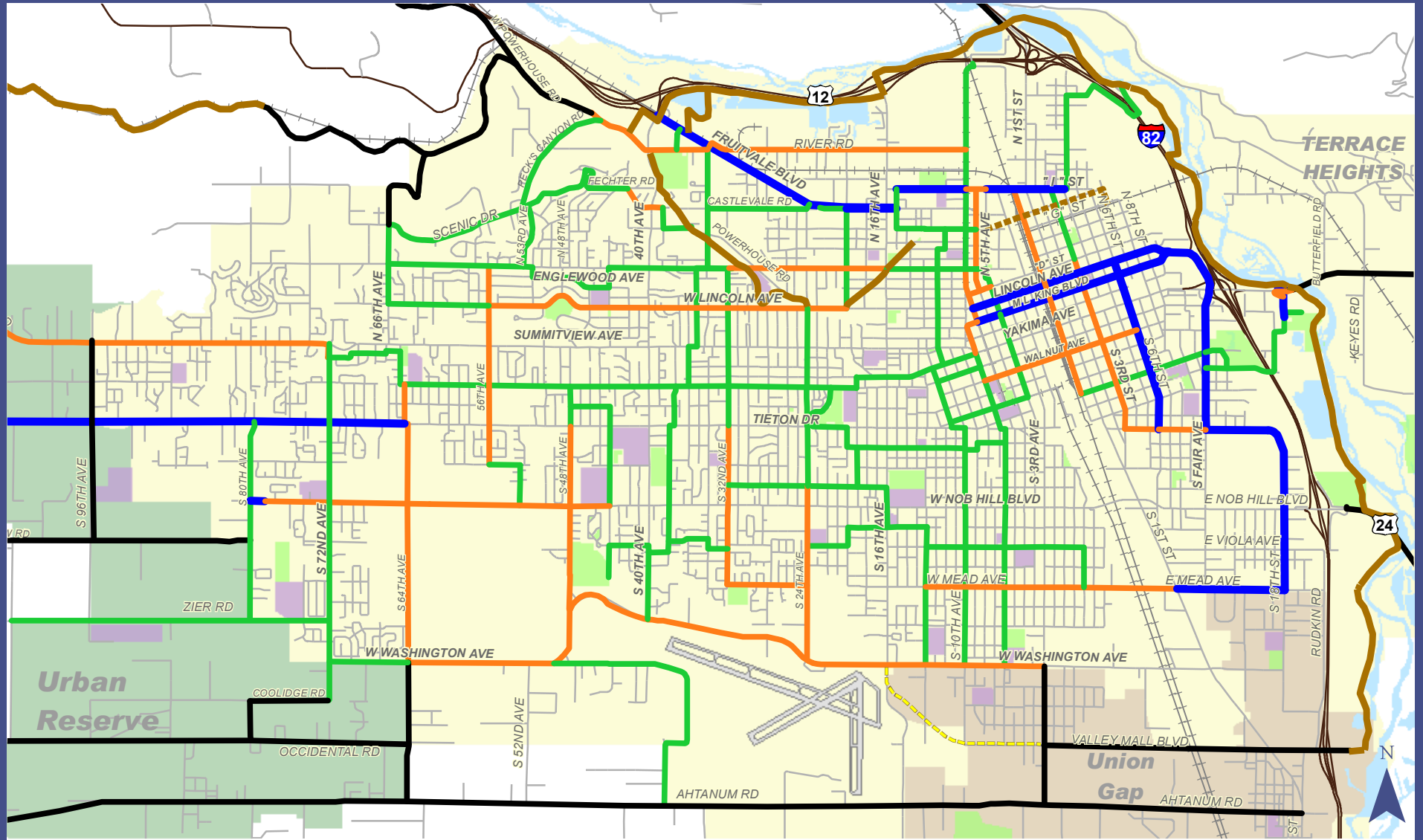


MAP LEGEND

- Urban Reserve
- Urban Area
- Schools
- Parks
- Union Gap
- Bicycle - Vehicle Accidents

Between 2001 and 2004, 102 bicyclists were involved in a collision with a vehicle as illustrated on this map. This data was reported by the Washington State Department of Transportation. Annual collisions between bicycles and motorists average 26 per year, or 1.5 % of all reported vehicle collisions. Each location is unique and requires site specific treatment to improve bicycling safety. Priority for safety improvements should be studied at the locations with more than one bicycle collision, or proximity to schools, parks and public buildings or other significant

1 inch equals 0.90 miles



MAP LEGEND

- | | | |
|---------------|-----------------------|----------------|
| Urban Reserve | Type 1 Facility | Existing Paths |
| Urban Area | Type 2 Facility | Future Paths |
| Schools | Type 3 Facility | |
| Parks | County or Other Route | |
| Union Gap | | |

Bicycle Facilities

Yakima has three levels of bicycle facilities along its public streets. Existing and future bicycle facilities will be constructed to these descriptions, as illustrated on this map. Level 1 facilities are dedicated bicycle lanes in each direction of travel. Level 2 facilities are travel lanes that are specifically designed to be shared between bicycles and motor vehicles. Level 3 facilities are signed bike routes with no designated area for cyclists. In addition, a number of off-street pathways are available in Yakima that are designed for both cyclists and pedestrians.

1 inch equals 0.90 miles

CITIZEN PARTICIPATION AND PROJECT PRIORITIZATION

The City of Yakima appointed a Bicycle and Pedestrian Citizen Advisory Committee in 1994. The seven-member citizen committee meets monthly to discuss various issues related to project design, policy, safety, and public education. The Committee assists in the prioritization of improvement projects and drafting recommendations for missing linkages and connections to regional pathways.

One primary task conducted by the Citizen Committee is development of a Bicycle Map for public distribution. The map identifies current bike routes and paths, as well as those that are in the planning process. County bike routes, off-street trails, and the canal pathway are included on the map, along with numerous other public facilities. Map 4-2 identifies existing and planned bicycle facility projects.

The Bicycle and Pedestrian Citizen Committee participated in a statewide review process for development of the Washington State Transportation Plan, Bicycle and Pedestrian Element. A list of projects was submitted for the Yakima Urban Area that exceeded \$19 Million and is included in the State Plan as a demonstration of local need. Specific bicycle improvement projects are included in Chapter 10: Implementation and Financing.

IMPLEMENTATION TASKS

The City should implement the following measures related to the bicycle element of the Plan:

- Provide a dedicated funding source for the construction of bicycle lanes and trails at prioritized locations throughout the City.
- Modify the Yakima Municipal Code to adopt new street design standards that reflect the needs of different types of cyclists (e.g., recreational, commuter, children, etc.). Recommended standards are provided in Chapter 5.
- Modify the Yakima Municipal Code to require the installation of bicycle racks and other supportive facilities as part of new commercial development.
- Provide a dedicated funding source to install bicycle racks on all Yakima Transit buses.

Chapter 5

Arterial and Collector Street System

Chapter 5: Arterial and Collector Street System

The Yakima Urban Area has over 95 miles of classified streets including Primary Arterial, Minor Arterial and Collector Arterial streets. The critical issues for stewardship of these streets are: ensuring adequate future capacity, system preservation, safety, and the provision of adequate, attractive facilities to support economic development.

ARTERIAL AND COLLECTOR STREET SYSTEM GOALS AND POLICIES

Goal (T-5.1): Address street segments that are projected to have future capacity constraints

Policies:

1. Identify and plan for necessary Arterial street capacity improvements. Incorporate the needed projects into the 6-Year Transportation Improvement Program.
2. Evaluate a variety of solutions to address future capacity constraints (e.g., access management) to minimize property and neighborhood impacts as well as the expense of street expansion.
3. Implement grade separation of arterial street crossings with rail lines to improve traffic safety, traffic flow efficiency, and air quality. Prioritize the grade separation of Martin Luther King Jr Boulevard and Lincoln Avenue. Grade-separated crossings of other streets shall be planned in the future.
4. Maximize existing infrastructure investment by reducing travel demand through increased use of the Transit system, and other Commute Reduction strategies.
5. Update the Transportation Concurrency Program to include project level coordination with SEPA mitigations and other off-site improvements, as identified in the 6-Year Transportation Improvement Program.
6. Develop and adopt guidelines for project-level Traffic Impact Studies.
7. Develop a formal system for a public-private partnership program to help fund capacity or safety projects identified in the 6-Year Transportation Improvement Program. Consider establishing a Development Impact Fee system as a possible alternative funding program.

Goal (T-5.2): Street System Preservation – Develop maintenance strategies that maximize efficiencies

Policies:

1. Provide funding to preserve, re-construct, and maintain the existing street system, including street surfaces, drainage, sidewalk repairs, street lighting, and traffic signals.
2. Enhance and improve street signage and lane markings for traffic safety and community aesthetics.

Goal (T-5.3): Revise development standards and guidelines to improve the quality of streets

Policies:

1. Amend Street Standards to increase flexibility in construction related to topographic and right-of-way constraints and neighborhood livability. Include options for 2-lane, 3-lane and 5-lane Arterial streets street standards to be used where appropriate for future traffic volumes and land use needs.
2. New 4-lane streets should be avoided. Implementation of safety-based improvement measures may be necessary for existing 4-lane streets.
3. Clarify bicycle and sidewalk standards for all streets. Provide low volume residential street options.
4. Create and enhance a sense of place through the transportation system. Modify design standards to provide gateway treatments on major arterials and near freeway interchanges to include landscaping and other aesthetic treatments, pedestrian accommodations, and street lighting.

YAKIMA STREET SYSTEM PLAN

Street System Functional Classification

The purpose of classifying roadways is to create a balanced transportation system that facilitates mobility and accessibility needs for all modes of transportation. A roadway's functional classification defines its intended purpose and its context in the overall transportation system. This context is relative to the expected vehicular, pedestrian and bicycle usage as well as the adjacent land uses and neighborhood. Finally, the designated public right-of-way must also provide sufficient space to accommodate utilities that are needed to serve the community.

A description of the proposed functional classification system is described below. As discussed a neighborhood collector designation is proposed as part of the Transportation Plan Update. This designation is needed to address neighborhood livability issues on existing streets within the City.

The proposed functional classification of each of the streets within the City is shown in Map 5-1.

Principal Arterial Streets

Principal Arterials serve both local and through traffic entering and leaving the City and provide access to major activity centers within Yakima. The Principal Arterials also connect the minor arterial and collector street system to the freeways. There are approximately 34 miles of Principal Arterials in Yakima. Some examples of Principal Arterials include: 40th Avenue, 16th Avenue, 1st Street, Summitview Avenue, Washington Avenue, and Nob Hill Boulevard.

Minor Arterial Streets

Minor Arterial Streets support moderate-length trips and provide connections between neighborhoods and community/regional activity centers. There is a higher degree of access and lower vehicular travel speed than on major arterials. There are approximately 31 miles of Minor Arterials in Yakima, such as Tieton Drive, Mead Avenue, and 3rd Avenue.

Collector Arterials

Collector Arterials are the intermediate street classification. They provide a link between local roadways and the arterial system providing a balance between access and mobility. There are approximately 25 miles of collector arterials in Yakima. Some examples of these facilities include Englewood Avenue and S. 3rd Street.

Neighborhood Collectors (New Designation)

Neighborhood collectors provide primary routes into residential neighborhoods. These roadways carry higher volumes than local streets but are not intended to serve through traffic. These facilities also have slower speeds to ensure neighborhood livability and safety for pedestrians and cyclists. The City does not currently have a neighborhood collector designation but will be adding one as part of the Transportation Plan. Neighborhood Collectors will be a local designation of the Federal Functional Classification for Collector Arterial. As discussed below, five street segments within the City are proposed for re-designation as neighborhood collectors.



Changes in Functional Classification of Streets

A number of changes are recommended to the existing Functional Classification System to reflect existing/projected travel demands, neighborhood needs, land use changes, regional traffic patterns, etc. These changes include reclassifying:

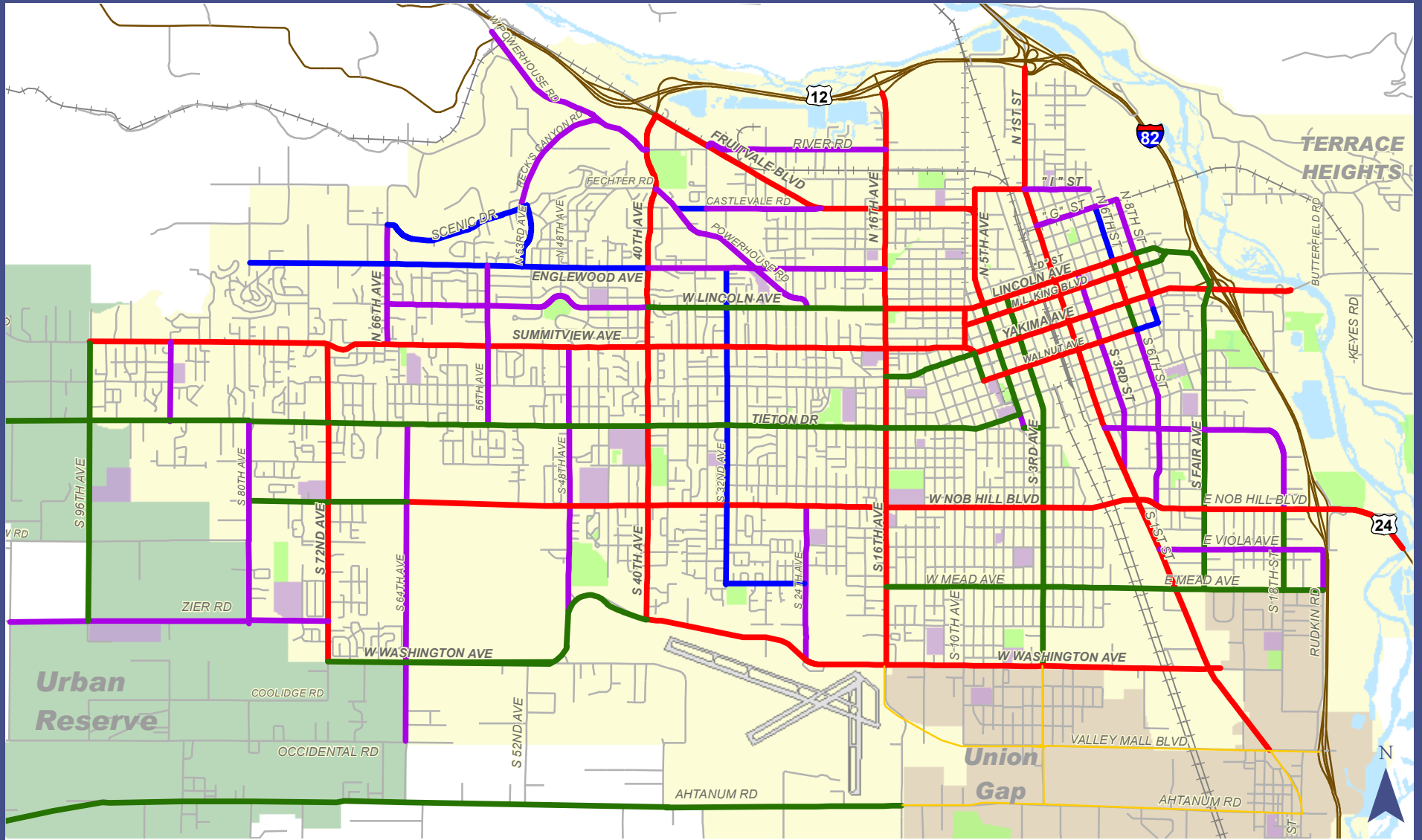
- Summitview Avenue (west of 56th Avenue), Fruitvale Boulevard, and Washington Avenue as Principal Arterials;
- Nob Hill Boulevard (west of 72nd Avenue), 18th Street (Mead to Nob Hill Blvd), Fair Avenue (Spruce to 10th Street), Martin Luther King Blvd (east of N 8th Street) and Lincoln Avenue (east of N 8th Street) as Minor Arterials;
- Zier Road (west of 72nd Avenue), N 56th Avenue (north of Tieton Drive), Castlevale Road (east of 34th Avenue), E G Street, and Pacific Avenue as Collector-Arterials;
- Scenic Drive, Englewood Avenue (west of 40th Avenue), Castlevale Road (west of 34th Avenue), 32nd Avenue, N 6th Street, Mead Avenue (24th Ave to 32nd Ave) and S 56th Avenue (south of Tieton Drive) as Neighborhood Collectors;
- S 10th Avenue, N 25th Avenue, and N 48th Avenue (north of Englewood) as local streets.

West Valley and Terrace Heights Neighborhoods

Currently, the City's Comprehensive Plan does not address the West Valley or the Terrace Heights neighborhoods. As such, the functional classification of streets within these neighborhoods is not identified in this plan. The City is proposing to initiate neighborhood plans in 2007 to address comprehensive planning issues associated with each area. As part of this process, the Transportation Plan will need to be updated to identify the appropriate functional classification of streets within these areas as well as the prioritization of improvements to serve these neighborhoods.

MAP 5-1

Proposed Functional Classification of Streets



MAP LEGEND

- | | | | |
|----------------------------------|---------------|--|------------------------|
| | Urban Reserve | | Primary Arterial |
| | Urban Area | | Minor Arterial |
| | Schools | | Collector Arterial |
| | Parks | | Neighborhood Collector |
| | Union Gap | | Other |
| Functional Classification | | | |

Streets classification defines the function and intended purpose of the system. Principal Arterials provide access to the freeway system. Minor Arterials provide service between neighborhoods and community land uses. Collector Arterials provide the link between the local streets and the Arterial street system. Neighborhood Collectors provide the primary access into the neighborhoods, but are not intended to serve through traffic. Local streets provide access to individual properties. This map includes suggested changes in the system.

1 inch equals 0.90 miles

STREET DESIGN STANDARDS

Street design standards are intended to address the functional and operational characteristics of streets, such as traffic volume, capacity, operating speed, and safety. These standards are necessary to ensure that the City's street system will be capable of safely and efficiently serving the traveling public while accommodating the orderly development of adjacent lands.



Today, Yakima Municipal Code (YMC) 12.06 specifies the following general street standards for classified streets:

- **Principal Arterials:** five-lane roadway with sidewalks and bike lanes. The paved width of the street is 70 feet whereas the total right-of-way needed is 100 feet.
- **Minor Arterial:** five-lane roadway with sidewalks and bike lanes. The paved width of the street is 65 feet whereas the total right-of-way is 80 feet.
- **Collector-Arterials:** four-lane roadway with sidewalks. Cyclists are expected to share the curb-side lane with motorists. The paved width of the street is 54 feet whereas the total right-of-way is 80 feet.

Neighborhood advocates, builders, realtors, and bicycling and walking advocates have encouraged the City to review the street development standards as currently defined by YMC 12.06 provide more flexibility and create more neighborhood-friendly streets through design standards. Specifically, items requested for review include narrower neighborhood streets, reduced lane width on arterial streets, clearer requirements for bicycle facilities. Consistency between Yakima County street standards and those of the City of Yakima also needs to be discussed.

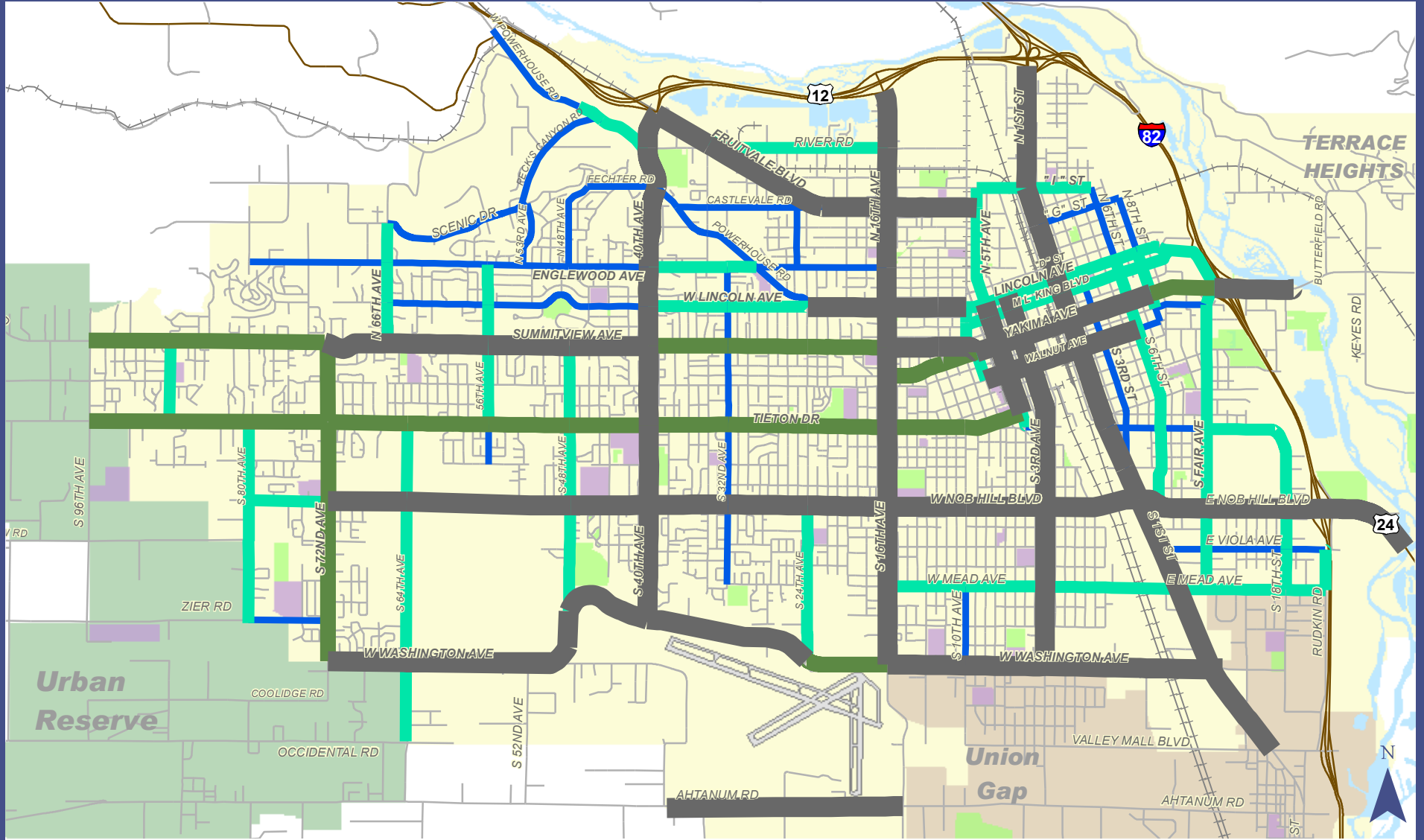
Based on this feedback, the Yakima Transportation Plan Update recommends amendments to the existing City street standards, including the addition of a neighborhood collector designation. The resultant proposed street design standards are shown in Table 5-1. The standards incorporate right-of-way needs, number and width of travel lanes, on-street parking, bicycle and pedestrian facilities, and utility strips. These standards are intended for planning purposes for new roadway construction as well as those areas where it is physically and economically feasible to improve the existing streets.

**Table 5-1
Recommended Street Design Standard Details**

ID Class	ifications	Right-of-way (ft)	Paved Width (ft)	# Lanes	Speed Limit (mph)	Median Type	Bike Lane or 14' Shared Lanes	Sidewalks (Both Sides)	Target ADT	Lane Width (ft)
P1	Principal Arterial	100	70	4	35+	Raised Median, turnlanes at intersections	5' BL (both sides)	7'	28,000+	11-11-M-11-11
P2	Principal Arterial	90	65	5	35+	Two-way center left-turn lane	5' BL (both sides)	7'	18,000 - 28,000	11-11-11-11-11
PM1	Principal Arterial or Minor Arterial	80	61	5	30 - 35	Two-way center left-turn lane	Shared lane, both sides	7'	15,000 - 20,000	14-11-11-11-14
MC1	Minor Arterial or Collector Arterial	60	43	3	30 - 35	Two-way center left-turn lane	5' BL (both sides)	7'	10,000 - 18,000	11-11-11
MC2	Minor Arterial or Collector Arterial or NC Commercial Access	60	39	3	30 - 35	Two-way center left-turn lane	Shared lane, (both sides)	7'	5,000 - 15,000	14-11-14
MC3	Minor Arterial or Collector Arterial or Neighborhood Collector	50	28 - 36	2	25 - 30	Parking on one-side - requires 36'	Shared lane, (both sides)	5'	3,000 - 5,000	14-14
LA	Local Access	50	24 - 30	2	20 - 25	Parking on one-side - requires 30'	No 5'		3,000 or less	11 to 12

Notes:

1. Target Average Daily Traffic (ADT) refers to maximum recommended traffic volume for the design layout by 2025.
2. NC Commercial Access refers to a non-classified street, serving a non-residential area.
3. On Street parking requires 8' of pavement for each side of the street.
4. Utility needs may impact total right-of-way needs.



MAP LEGEND

- | | | |
|---------------|----------------------------|---------|
| Urban Reserve | Future Travel Lanes | 5-Lanes |
| Urban Area | | 4-Lanes |
| Schools | | 3-Lanes |
| Parks | | 2-Lanes |
| Union Gap | | |

Future street capacity and safety needs influence the number of travel lanes necessary on Arterial Streets. However, available right of way, development patterns and land use may limit total street width. The Transportation Plan must provide a balance between these interests. The number of travel lanes planned for Arterial Streets determines the total right of way requirements and nature of the frontage improvements. To provide predictability to property owners, this map illustrates the 20-year plan regarding the number of travel lanes for each Arterial Street.

1 inch equals 0.90 miles

CAPACITY OF THE ARTERIAL STREET SYSTEM

The Transportation element to the Future Land Use component of the City's Comprehensive Plan is a required portion of the Washington State Growth Management Act (GMA). The Yakima Valley Council of Governments provided future land use and travel demand modeling data to forecast future capacity needs on the arterial street system within the City. The results of the analysis confirmed that the following corridors will be of concern from a capacity standpoint: 40th Avenue, Nob Hill Boulevard, and 16th Avenue. Further details of this analysis are discussed below.

In addition to the future traffic projections, actual traffic volumes on the arterial and collector streets are regularly monitored. Traffic volumes for the 95 miles of classified streets are collected and updated on a two-year cycle. Historic data for Yakima indicates the average growth rate of traffic volumes is between 1.5 and 2 percent. However, some streets have experienced higher or lower rates of traffic increase.

Based on actual count data, the City of Yakima estimates weekday PM peak hour volumes average 8.7 percent of the daily volumes. The PM peak hour represents the busiest time period for daily traffic throughout the community. The morning peak traffic is spread out over a period between 7:00 and 9:00 a.m. Mid-day traffic increases between 11:30 a.m. and 1:00 p.m. The evening peak traffic period is between 4:00 and 6:00 p.m. Additional traffic volume fluctuations occur between 3:00 and 4:00 p.m. during school release periods.



Street Segment Level of Service

Ensuring the presence of adequate capacity on public streets, to support new development and provide for community needs, is one of the key components of the Washington State Growth Management Act (RCW 36.70A.070). A minimum acceptable Level of Service (LOS) standard was established in the 1998 Transportation Plan to accomplish this purpose. A Transportation Concurrency Ordinance was also implemented in 1998 as part of the plan adoption.

Level of service (LOS) is a concept developed to quantify the degree of comfort (including such elements as travel time, number of stops, total amount of stopped delay, and impediments caused by other vehicles) afforded to drivers as they travel through an intersection or roadway segment.

Six LOS designations are provided for each type of facility, from "A" to "F". LOS "A" reflects no congestion faced by drivers whereas LOS "F" reflects overcapacity conditions with high congestion (Highway Capacity Manual, 2000). Per the Concurrency Ordinance, LOS D conditions or better must be maintained on City of Yakima streets.

For planning purposes, the extent of congestion experienced by drivers can be expressed as the percentage of capacity that is used by the traffic volume on a given street [a volume-to-capacity ratio (V/C Ratio)]. Generally, the City defines Level of Service as:

Volume to Capacity Ratio (V/C)	Corresponding Level of Service (LOS)
V/C Ratio greater than 1.0	LOS F
V/C Ratio of 0.90 to 1.0	LOS E
V/C Ratio of 0.80 to 0.89	LOS D
V/C Ratio of 0.70 to 0.79	LOS C
V/C Ratio of 0.60 to 0.69	LOS B
V/C Ratio of less than 0.60	LOS A

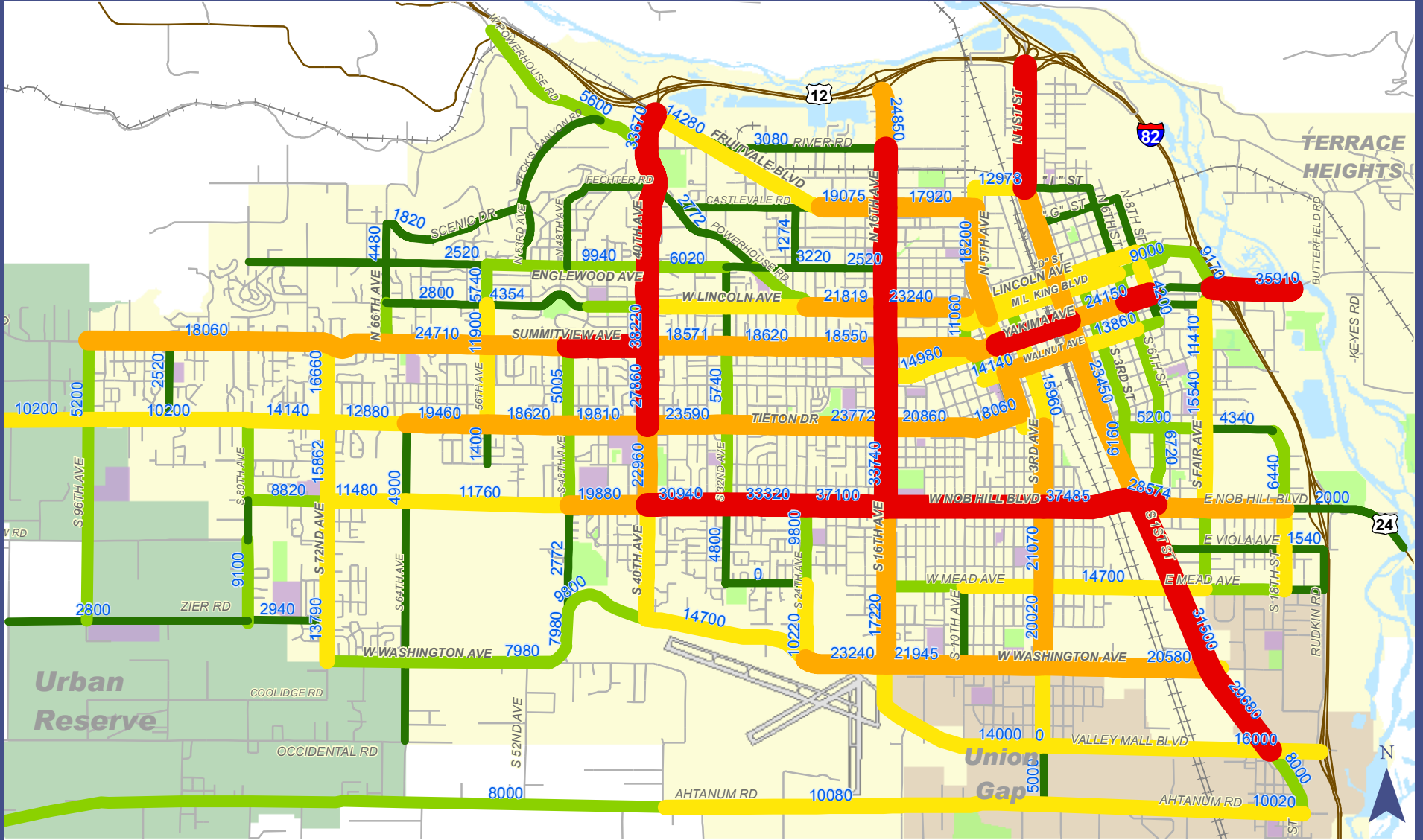
The Level of Service definition adopted in 1998 reflects a conservative approach to expressing community preferences. Public comments emphasized that Yakima citizens did not wish to experience the congestion problems that communities in the Puget Sound region regularly endure. To reflect that preference, the tolerable (or maximum) number of vehicles per driving lane during a peak hour was established at 600 vehicles, which allowed significant spacing between vehicles (i.e., “headways”) on the street. In the year 2000, the City revised its definition of capacity from 600 to 800 because North 40th Avenue exceeded the conservative local definition and the community did not feel it was necessary to add travel lanes to this facility at that time. For reference purposes, communities throughout the nation use a range of 1,000 to 1,400 vehicles per travel lane during a peak hour as a more realistic measure of capacity. This range ensures that the investment in the existing infrastructure is maximized while still providing tolerable levels of congestions for community residents.

Using a maximum capacity of 800 vehicles per driving lane during peak hour, a number of street segments will meet or exceed the Level of Service definitions prior to 2025. Additional development would be prohibited under the Growth Management Act until capacity-related improvements are made. These streets include:

- North 40th Avenue from Fruitvale Boulevard to Tieton Drive;
- Nob Hill Boulevard from 16th Avenue to 1st Street;
- South 1st Street from Nob Hill Boulevard to Washington Avenue;
- Summitview Avenue from 40th Avenue to 48th Avenue;
- 16th Avenue between Lincoln Avenue and Tieton Drive.

MAP 5-3

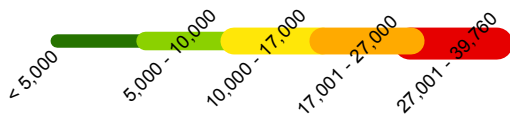
Average Daily Traffic, 2025



MAP LEGEND

- Urban Reserve
- Urban Area
- Schools
- Parks
- Union Gap

Projected Traffic Volumes, 2025



Traffic volumes in the Yakima Urban Area have averaged an annual growth rate of approximately 2%. This map displays anticipated traffic in the year 2025, assuming this historical rate of traffic increase continues. Individual street corridors may experience a higher or lower rate of traffic growth, due to changes in land use, development or vacant land or construction of new or improved streets. The Yakima Metropolitan Model, maintained by the Yakima Conference of Governments, was utilized to confirm these assumptions in traffic growth.

1 inch equals 0.90 miles

The existing and future fiscal constraints require the City to identify ways to maximize the life of the existing transportation system infrastructure. Because the current definition of capacity of 800 vehicles per hour per lane can result in unnecessary construction and/or widening of City streets, the Transportation Plan Update 2005 - 2025 recommends increasing the definition of capacity from 800 vehicles per hour per lane to 1,000 vehicles per hour per lane. The minimum acceptable LOS on City streets shall remain at LOS "D" (e.g., a volume-to-capacity ratio of between 0.80 and 0.89). This expectation results in a maximum traffic volume of 890 vehicles per hour per lane on City streets. In instances when the traffic volumes exceed this threshold, capacity-related improvements are necessary before additional land use development can occur.

Based on a capacity definition of 1,000 vehicles per hour per lane, the following street segments will exceed LOS D conditions by the year 2025, if no action is taken and additional significant development occurs to change travel patterns:

- North 40th Avenue (between River Road and Summitview Avenue).
- Nob Hill Boulevard (between 16th Avenue and 1st Street)

Corridor plans will be developed for each of these street segments following the adoption of the Transportation Plan Update. These corridor plans will address capacity needs as well as community/aesthetic enhancements.

Other streets within the City would also benefit from the development and implementation of a corridor plan to address future livability and transportation needs. Two examples include 16th Avenue and 1st Street.

Travel Speed Study

In addition to the street segment volume-to-capacity ratio analysis, the City of Yakima conducted a "Travel Speed Study of Urban Streets" to analyze corridor levels-of-service during the weekday PM peak hour. The purpose of this study was to review the "quality of service" provided to drivers during peak hour conditions. While all streets were found to meet the City's definition of arterial LOS (based on a volume-to-capacity ratio), not all streets operate with free-flowing conditions. Signalized intersections and non-intersection turning movements reduce travel speed, especially under congested conditions.

The travel speeds of more than 85 miles of arterial streets were evaluated as part of the study, in accordance with the urban streets methodology contained in Chapter 15 of the Highway Capacity Manual (2000). As described in the study, the following corridors were identified as operating at level-of-service "D" during the weekday p.m. peak hour based on travel speed:

- North 40th Avenue between Summitview Avenue and Englewood Avenue;
- South 16th Avenue between Nob Hill Boulevard and Tieton Drive;

- North 16th Avenue between Summitview Avenue and West Lincoln Avenue;
- East Nob Hill Boulevard between South 1st Street and 18th Street; and,
- North 56th Avenue between Englewood Avenue and Summitview Avenue.

Many of the streets with reduced peak hour travel speeds do not have center left-turn lanes to accommodate left-turning traffic. The efficiency of these routes should be reviewed for methods to reduce vehicular conflicts and improve travel speed.

Speed Limit Ordinance Review

The City needs to comprehensively review the posted speed limits on each of the arterials within the system. This review should focus especially on those streets that have been incorporated from the County and the adjacent land uses have been urbanizing. It is important to perform the comprehensive citywide review in the context of the adjacent land uses and neighborhood characters, 85th percentile speeds and any enforcement issues.

Transportation Demand-Management Strategies

The City is mandated to participate in the Washington State Commute Trip Reduction (CTR) program. The Yakima Valley Conference of Governments coordinates the CTR program regionally. At the present time, Yakima has 12 mandated employers (those businesses that have more than 100 persons reporting to or leaving work during a peak traffic hour) that are subject to reporting requirements of the CTR act. Strategies used by the local CTR program include incentives to use public transit, park and ride lots, van-pools and other special programs.

Safety Needs of the Arterial Streets

Vehicle collision records from 1998 to 2004 were evaluated for safety on Arterial and Collector street segments. Police accident records were used for this research. Insurance industry experts estimate that police records represent approximately 40 percent of all the “incidents” that may occur at any location. The “near misses” or the minor fender benders that do not result in a police report can only be estimated. However, the police records provide useful data on collision location, type, time of day, injuries, and other contributing factors that can be analyzed.

This evaluation considered both the rate of vehicle collisions, based upon traffic volumes, and the severity of injuries. The rate of collisions measures the number of reported accidents per one million vehicles (MEV) entering the intersection.

This method normalizes all intersections for comparative purposes. Locations where the rate of collisions exceeds 1.0 MEV can merit a safety review.

Additionally, police accident records indicate number and severity of injuries for persons involved in the collision. Severity of injuries can be expressed in relative terms to identify locations where collisions are more likely to result in severe injuries.

Police reports indicate the location of a vehicle accident relative to the closest intersection. Collision locations associated with the functional area of the intersection are analyzed in the intersection chapter of this report. Accidents that occur outside of the intersection area (generally beyond 250 feet) are related to the street segment. The street corridors within the City with the highest percentage of non-intersection collisions tend to be four-lane Principal or Minor Arterial Streets where traffic volumes exceed 14,000 average daily vehicles and multiple commercial driveways exist.

A safety rating index has been developed for the Arterial streets, based upon historical collision data. A weighted factor was determined using the total number of collisions that occurred on each street segment, multiplied by the average Severity of Injury Index. This Safety Rating Index includes those intersections where no collisions were reported by assigning a zero value. The minimum Safety Rating Index for an Arterial street segment was 266 (least collisions) and the highest was 43,395 (most collisions and severity of injuries). The Safety Rating Index was organized into ten rating classes. The lower the rating, the less probability of a vehicle collision with severe injuries. Map 5-4 illustrates intersection collisions and the Arterial street segments highlighted by the Safety Index.

Street corridors with the highest safety concerns (for non-intersection collisions) include:

- 16th Avenue between Tieton Drive and River Road;
- Nob Hill Boulevard between 24th Avenue and 18th Street;
- 40th Avenue between Fruitvale Blvd and Nob Hill Boulevard;
- South 1st Street between Nob Hill Boulevard and Washington Avenue; and
- Portions of South 3rd Avenue, Summitview Avenue, Yakima Avenue, and Lincoln Avenue

Two-Way Left Turn Lanes and the Road Diet

Until the 1970s, most urban communities constructed either 2-lane or 4-lane Arterial Streets. As urban level development continued along these streets, many streets experienced congestion due to driveway and turning movements, as well as safety concerns largely from rear end or broadside collisions also associated with turning vehicles.

To address these safety and congestion concerns, many communities began constructing streets with a center left turn lane. Continuous two-way left turn

lanes (TWLTL) improve traffic safety by providing a separate lane for left turning vehicles to remove turning vehicles from the through travel lanes. The presence of TWLTL has been estimated to reduce the rate of vehicle collisions between 26 and 40 percent. In addition to the traffic safety benefits, a TWLTL also improves the capacity of the street by reducing delay and congestion caused by turning vehicles.

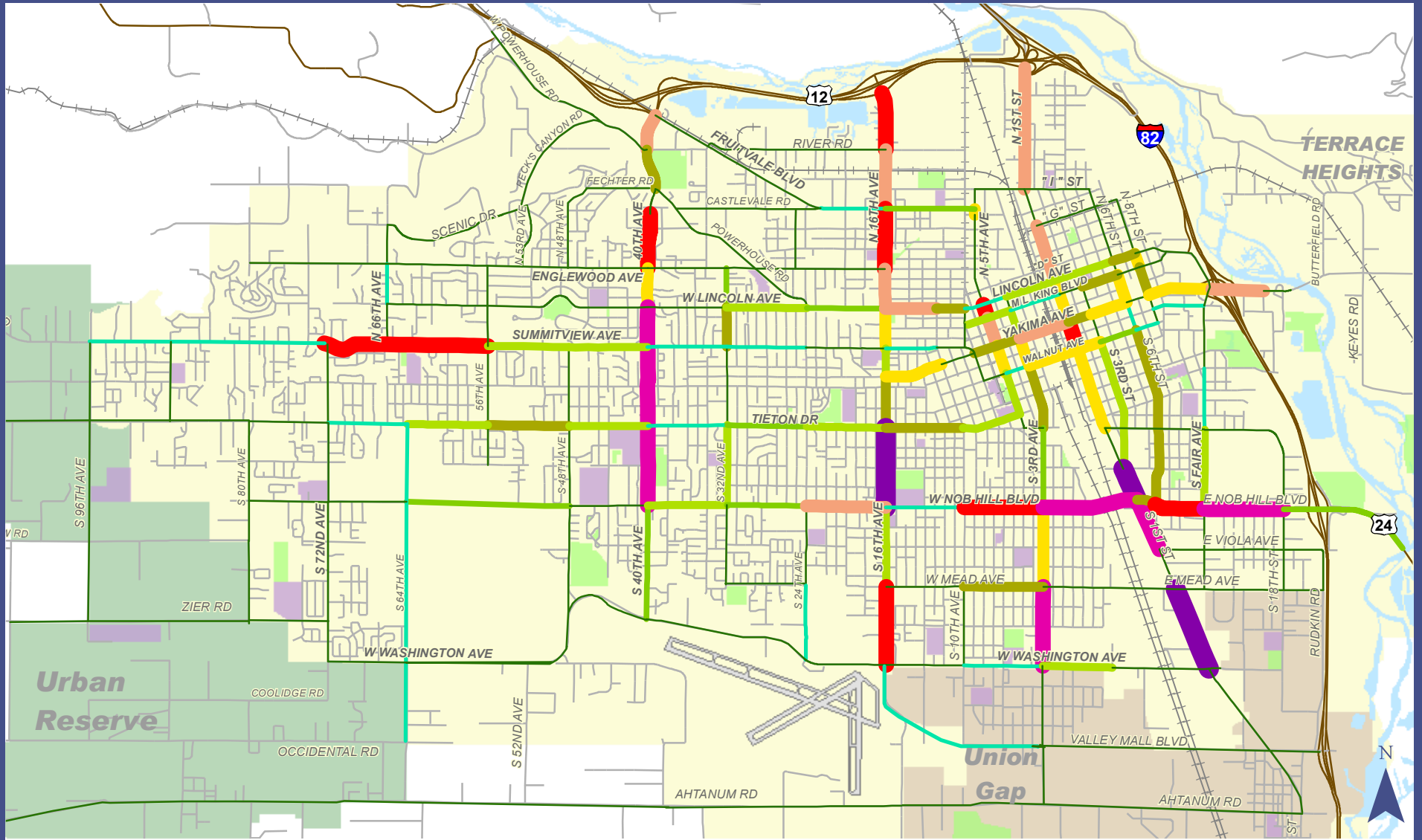
As the safety and capacity benefits of the TWLTL were studied and proven in the 1980's, roadway conversions from 4-lane facilities were examined for the feasibility of reducing the number of lanes to a 3-lane design (known as the "road diet"). Added benefits of reducing the number of travel lanes from 4-through lanes to 3-lanes also include improving safety conditions for pedestrians, bicyclists and transit users. Reducing the number of through lanes may also reduce excessive speeds.



Traffic Engineering studies indicate that a 3-lane street design is effective for a street with a future design volume of up to 17,000 average daily vehicles. A 5-lane street is effective for a future design volume of up to 28,000 average daily vehicles.

On streets where the future traffic is expected to exceed 28,000 average daily vehicles, the TWLTL is not recommended due to higher accident rates associated with fewer gaps in traffic for safe turning movements. Raised median dividers and turn lanes at intersections are recommended for these higher volume streets.

The City has recently applied the "road diet" approach on North 5th Avenue between Fruitvale Boulevard and Lincoln. This section of the street has three travel lanes and on-street parking. Anecdotal observations have suggested that the operations and safety of the roadway have greatly increased since the conversion.



MAP LEGEND

1 inch equals 0.90 miles

Safety Index		
1: 0 - 266	5: 2,143 - 3,333	9: 13,199 - 26,944
2: 267 - 813	6: 3,334 - 6,513	10: 26,945 - 43,395
3: 814 - 1,353	7: 6,514 - 9,238	
4: 1,354 - 2,142	8: 9,239 - 13,198	

Each of the 225 Arterial Street segments with the Yakima Urban Area have been rated with a Collision and Injury Severity Index. The safety rating was derived by assigning all vehicle collision points to the street segment. A weighted factor was determined using the total number of collisions that occurred in each street segment, multiplied by the average Severity of Injuries Index. The Safety Index includes those intersections with no collisions (or no data). Data was divided into ten equal classes using GIS to determine the Natural Data Breaks, as shown on this map. The lower the safety rating, the less probability of a severe injury vehicle collision.

Access Management

There are many busy arterial intersections within the City in which there are several driveways in close proximity to one another and to the intersection. This numerous turning movement conflicts that result from these driveways can yield safety problems and reduced intersection capacity over time. This can also result in driver frustration regarding conflicts between those traveling through the intersection versus those accessing private developments within the functional areas of the intersection.



To respond to these concerns and to extend the operating lifespan of the system in a cost-effective fashion, several jurisdictions throughout the country are adopting access management policies. Some of these techniques incorporated in these policies include limiting or consolidating driveways accessing commercial land uses, restricting the location and spacing of commercial driveways especially near street intersections, or prohibiting driveways in certain locations entirely.

Yakima does not have an adopted policy related to access management. Adoption of an Arterial Street Access policy should be considered in conjunction with other plans to improve safety and capacity. As part of this adoption, it is important to note that the implementation of access management strategies on specific roadway sections will only be applied when property is developed/redeveloped, when the City engages in a major transportation improvement project and/or if a safety deficiency is documented relative to access issues.

Downtown Parking, Circulation and Multimodal Access Needs

The City may also want to initiate a study to comprehensively review the parking, access and circulation needs in the Central Business District. This study should be multimodal in nature and provide for adequate parking while reducing barriers to economic development and historical preservation. The circulation study should review angle parking and one-way streets. The parking study should also identify the balance between competing needs for adequate parking and other transportation and community goals. The study area should extend east to include the Convention Center vicinity as well as the downtown core area.

ARTERIAL STREET PAVEMENT PRESERVATION

The Yakima Urban Area includes 95 linear miles of Arterial Streets with over 300 lane miles. Additionally, Yakima maintains over 250 miles of Local Access Streets. Pavement Surface conditions on the Arterial streets in Yakima are inventoried on a three-year cycle, last updated in 2005. The Pavement Condition Index (PCI) is a standardized process of collecting data and rating pavement

segments of arterial streets relative to the surface conditions, including the nature and extent of the pavement distresses. The PCI is a basic management tool to prioritize safety, repair, and improvement projects. Conditions are rated consistent with the guidelines of the Washington State standards for pavement rating. Pavement conditions are grouped into four general categories as shown in Table 5-2.

**Table 5-2
Pavement Conditions Rating**

Category Description	Description
Good Condition (Rating 80-100)	<ul style="list-style-type: none"> • Few distresses. • May have been recently paved or seal-coated. • Requires minimal annual maintenance.
Fair Condition (Rating 60-79)	<ul style="list-style-type: none"> • Distresses are generally localized and do not require immediate action. • Examples of the distresses include small alligator cracking, combination of high, medium, and low cracks, or some wheel path rutting.
Poor Condition (Rating 41-59)	<ul style="list-style-type: none"> • Streets have multiple distresses distributed throughout the entire segment. • The pavement cracks in the medium to high range. • Rough pavement patches or extensive wheel rutting recorded.
Failed Condition (Rating 40 or less)	<ul style="list-style-type: none"> • Deficiencies cannot be corrected by maintenance treatments. • Characterized by alligator cracking, transverse cracks, high rutting or flushing of eight wheel paths on entire segment length.

The 2005 Pavement Condition Inventory identified over 17 linear miles (out of 95 miles of Arterial streets) with a Poor or Failed Condition rating: 34 miles in Fair Condition and 44 miles in Good Condition. The condition of the 245 miles of Local Access streets has not been inventoried.

Arterial System Preservation Program – A Plan to Improve Pavement Condition

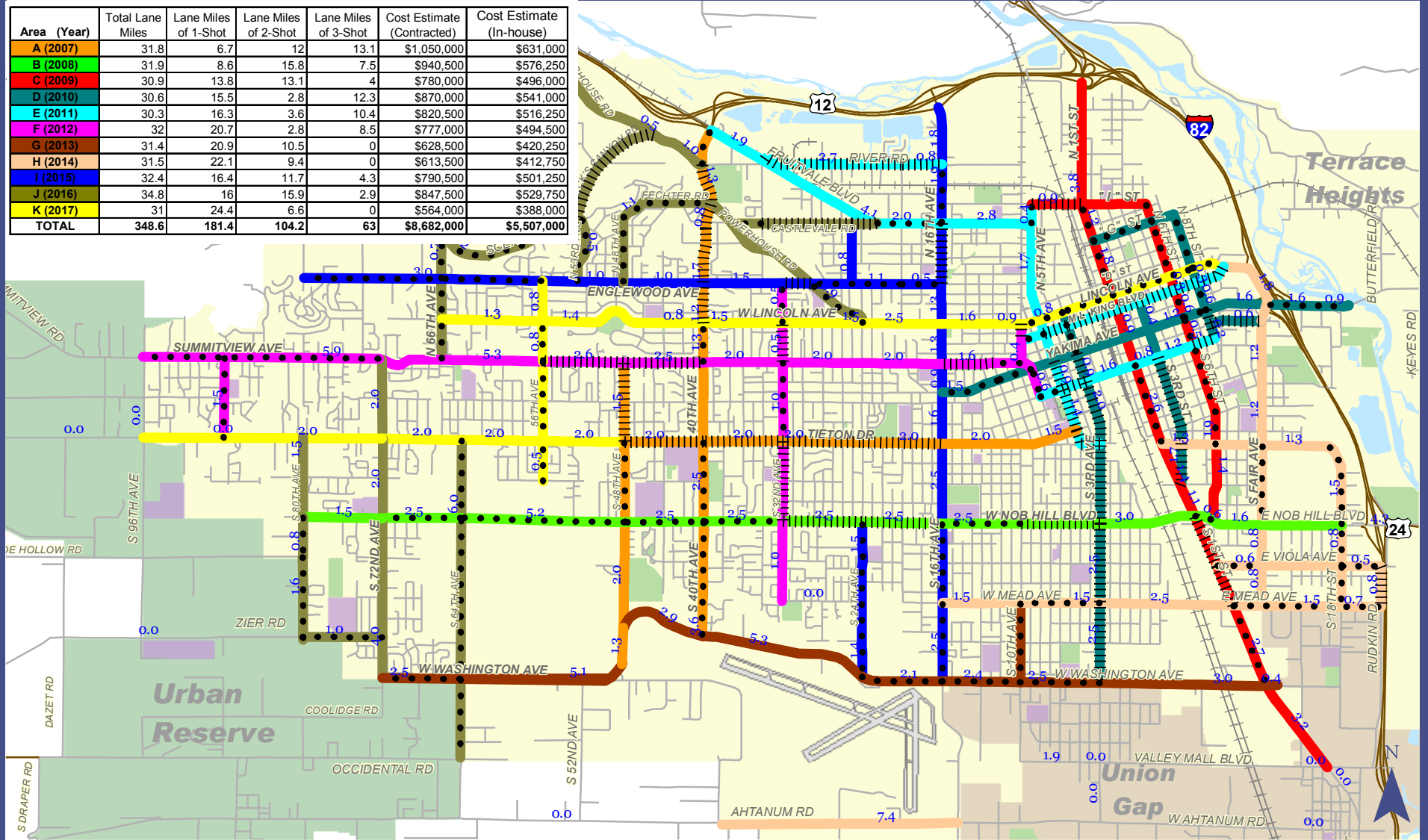
All streets require routine maintenance in order to preserve the integrity of the pavement, prevent water-damage, and extend the life of the asphalt. This plan proposes a program of regular seal-coating of all public streets. The Preservation Program will seal-coat approximately 10 miles of Arterial streets and 20 miles of Local Access streets each year. All public streets will receive surface treatments over the course of a 12-year cycle as illustrated in Map 5-5.

A preservation program adopted by the City council in 2006 provides for an eleven-year cycle of routine maintenance on the City’s 95 miles of classified streets. The program includes major wheel-path grinding, patching, crack filling, and one- to triple-shot chip seal coverage. This program supplements the routine pothole patching and major capital construction projects that may be necessary on

MAP 5-5

Arterial Street Maintenance Plan

Area (Year)	Total Lane Miles	Lane Miles of 1-Shot	Lane Miles of 2-Shot	Lane Miles of 3-Shot	Cost Estimate (Contracted)	Cost Estimate (In-house)
A (2007)	31.8	6.7	12	13.1	\$1,050,000	\$631,000
B (2008)	31.9	8.6	15.8	7.5	\$940,500	\$576,250
C (2009)	30.9	13.8	13.1	4	\$780,000	\$496,000
D (2010)	30.6	15.5	2.8	12.3	\$870,000	\$541,000
E (2011)	30.3	16.3	3.6	10.4	\$820,500	\$516,250
F (2012)	32	20.7	2.8	8.5	\$777,000	\$494,500
G (2013)	31.4	20.9	10.5	0	\$628,500	\$420,250
H (2014)	31.5	22.1	9.4	0	\$613,500	\$412,750
I (2015)	32.4	16.4	11.7	4.3	\$790,500	\$501,250
J (2016)	34.8	16	15.9	2.9	\$847,500	\$529,750
K (2017)	31	24.4	6.6	0	\$564,000	\$388,000
TOTAL	348.6	181.4	104.2	63	\$8,682,000	\$5,507,000



MAP LEGEND

- Urban Reserve
 - Urban Area
 - Schools
 - Parks
 - Union Gap
- Maintenance Treatment**
- 3-Shot Treatment (PCI 59 or less)
 - 2-Shot Treatment (PCI 60 - 79)
 - All other streets (PCI 80 - 100) to receive 1-shot treatment.

This map identifies a system of regular maintenance for all Arterial Streets. The map illustrates an 12-year cycle for application of chip-seal treatment. Based upon the 2005 Pavement Condition Index (PCI) the street will receive either a single shot of chip-seal for a street with a GOOD rating of PCI 80-100; a double shot treatment for a FAIR rating of PCI 60-79 PCI and a triple shot treatment for PCI of less than 60. Each street has been calculated by the total lane miles. Average cost of \$15,000 per lane mile per chip-seal coat includes materials, equipment and labor estimates.

1 inch equals 0.90 miles

select segments of classified streets. The cost to repair or replace a street doubles every 10 to 15 years. Providing routine maintenance while streets are still in the excellent to fair range costs \$1.50 per square yard compared to \$7.50 to \$24.00 per square yard for streets in the fair to poor conditions. Estimated costs to rebuild streets in very poor condition are \$57.00 per square yard. Routine preventative maintenance reduces overall costs associated with operating and maintaining a City's street infrastructure. In addition to the Pavement Preservation Program, some Arterial Streets may receive a Grind and Overlay, or a total reconstruction. Such projects will likely be the result of Economic Development funding, capacity improvements, or other funding opportunities.



CLASSIFIED STREET RECOMMENDATIONS - 2025

Based on the policies outlined in this chapter, the following table identifies the functional classification, number of travel lanes, anticipated year 2025 traffic volumes, potential safety exposure, and likely improvements needed on each of the classified street corridors within the City. Table 5-2 provides detail of the recommendations for classified streets.

**Table 5-2
Classification Street Improvement Recommendations**

Street Classification	Lanes in 2025	Street Standard Design ID	2025 ADT (+2% rate)	Safety Risk Index	Chip Seal Year	On 6-Yr STIP?	Improvements and Implementation Actions to be Taken
PRINCIPAL ARTERIAL							
40th Ave (SR 12 to Washington Ave)	5 P1		31,000	5	2007	Yes	Capacity constrained. Corridor needs 5- lanes, access management and intersection safety improvements.
Nob Hill Blvd (I-82 to 72nd Ave)	5 P2		27,800	4	2008	Yes	Capacity constrained. Corridor needs 5- lanes, access management and intersection safety improvements.
Yakima Ave (I-82 to 16th Ave)	5	P2	26,700	5	2010	No	Corridor has 5-lanes. Requires access management and intersection safety improvements.
16th Ave (US-12 to Washington Ave)	5 P2		26,300	6	2015	Yes	Capacity constrained. Corridor needs 5- lanes, access management and intersection safety improvements.
1st St (I-82 to Union Gap)	5	P2	25,500	7	2009	Partial	Corridor has 5- lanes. Requires access management and intersection safety improvements.
Summitview (16th Ave to 72nd Ave)	4	**	22,300	3	2012	No	Existing 4-lanes has capacity for term of plan. Some safety improvements at selected intersections.
5th Ave (Fruitvale to Yakima Ave)	5, 3	PM1,MC1	18,200	6	2011	No	3-lanes acceptable where future volumes are less than 17,000 ADT. Access management or intersection safety improvements necessary.
72nd Ave (Summitview to Nob Hill)	5 PM1		16,300	1	2016	No	Existing configuration generally acceptable for term of plan.
Lincoln Ave (10th St to 16th Ave)	3	**	20,000	4	2017	No	Turn lanes at some intersections would reduce collisions.
Fruitvale (5th Ave to 40th Ave)	5	P2	15,700	1	2011	No	Existing configuration adequate for the term of the plan. Need sidewalk or pathway additions.
I St (5th Ave - 1st St)	2	MC2	14,000	1	2009	No	Existing 2-lanes is not adequate for future capacity, 3-lane section recommended. Sidewalks needed.
MLK Jr Blvd (10th St to 7th Ave)	3	**	13,000	3	2011	No	Existing Configuration generally acceptable for term of plan. Renamed to Martin Luther King, Jr Blvd
Washington Ave (16th Ave to 40th Ave)	5	PM1	6,000	1	2013	No	New 5-lane configuration from 24th Ave to 40th Ave has reserve capacity.

**Table 5-2
Classification Street Improvement Recommendations**

Street Classification	Lanes in 2025	Street Standard Design ID	2025 ADT (+2% rate)	Safety Risk Index	Chip Seal Year	On 6-Yr STIP?	Improvements and Implementation Actions to be Taken
MINOR ARTERIAL							
Tieton Dr (5th Ave to 96th Ave)	4	PM1	17,600	3	2007	No	Existing 4-lane configuration generally acceptable for capacity needs during term of plan. No existing bicycle facilities, east of 72nd Ave.
Walnut Ave (6th St to 7th Ave)	5	PM1	17,600	3	2011	No	Existing 5-lanes adequate for term of plan.
Ahtanum Rd (16th Ave – WCL)	3 MC1		16,500	1	2014	No	3-Lane design will accommodate future volumes
3rd Ave (Lincoln Ave to Washington)	5	PM1	16,200	6	2010	No	Consider removal of some on-street parking for safety improvements near street intersections to allow left turn lanes. Sidewalk repairs needed.
Lincoln (16th Ave to 40th Ave)	3, 5	MC1	15,900	2	2017	No	Consider 3-lane re-striping between 24th Ave and 40th Ave to provide bike corridor and reduce speeds through neighborhood. Missing sidewalk segments should be constructed.
Yakima Ave (7th Ave to 16th Ave)	4 PM1		15,800	2	2010	No	Existing configuration adequate for the term of the plan.
5th Ave (I St to Walnut St)	3, 4	PM1, MC1	15,400	4	2011	Partial	Safety improvements planned at certain signalized intersections.
Fair Ave (10th St to Mead Ave)	3	MC2	11,800	3	2014	No	Consider 3-lanes between Nob Hill Blvd and Mead Ave.
Nob Hill Blvd (72nd Ave - 64th Ave)	5	PM1	11,500	0	2008	Yes	May receive significant future traffic when adjacent vacant land is developed within the term of this plan. 5-Lane street section is planned.
72nd Ave (Nob Hill Blvd to Washington)	4 PM1		10,500	1	2016	No	Existing configuration adequate for the term of the plan.
Mead Ave (Rudkin Rd to 16th Ave)	3	MC2	10,409	2	2014	No	Entire section should be 3-lane design, with shared outside lanes for bicycle facility. No sidewalks exist between Rudkin Rd and Fair Ave.

**Table 5-2
Classification Street Improvement Recommendations**

Street Classification	Lanes in 2025	Street Standard Design ID	2025 ADT (+2% rate)	Safety Risk Index	Chip Seal Year	On 6-Yr STIP?	Improvements and Implementation Actions to be Taken
56th Ave (Lincoln Ave to Tieton Dr)	4 MC2		9,200	1	2017	No	Consider 3-lanes, with parking on one-side.
80th Ave (Tieton - Nob Hill Blvd)	2	MC3	7,280	0	2016	Yes	2-lanes with sidewalk or walking/bike path will be adequate for future capacity.
Division (5th Ave - 3 rd Ave)	2	MC3	6,600	1	2011	No	2-Lanes with sidewalks (or walking path) and on-street parking recommended.
6th St (I St - Nob Hill Blvd)	2	MC3	6,500	1	2009	No	2-Lane street will be adequate. Recommend sidewalk or walking path.
7th Ave (Yakima - Walnut)	2	MC3	6,000	1	2012	No	2-Lane street will be adequate. Recommend sidewalk or walking path.
64th Ave (Tieton Dr to Washington)	2 MC3		4,100	2	2016	No	2-Lane street will accommodate volume. When commercial development occurs, consider 3-lanes for turning movements.
8th St (G St to Walnut)	2	MC3	3,800	1	2009	No	2-Lane street will be adequate (3-lanes through commercial area). Recommend sidewalk repairs.
COLLECTOR ARTERIAL							
24th Ave (Nob Hill to Washington)	3 MC2		10,000	5	2015	No	Consider 3-lane section due to collision history.
Nob Hill Blvd (80th Ave - 72nd Ave)	3	MC2	8,800	1	2008	Yes	Consider 3-lane section because of commercial land use in vicinity.
18th St (Pacific to Mead)	3	MC2	8,600	1	2014	No	3-Lane street will be adequate. Safety improvement needed at intersection with Nob Hill Blvd.
W Powerhouse Rd (40th Ave to WCL)	3	MC2	6,800	1	2016	No	3-Lane street will be adequate. Sidewalk or walking path needed on south side.
Walnut (6th St - 8th St)	2	MC3	6,600	0	2011	No	2-Lane street will be adequate.
Mead Ave (24 th to 32 nd Ave)	2	MC3	3,000	0	2015	No	2-lanes will be adequate.
80th Ave (Nob Hill Blvd to Zier)	2	MC3	6,400	1	2016	Yes	2-Lane street will be adequate. Recommend sidewalk or walking path.

**Table 5-2
Classification Street Improvement Recommendations**

Street Classification	Lanes in 2025	Street Standard Design ID	2025 ADT (+2% rate)	Safety Risk Index	Chip Seal Year	On 6-Yr STIP?	Improvements and Implementation Actions to be Taken
66th Ave (Scenic Dr to Summitview)	2	MC3	5,000	2	2016	Yes	2-Lane street will be adequate. Recommend sidewalk or walking path. Intersection of 66th Ave with Summitview should be improved due to collision history.
48th Ave (Summitview to Washington)	2	MC3	4,500	1	2007	Yes	Consider 3-lane section because of commercial land use in vicinity. Need sidewalk or walking path.
Lincoln Ave (40th to 66th Ave)	2	MC3	4,400	1	2017	No	2-Lane street will be adequate. Recommend sidewalk or walking path.
Pacific (Fair Ave - 18th St)	3	MC2	4,300	1	2014	No	3-lane section is adequate for term of plan. Need sidewalk on north side.
3rd St (Lincoln to Arlington)	2	MC3	3,900	2	2010	No	2-Lane street will be adequate.
River Rd (16th Ave to Fruitvale)	3	MC2	3,700	1	2011	Yes	3-lane section is planned improvement due to industrial, mixed use land use in vicinity.
Powerhouse Rd (40th Ave to Lincoln)	2	MC3	3,600	1	2016	No	2-Lanes will be adequate for term of plan. Sidewalk or pathway needed.
Zier (80th Ave - 72nd Ave)	2	MC3	3,000	1	2016	Yes	2-Lane street will be adequate. Recommend sidewalk or walking path.
Rudkin Rd (Mead – Viola)	2	MC3	1,300	1	2014	No	2-Lane street will be adequate with sidewalk or walking path.
Peck's Cyn Rd (Powerhouse-Scenic)	2	MC3	2,400	1	2016	No	2-Lane street will be adequate. Recommend sidewalk or walking path.
I St (1st St to 4th St)	2	MC3	2,400	1	2009	No	2-Lane street will be adequate.

NEIGHBORHOOD COLLECTOR ARTERIAL							
32nd Ave (Englewood to Mead Ave)	2	MC3	4,300	3	2012	No	2-Lanes with sidewalks (or walking path) and on-street parking recommended.
Mead Ave (24 th Ave to 32 nd Ave)	2	MC3	4,600	1	2012	No	2-Lanes with sidewalks (or walking path) and on-street parking recommended.
Englewood (16th Ave to 80th Ave)	2	MC3	5,100	1	2015	Yes	2-Lane street will be adequate. Recommend sidewalk or walking path.
10th Ave (Mead – Washington)	2	MC3	2,900	1	2013	No	2-Lane street will be adequate. Recommend sidewalk or walking path.
Scenic (52nd Ave to 66th Ave)	2	MC3	1,900	1	2016	No	2-Lane street will be adequate. Recommend sidewalk or walking path.
Viola Ave (18th St to Rudkin)	2	MC3	1,700	1	2014	No	2-Lane street adequate with sidewalk or walking path.
Castlevalle Rd (Fruitvale to Powerhouse)	2	MC3	2,400	1	2013	No	2-Lane street adequate with sidewalk or walking path.
96th Ave (Summitview - Tieton)	2	MC3	1,200	0	2017	Yes	2-Lane street adequate with sidewalk or walking path.

** - No design changes are anticipated for these roadway facilities.

IMPLEMENTATION TASKS

To implement the arterial and collector streets element of the Transportation Plan, the City should implement the following measures:

- Provide a dedicated funding source for street maintenance and preservation.
- Modify the Yakima Municipal Code to require the construction of half-street frontage improvements (including sidewalks, curb, gutter and street lighting) as part of all site development/redevelopment activities in the City. Provisions should be included in the Code to address situations where sidewalk construction is infeasible due to topographic, wetland or other constraints.
- Modify the Yakima Municipal Code to adopt new street design standards that reflect multimodal user needs, neighborhood livability issues and promote a more efficient and environmentally-responsive transportation system.
- Modify the existing functional classification system to add a neighborhood collector classification.
- Amend the existing functional classification of the following streets:
 - Summitview Ave (west of 56th Ave), Fruitvale Blvd, and Washington Ave as Principal Arterials;
 - Nob Hill Blvd (west of 72nd Ave), 18th Street (Mead to Nob Hill Blvd), Fair Avenue (Spruce to 10th Street), Martin Luther King Blvd (east of N 8th Street) and Lincoln Ave (east of N 8th Street) as Minor Arterials;
 - Zier Rd (west of 72nd Ave), N 56th Ave (north of Tieton), Castlevale Rd (east of 34th Ave), E G St, and Pacific Ave as Collector-Arterials;
 - Scenic Dr, Englewood Ave (west of 40th Ave), Castlevale Rd (west of 34th Ave), 32nd Avenue, 2nd Ave, N 6th St, Mead Avenue (24th Avenue to 32nd Avenue) and S 56th Ave (south of Tieton Dr) as Neighborhood Collectors;
 - S 10th Ave, N 25th Ave, N 48th Ave (north of Englewood as local streets.
- Update the Yakima Transportation Concurrency Program to include a revised definition of street capacity and mitigation program.

- Develop and implement project-level traffic impact study guidelines. These guidelines will include operational standards for arterial and collector intersections.
- Modify the Yakima Municipal Code to include an arterial access management policy to improve safety and capacity along arterial streets.
- Develop corridor plans for 40th Avenue, 16th Avenue and Nob Hill Boulevard, at a minimum, to address future capacity, community and aesthetic needs. Prioritize funding for the implementation of action items identified in the corridor plans.
- Prioritize the identified arterial and collector street improvements into near, mid and long-term improvements. Annually review the anticipated costs associated with each improvement project.
- Incorporate near-term arterial and collector street improvement needs into the City's six-year Transportation Improvement Program.
- Modify the Yakima Municipal Code to allow for the funding of planned capacity and safety improvements through public-private partnerships (e.g., proportionate share contributions, fee-in-lieu of construction)
- Evaluate the feasibility of adopting a Transportation Impact Fee or other forms of public-private partnerships to help fund future capacity improvements.
- Amend speed limit ordinance for various arterial streets.
- Work with Yakima County to develop Transportation Element of the neighborhood plans for the Terrace Heights and West Valley areas. Incorporate these neighborhood plans into the City's Transportation Plan.

Chapter 6

Signalized and Other Major Intersections

Chapter 6: Signalized and Other Major Intersections

The efficiency of major intersections plays a critical role in the movement of goods and people within Yakima. Motorists, freight and public transportation users expect certainties regarding the amount of time that it will take to travel from one place to another throughout the city. The



amount of delay or uncertainty that is experienced in these travels is often due to congestion experienced at major intersections. The crossing opportunities provided at major intersections play an important role in the ability of pedestrians to move safely throughout the system. It is essential that the city continue to identify ways to improve the safety, convenience, comfort and congestion experienced at major intersections throughout Yakima.

SIGNALIZED AND OTHER MAJOR INTERSECTIONS GOALS AND POLICIES -

Goal (T-6.1): Identify Street Intersection Capacity and Operation Deficiencies

Policies:

1. Reduce unnecessary vehicle delay at signalized street intersections to improve traffic flow, improve air quality, and reduce congestion.
2. Seek funding to upgrade traffic signal systems to optimize efficiency and safety needs.
3. Balance needs of pedestrians and cyclists with vehicular mobility at signalized intersections.

Goal (T-6.2): Promote Safety Improvements at Signalized Street Intersections

Policies:

1. Continue a routine program of monitoring and analyzing signalized intersections for vehicle collision patterns and severity of injuries.
2. Prioritize improvements based upon safety needs and ability to implement necessary changes.

Goal (T-6.3): Develop Maintenance Strategies that Maximize Efficiencies**Policies:**

1. Provide funding to preserve, re-construct, and maintain the traffic signal infrastructure.
2. Continue to monitor street and intersections for traffic hazards and seek funding to address improvements as necessary.

SIGNALIZED INTERSECTION POLICIES

Traffic signals provide orderly flow of vehicle and pedestrian traffic through a street intersection. They are valuable tools in managing congestion. However, unwarranted or traffic signals that are installed for marginal reasons may create more safety hazards than other intersection treatments such as roundabouts or STOP sign control.

In general, installations of new traffic signals have been the result of new development mitigation or been driven by collision and safety warrants. Two examples of these policies include the traffic signal installed on 16th Avenue at Englewood Avenue in 2003 and the traffic signal to be constructed in 2006 at River Road and 16th Avenue.

The City of Yakima has no established level of service standards for intersections. In the past, the need for intersection improvements has been identified through the annual monitoring of collision patterns, delays experienced by motorists, and actual equipment failures related to age or condition.

The city also has not established access management policies to address the creation of new driveways within the functional area of a signalized intersection. Policies regarding access management can help maximize the use of the existing infrastructure by reducing potential conflict points along congested arterials.

The standards and guidelines of the Federal Highway Administration's "Manual on Uniform Traffic Control Devices (MUTCD)" are observed by the City of Yakima. In addition standards from the "Highway Capacity Manual" and from the American Association of State Highway and Transportation Officials' (AASHTO) "Policy on Geometric Design of Highways and Streets" are also used in establishing the need for specific design features such as the length of turn pockets, protected or permissive left turn phases and other items.

EXISTING CONDITIONS OVERVIEW

The City of Yakima currently maintains nearly 100 signalized intersections throughout the city. The age and condition of these signals varies greatly. To improve system inefficiencies, the city implemented a program in 2001-2002 to upgrade 40 traffic signals in the Central Business District (CBD). These upgrades changed the signals from operating in a “fixed time” mode wherein the signal operates independently of who is waiting for the light to turn green to a system of pedestrian and vehicle “actuation” which, in simple terms, recognizes waiting users and changes the light to green to service those waiting. Some of the primary advantages of an actuated system include reduced travel delays for pedestrians and motorists, improvements in air-quality due to the elimination of unnecessary stops, and overall improvements in traffic flows and reduction in congestion. As a result of the program, the traffic signal system within the CBD now operates in a coordinated and actuated fashion on weekdays between 7:00 a.m. and 6:00 p.m.

To improve traffic flow outside the CBD, a signal optimization program was initiated in 1999. In general, this program investigated modifying the way in which individual signals operate today to help improve the overall efficiency of the system and reduce unnecessary vehicle delays. However, due to the age of the traffic signal infrastructure, right of way limitations, and the high cost of replacing existing signals with updated equipment, a number of signalized intersections are still in need of upgrades before any efficiency improvements can be realized to the traffic signal system as a whole.

Signalized Traffic Operations

To provide a baseline understanding about how major intersections are functioning today, city staff compiled data about the condition and type of traffic control provided and the number of vehicles traveling through key arterial intersections throughout the city. This analysis focused on the weekday p.m. peak hour (4:00 and 6:00 p.m.), which is the time in which many people commute home from work and several people run errands and make other “discretionary” trips. Within Yakima, the p.m. peak hour is typically the time in which the highest traffic volumes occur on the roadways.

The amount of congestion experienced at intersections can be quantified by a “level of service” rating, much like a school report card. Level of Service (LOS) is an indicator of the average amount of delay that motorists experience when passing through the intersection. LOS is measured on an “A” (best) to “F” (worst) scale. At signalized intersections, LOS is based on the average amount of delay experienced by all vehicles entering the intersection. Generally, signalized intersections operating at LOS “D” or better during the weekday p.m. peak hour are considered acceptable.

In addition to LOS, another useful intersection performance measure that can be used to evaluate the operational performance of a signalized intersection is its “volume to capacity” ratio. This ratio quantifies the percentage of the intersection’s capacity that is being used. For example, a volume to capacity ratio

of 0.50 during the weekday p.m. peak hour indicates that half of the intersection's capacity is being utilized by existing traffic. Any intersection that is operating near or over capacity is considered to be operating unacceptably. In these cases, long delays are typically being experienced by all motorists who are trying to travel through the intersection.

Level-of-service and volume to capacity analyses were performed at each of the key arterial intersections in the city. These analyses were performed using procedures summarized in the 2000 Highway Capacity Manual. Map 6-1 shows the existing weekday p.m. peak hour intersection operations at the key signalized intersections. As shown in the map, the following intersections are currently experiencing high levels of congestion today:

- N 40th Avenue / Summitview Avenue
- N 40th Avenue / Fruitvale Boulevard / SR 12
- S 1st Street / Washington Avenue
- S 1st Street / Nob Hill Boulevard
- S 16th Avenue / Nob Hill Boulevard

In all cases, the intersections identified above currently experience heavy travel demand during the weekday p.m. peak period which leads to higher levels of intersection delay for motorists. Intersections such as S 1st Street / Washington Avenue and S 16th Avenue / Nob Hill Boulevard have geometric deficiencies which lower the overall capacity of the intersection even further. As Yakima continues to grow and traffic volumes increase, it will be important to address these deficiencies through various intersection capacity and improvement measures.

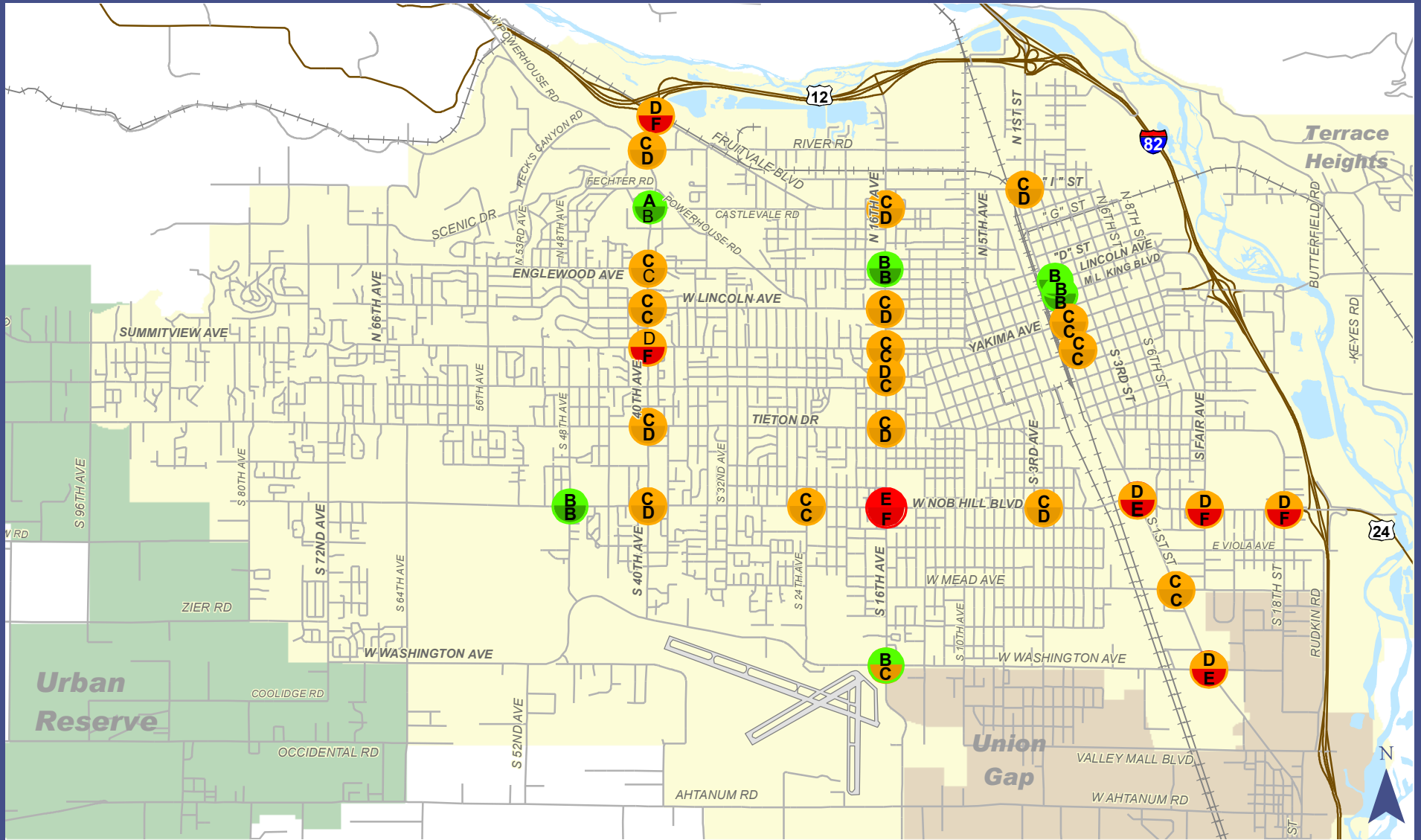
Traffic Safety Analysis

To identify any potential safety deficiencies at the key arterial intersections, the most recent five years of crash data was reviewed. Collision rates for intersections are reported in collisions per Million Entering Vehicles (MEV). Patterns amongst the types of collisions at a particular intersection may be indicative of an existing geometric or operational deficiency.

The City of Yakima produced a "Vehicle Collision Report" in August 2005 that summarized the collision history at several major intersections for the period from 1998 – 2004. As summarized in this report, the intersections listed in Table 6-1 and graphically illustrated in Map 6-2 had collision rates that may be indicative of a potential deficiency. Table 6-1 also summarizes the number of fatal/disabling collisions, the predominant type of collisions at each location, and other trends amongst the collisions. Collisions occurring near the intersection typically were related to access driveways within the intersection influence area.

MAP 6-1:

Critical Signalized Intersection LOS



MAP LEGEND

- Urban Reserve
- Urban Area
- Schools
- Parks
- Union Gap

Intersection Level of Service

● LOS "A" or "B"
● LOS "C" or "D"
● LOS "E" or "F"

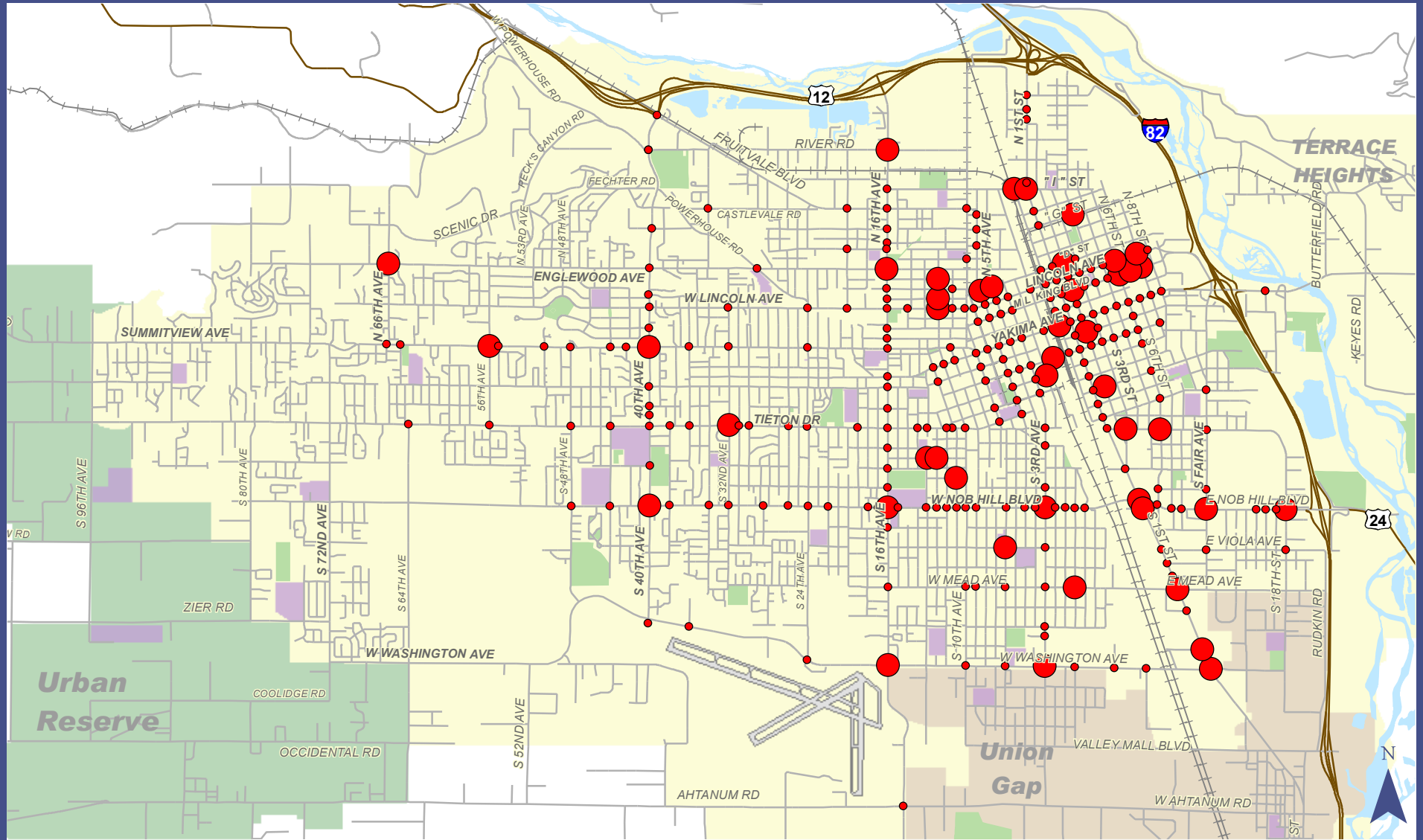
Existing
2005 LOS
Future
2025 LOS

Intersection Level of Service (LOS) measures average vehicle delay experienced at intersections. Much like a report card, LOS "A" is the best, or least delay, while LOS "F" is the worst with significant delay. This map illustrates the existing (2005) LOS for signalized intersections and the projected (2025) LOS if no actions are taken to improve operations or reduce congestion. The intersections shown on this map are located on capacity constrained corridors, as described in this plan. LOS "D" is considered acceptable. Intersection LOS of "E" or "F" does not meet standards.

1 inch equals 0.90 miles

MAP 6-2:

Rate of Vehicle Collisions per MEV, 1998-2004



MAP LEGEND

- Urban Reserve
 - Urban Area
 - Schools
 - Parks
 - Union Gap
- Vehicle Collisions per One Million Entering Vehicles (MEV)**
- 0.18 - 1.00
 - 1.01 - 2.13

The location of vehicle collisions can be evaluated based upon the rate of accident. Collision rates are generally measured in the number of occurrences per One Million Entering Vehicles (MEV). This map illustrates the locations where more than 12 traffic accidents have occurred between 1998 and 2004. The map also identifies locations where the rate of collision exceeds more than one collision per MEV. This is a common criteria for addressing intersection safety concerns.

1 inch equals 0.90 miles

**Table 6-1
Vehicle Collision Report (1998-2004)**

Intersection	Total Crashes 1998-2004	MEV	Collision Type				Severity	
			Turning	Angle	Rear End	Other	Property Damage Only	Personal Injury +Fatality
S 18th St / E Nob Hill Blvd	125	1.92	15	13	50	47	76	70
S 1st St / E Washington Ave	170	1.82	15	8	66	81	106	81
S 1st St / E Nob Hill Blvd	171	1.69	11	7	75	78	107	99
N 56th Ave / Summitview Ave	103	1.56	8	16	27	52	57	53
S Front St / E Yakima Ave	78	1.55	3	26	33	16	54	31
N 16th Ave / River Rd	74	1.46	19	5	23	27	45	46
S 40th Ave / W Nob Hill Blvd	105	1.33	13	13	33	46	64	54
S Fair Ave / E Nob Hill Blvd	71	1.20	12	16	26	17	41	45
N 1st St / E "I" St	78	1.19	11	12	31	24	43	42
S 3rd Ave / Washington Ave	89	1.16	24	13	14	38	41	72
S 3 rd Ave / W Nob Hill Blvd	113	1.15	14	18	34	47	52	67
S 1 st St / E Mead Ave	90	1.15	9	5	37	39	45	59
S 16 th Ave / W Nob Hill Blvd	117	1.07	7	11	72	27	76	60
N 40 th Ave / Summitview Ave	111	1.06	25	24	29	33	67	36
N 16 th Ave / Englewood Ave	63	1.05	26	8	17	12	36	37
S 16 th Avenue / Washington Ave	74	1.05	32	11	10	21	44	48
N 1 st Street / Lincoln Ave	69	0.95	17	21	9	22	53	19
S 24 th Ave / W Nob Hill Blvd	72	0.93	17	11	19	25	42	37
N 16 th Avenue / W Lincoln Ave	84	0.89	10	7	42	25	46	56
N 16 th Avenue / Fruitvale Blvd	67	0.83	11	16	21	19	41	33
N 1 st Street / Yakima Ave	70	0.81	12	9	27	22	48	28
S 40 th Avenue / Tieton Dr	72	0.78	10	6	31	25	42	37
S 1 st Street / Walnut St	56	0.73	15	6	22	13	25	42
S 16 th Avenue / Tieton Dr	70	0.70	2	10	31	27	40	43
N 1 st Street / MLK Jr Blvd	49	0.69	9	10	13	17	28	25
N 40 th Avenue / River Rd	45	0.65	7	1	13	24	29	13
N 40 th Avenue / Englewood Ave	53	0.65	13	4	16	20	27	34
N 40 th Avenue / W Lincoln Ave	53	0.64	20	16	4	13	35	28
N 40 th Avenue / Fruitvale Blvd	51	0.63	4	2	20	25	34	27
N 16 th Avenue / Summitview Ave	55	0.61	8	10	22	15	35	24
S 40 th Avenue / Washington Ave	21	0.47	8	5	1	7	11	15
N 16 th Avenue / W Yakima Ave	20	0.27	3	5	10	2	10	14

MEV = Million Entering Vehicles

FUTURE CONDITIONS

A plan for intersection improvements in the City of Yakima is identified based on the evaluation of existing and future growth needs. The potential growth at each of the intersections was assessed based on information obtained from the Yakima Valley Conference of Governments' (YVCOG) transportation model. This model is a tool that forecasts future traffic growth based on assumptions about growth in land use in the city over the next twenty years.



Year 2025 weekday p.m. peak hour traffic volumes at each of the major intersections were forecast based on the information received from YVCOG. The future traffic patterns reflect the maintenance of the existing street system plus new roadways that are funded for construction in the next few years. Based on these traffic forecasts, Map 6-3 shows the future weekday p.m. peak hour intersection operations at the study intersections. As shown in the map, the following intersections are forecast to exceed the level of service and/or volume to capacity ratio standards by the year 2025 without any improvements:

- N 40th Avenue / Summitview Avenue
- N 40th Avenue / Fruitvale Boulevard / SR 12
- N 40th Avenue / Englewood Avenue
- S 1st Street / Washington Avenue
- S 1st Street / Nob Hill Boulevard
- S 16th Avenue / Nob Hill Boulevard
- S Fair Avenue / Nob Hill Boulevard
- S 18th Street / Nob Hill Boulevard
- S 16th Avenue / Washington Avenue
- N 40th Avenue / River Road
- S 40th Avenue / Nob Hill Boulevard
- N 16th Avenue / Fruitvale Boulevard

The previous map identified signalized intersection deficiencies that are likely to develop in Yakima over the next twenty years if no improvements are made to the street system. To ensure that the signalized intersection network continues to function acceptably over the next twenty years, the following sections describe various improvement strategies that the City of Yakima can use to meet intersection capacity needs. These strategies include transportation system management measures that aim to optimize the carrying capacity of roadways and intersections through physical capacity enhancing improvements. Recognizing that the ability to make physical improvements is often limited by funding and right-of-way constraints, transportation demand management measures can also be implemented to encourage alternatives to single occupancy vehicle travel.

Intersection Improvement Strategies

Traffic congestion at street intersections can be improved using several alternate or combined approaches. The objective of all of these strategies is to reduce average vehicle delay. Selection of the appropriate or best action for a particular intersection requires site-specific review of the characteristics of the intersection. A combination of these strategies or a staged approach is often the most feasible solution to resolving travel delay within a confined municipal budget. Examples of these strategies are outlined in the table below.

In addition to capacity strategies, there are a number of intersection improvements that can also facilitate safer and more comfortable crossings for pedestrians and cyclists at intersections. These are also outlined in the Table 6-2 below.

**Table 6-2
Intersection Improvement Strategies**

	Intersection Improvement Strategies
Geometric Improvements	<ul style="list-style-type: none"> Acquire or preserve right-of-way for the inclusion of through lanes (consistent with YMC 12 requirements) and/or turn lanes to reduce queuing and delays at major signalized intersections.
Signal Optimization/ Enhancements	<ul style="list-style-type: none"> Install protected, permissive, and/or flashing left-turn arrows to enhance safety and increase the efficiency of signalized intersections. Upgrade traffic signal equipment to allow for coordination between traffic signals along corridors and within designated districts, such as the CBD. Consider "lag" left turn operations at busy traffic signals and on congested arterial corridors to improve through movement flow.
Roundabouts	<ul style="list-style-type: none"> Consider the use of modern roundabouts as an acceptable alternative for intersection traffic control. Appropriately installed, roundabouts have been shown to reduce roadway widening needs, reduce overall travel delay, be more flexible to changing traffic patterns over the course of the day and throughout the year, increase safety, and have lower maintenance costs than traditional signalized intersections.
Turning Movement / Driveway Restrictions	<ul style="list-style-type: none"> Incorporate the use of raised medians on arterial roadways that limit turning movements into and out of private driveways in order to enhance the safety and reduce conflict points within the influence area of intersections. Incorporate access management policies that, over time, reduce and

Intersection Improvement Strategies	
	consolidate private driveways located within the influence area of signalized intersections, unsignalized intersections and roundabouts.
Non-Vehicular Treatments at Intersections	<ul style="list-style-type: none"> • Improve sidewalks, crosswalks, and walking paths to provide a clearly delineated area for pedestrians to travel through major intersections to bus stops, schools, neighborhoods, etc. • Provide street furniture and other pedestrian amenities to facilitate the comfort of pedestrians along busy arterials. • Upgrade curb ramps at all intersections for ADA compliance and facilitate crossings for pedestrians with strollers. • Upgrade signalized intersections to include pedestrian phases and pedestrian actuation. • Preserve and/or acquire the right-of-way needed to provide appropriate bicycle treatments through major intersections • Construct curb extensions to increase the visibility of pedestrians and reduce the crossing distances. Curb extensions can be provided at both signalized and unsignalized intersections. • Construct raised medians, islands or pedestrian refuges to improve pedestrian visibility enhance pedestrian comfort and reduce crossing distances. Raised islands for pedestrians can also be provided at busy intersections where large radius corners have been constructed to accommodate truck movements. Pedestrian refuges can also be constructed at unsignalized intersections to provide a place for pedestrians to wait for safe gaps in the traffic stream while crossing busy roadways. • Work with Yakima Transit to appropriately site bus stops at busy arterial intersections. Investigate the effectiveness of near-side and far-side bus stop placement.

Intersection Improvement Projects

Based on the capacity -based strategies outlined above, a series of near-term, mid-term, and long-term intersection improvements have been identified for those intersections that are forecast to exceed level of service standards or experience capacity deficiencies. These improvements are summarized in Table 6-3.



**Table 6-3
Recommended Near-Term, Mid-Term, and Long-Term Intersection Improvements**

Intersection	Improvement Description		
	Geometric Improvement	Signal Modification	Access Management Improvement
Near-Term Improvements			
N 40th Avenue / Fruitvale Boulevard	Add SB Left-Turn Lane; Modify NB Right-Turn Lane to Shared Through/Right-Turn Lane	Add NB & SB Protected Left-Turn Phasing; EB & WB Overlap Phasing	
S 6th Street / E Nob Hill Boulevard		Install Traffic Signal	
N 16th Avenue / River Road	Develop NB & SB Left-Turn Lanes	Install Traffic Signal	
Mid-Term Improvements			
S 18 th Street / E Nob Hill Boulevard	Add Second WB Left-Turn Lane; Lengthen NB Right-Turn Lane; Add EB & WB Bike Lanes	Add NB Right-Turn Overlap Phase	Eliminate driveways within intersection influence area
S 1 st Street / E Washington Avenue	Develop Full EB & WB Left, Through, & Right-Turn Lanes; Improve Bicycle and Pedestrian Facilities		
S Fair Avenue / E Nob Hill Boulevard	Add Separate EB & WB Left-Turn Lanes; Provide Pedestrian & Bicycle Facilities	Develop EB & WB Left-Turn Phasing	Eliminate driveways within intersection influence area
N 16 th Avenue / Fruitvale Boulevard	Widen and Lengthen WB Right-Turn Lane	Upgrade Signal Equipment; Video detection	Eliminate driveways within intersection influence area
S 16 th Avenue / W Washington Avenue	Add EB Right-Turn Lane	Add Protective Phasing to All Left-Turn Movements	
N 40 th Avenue / Englewood Avenue	Add SB & NB Right-Turn Lanes	Signal Equipment Upgrade; Video detection	
N 40 th Avenue / Summitview Avenue	Add 2 nd EB Left-Turn Lane; Lengthen SB Right-Turn Lane	Add SB Right-Turn Overlap Phase; Video detection	Eliminate driveways within intersection influence area
Long-Term Improvements			
S 1 st Street / E Nob Hill Boulevard	Add 2 nd NB Left-turn Lane	Add SB Overlap Phase	Eliminate driveways within intersection influence area
S 16 th Avenue / W Nob Hill Boulevard	Add SB Right-Turn Lane	Add SB Overlap Phase	
N 40 th Avenue / River Road	Add EB Right-Turn Lane		
S 40 th Avenue / W Nob Hill Boulevard	Add NB and WB Right-Turn Lane		Eliminate driveways within intersection influence area
S 3 rd Avenue / W Nob Hill Boulevard	Widen NB & SB Approaches to Provide Longer Left-Turn Lanes		Eliminate driveways within intersection influence area
N 16 th Avenue / Summitview Avenue			Eliminate driveways within intersection influence area
S 16 th Avenue / Tieton Drive	Extend WB Left-Turn Lane		

Intersection Review Criteria

The Washington State Growth Management Act (GMA) mandates that all local jurisdictions in the state establish a local definition of roadway travel levels to ensure that transportation facilities and services are available concurrently with, or within a reasonable time (i.e., six years) after new development occurs. Currently, the City of Yakima measures acceptable levels of service on its roadway network by examining street segment “level of service” through its Transportation Concurrency Review.

The Transportation Concurrency Program measures capacity of arterial and collector roadways assuming a maximum per lane capacity. The Yakima Municipal Code further requires that level of service (LOS) “D” or better must be maintained on all roadways. According to the Code, the traffic volumes measured on the road must be a maximum of 89 percent of the defined roadway capacity to achieve LOS “D” conditions. Under Concurrency, if a new development adds vehicular trips to the arterial and collector system that results in LOS “E” or LOS “F” condition, then the development can not be approved unless an appropriate mitigation measure can be implemented that would bring the roadway back to LOS “D” or better. This is typically achieved by adding “through” vehicular travel lanes to specific roadway segments.

The existing Concurrency Program does not account for the impact that new development has on intersection operations. Typically, the City has required that the intersection impact be addressed through the safety and site design issues generally covered under the Washington State Environmental Policy Act (SEPA). Currently, the city does not have formal guidelines regarding the appropriate scope of study nor the appropriate level of impact for intersection analyses as part of the SEPA process. The Transportation Plan Update recommends the adoption of project-level traffic impact study guidelines for SEPA and the incorporation of those standards into the Yakima Municipal Code. The following outlines a recommended tiered methodology for project-level traffic study guidelines. Detailed guidelines should be developed for incorporation into the Code.

Overview of Traffic Impact Analysis Guidelines

A Transportation Impact Analysis (TIA) quantifies the expected effects that a proposed site development will have on the transportation system. The TIA should provide adequate information for City of Yakima staff to evaluate the development proposal and, when appropriate, recommend conditions of approval based on transportation-related issues. This review is typically done in the context of the SEPA process. In some cases, only a Transportation Concurrency Analysis is needed; in others a full traffic impact analysis should be required. The appropriate levels of analysis are described below.

1. Study Scope

A Transportation Concurrency Analysis should be required for:

- A) Any proposed site development that can be reasonably expected to generate a minimum of 100 vehicle trip ends during a single day and/or more than 10 vehicle trip ends during a single hour.

A Transportation Concurrency Analysis may be required for:

- A) Any development that generates less than 100 daily trip ends, if in the opinion of the Public Works Director the development adversely impacts an existing roadway capacity problem and/or safety deficiency. The Public Works Director shall determine the scope of this special analysis at his/her discretion.

A Transportation Impact Analysis should be required (in addition to a Transportation Concurrency Analysis) for any proposed site development that can be reasonably expected to generate a minimum of 250 vehicle trip ends during a single day and/or more than 25 vehicle trip ends during a single hour. The scope of the study should be defined as follows:

- A) 250 – 500 daily trips (or 25 – 50 hourly trips): analysis of the site access points and the nearest arterial or collector-level intersection and arterial street segments.
- B) 500 – 2,500 daily trips (or 50 – 250 hourly trips): an analysis of the site access points *and* any collector or arterial intersection and arterial street segments that is located within one mile of the site's boundaries that may experience an increase in traffic volumes of ten percent or more as a result of the development. (Distance from the site is measured as a radial distance rather than along subject roadways)
- C) More than 2,500 daily trips (or 250 hourly trips): analysis of the site access points *and* any collector or arterial intersection and arterial street segments that is located within two miles of the site's boundaries that may experience an increase in traffic volumes of ten percent or more as a result of the development. (Distance from the site is measured as a straight-line distance rather than along subject roadways)
- D) Any other intersections identified by Public Works staff as having capacity, safety, neighborhood, and/or geometric concerns.

2. Transportation Impact Analysis (TIA) Requirements

A. Trip Generation and Distribution

Regardless of the scope of study required, all TIAs should include an estimation of the number of peak hour and daily trips generated by the site as well as an estimate of trip distribution. Trip generation data provided in the most recent edition of the Institute of Transportation Engineers' (ITE) publication *Trip Generation Manual* should be used unless more appropriate data is available. Trip generation formulas (where applicable) or average rates should be used. Trip generation studies of comparable uses prepared by an engineer and approved by the Public Works Director may be used for those land uses where the ITE manual does not contain adequate data or if the proposed use is unique.

Directional trip distribution assumptions should be based on historical data for the proposed use and/or existing and future travel characteristics.

B. Analysis Periods

All TIAs should study the impact on intersections and proposed accesses during the critical p.m. peak hour (typically defined between 4:00 and 6:00 p.m.). In certain circumstances, the Public Works staff may also require the analysis of the a.m. peak hour or the afternoon school peak hour.

The analysis should include the following study time frames: existing conditions (without development of the site), "background conditions" (those that are expected to occur in the year that the site is fully built out but without consideration of the site traffic) and total traffic conditions (year of buildout with consideration of full site traffic). Background and total traffic conditions should include consideration of any pending and approved but not yet constructed developments and/or funded transportation improvements that would affect traffic volumes in the study area.

C. Analysis Methodologies

All intersection operations should be analyzed using the procedures outlined in the most recent edition of the Highway Capacity Manual. In instances where closely spaced signalized intersections exist, additional consideration of progression may be required.

Collision data for all intersections shall be reviewed for the most recent available three year period (as provided by the City of Yakima). Patterns or trends amongst collisions shall be reviewed to identify needed geometric or capacity improvements needed to address safety deficiencies.

Analyze right- and left-turn lane warrants, queue lengths, acceleration lanes, throat lengths, sight distance, channelization, access spacing requirements, and other characteristics of the site-access driveways as appropriate.

D. Mitigation Measures

Mitigation measures should address operational or safety deficiencies and should be described and analyzed in sufficient detail to ensure compliance with the applicable standards.

E. Level of Service Standards for City Intersections

- 1) All signalized shall operate at a level of service “D” or better with a volume to capacity ratio of 0.95 or less.
- 2) All unsignalized intersections (including unsignalized private accesses) should operate with a volume-to-capacity ratio of less than 0.95 for the major street left turns and side street approaches. Level of service “F” will be allowed for the side street approaches if the volume-to-capacity standard is met and the installation of a traffic signal or roundabout is not warranted.
- 3) Driveway locations or new street intersections proposed with new development should be reviewed in conformance with Access Management policies to reduce congestion and safety-related impacts.

IMPLEMENTATION TASKS

To implement the major street intersections element of the Transportation Plan, the city should implement the following measures:

- Provide a dedicated funding source for the construction, maintenance and upgrading of intersection control devices, such as traffic signals and roundabouts.
- Establish a monitoring program for traffic operations and safety to identify the need and timing for intersection improvements. Investigate a number of capacity and safety-based strategies for these improvements.
- Implement strategies that increase the comfort and safety of pedestrians and bicyclists at arterial intersections.
- Adopt traffic impact study guidelines as part of project-level requirements related to SEPA. These guidelines should include a definition of acceptable level of service for signalized and unsignalized intersections.

- Modify the Yakima Municipal Code to include an arterial access management policy to improve safety and capacity within the influence areas of intersections.
- Work with Yakima Transit to appropriately site bus stops at busy arterial intersections. Investigate the effectiveness of near-side and far-side bus stop placement.

Chapter 7

Freight Transport and Economic Development

Chapter 7: Freight Transport and Economic Development

Agricultural and other freight-dependent businesses are a vital component of the Yakima Valley economy. The operation and maintenance of the transportation infrastructure required to serve these businesses in an efficient and economical manner is paramount to the region today and in the future. It is essential that the City, County and State continue working together to ensure these vital needs are met.

FREIGHT TRANSPORT GOALS AND POLICIES -

Goal (T-7.1): Identify critical freight routes and plan for necessary improvements to accommodate the efficient and economical transport of goods through the community

Policies:

1. Emphasize the priority of freight routes to the Yakima Regional Airport and other significant industrial or activity centers and plan for street and intersection improvements to accommodate the movement of freight.
2. Encourage development of additional services and support facilities of the Yakima Regional Airport and other alternate means of transportation in the Yakima Valley
3. Support regional street improvements that improve circulation to and around the airport and planned expansion efforts.
4. Support increased services at the Yakima Regional Airport.
5. Continue to work with rail interests to ensure future service needs are accommodated.
6. Implement grade separation of arterial street crossings with rail lines for traffic safety, improved traffic flow efficiency and improved air quality.
7. Priority is given to the grade separation of Martin Luther King Jr Boulevard and Lincoln Avenue, with planned future projects of other rail crossings at Arterial Streets.



Goal (T-7.2): Support infrastructure improvements that contribute to viable existing and future airport operations, facility needs or improve deficiencies.

Policies:

1. Promote inter-modal connections to the Yakima Airport and vicinity.
2. Coordinate street improvements in the airport vicinity with the needs of the complex including freight operations.
3. Support runway capacity needs of the airport, as necessary for growth and safety.

FREIGHT TRANSPORT

Strategically located in both the Pacific Northwest and Washington State, Yakima County is a natural distribution hub served by all major modes of transportation. The region's central location is particularly beneficial for companies that rely on effective and efficient access to key markets or suppliers. Washington State exports to a global market, with agricultural products a leading commodity. Produce raised and packed in the Yakima Valley are largely dependent on refrigerated truck or rail cars, of which 90 percent is trucked. Regional freight modes in the Yakima Valley are outlined below.

Highways

Interstate 82 (I-82) runs through the heart of Yakima County. The modern freeway links with Interstate 90 (I-90) at Ellensburg, just 35 miles north of Yakima. I-90 connects Seattle with Boston, Massachusetts. The County's close proximity to I-90 provides excellent accessibility to the Ports of Seattle and Tacoma, which are gateways to burgeoning trade with the Asia-Pacific and Pacific Rim Countries.

Winter conditions and summer congestion on I-90 impede efficient freight movement. Improvement of I-90 over Snoqualmie Pass is a priority project of the Washington State Department of Transportation and critical to the distribution of freight.

I-82 also links with Interstate 84 (I-84) in Oregon, providing an important linkage to an extensive network of interstate highways in all directions.

Finally, all thirteen communities within Yakima County are within 45 minutes of driving time from Yakima via a system of well-maintained federal, state and county highways, including U.S. Highway 12 and 97, and state highways 410, 241, 22 and 24.

Motor Freight Carriers

Within Yakima County there are 74 trucking firms registered for motor freight trucking - 16 for heavy hauling and 3 for local cartage. Due to the heavy volume of fresh fruit and produce shipped from the Yakima Valley, numerous independent truckers also serve the area on a consistent basis.

Railroads

Rail shipment to and from Yakima County is available via Burlington Northern Santa Fe railroad. There are over 200 active spurs located throughout Yakima County that serve numerous industrial sites.

Air Service

The 809-acre Yakima Air Terminal serves Yakima County and portions of Kittitas, Klickitat and Lewis Counties. The airport is owned by the City and County and is managed and operated by an independent Board of Directors and airport staff. Airport maintenance and operations are funded solely through revenues generated at the airport. The Yakima Regional Airport has two runways, one approximately 7,603 feet in length and the other approximately 4,293 feet in length. There are plans to expand the runway in the future.

Passenger service is available at the airport via Horizon Air. Six flights per day are provided to and from the Seattle-Tacoma International Airport. In 2000 there were over 84,000 passenger boardings from Yakima, an average of 230 per day.

Casino Express/Xtra Airways also provides intermittent charter service to Elko and other destinations in Nevada. The airport also supports a general aviation community and there are two full service Fixed Base Operators on the airfield, McCormick Air Center and Noland-Decoto Flying Service.

Water Transportation

Containerized goods may be shipped through the nearby Port of Pasco. From there, goods travel by barge on the Columbia River to the Port of Portland for shipment overseas. Yakima County also has excellent freeway access to the Puget Sound ports of Seattle and Tacoma, only 2 ½ hours away.

FREIGHT TRANSPORTATION TODAY

Research by the Eastern Washington Intermodal Transportation Study (EWITS) of freight in the Yakima Valley (1998) found the following characteristics:

- An average of 500 freight trucks each day originate from the City of Yakima, consisting primarily of agricultural products.

- Incoming freight to Yakima averages over 500 trucks daily, except in the summer when truck traffic falls to 400 trucks per day. Incoming freight is predominantly food products.
- Total truck traffic within Yakima (incoming, outgoing and inter-regional) is slightly higher in the fall averaging 1,760 trucks per day and lowest in summer, averaging 1,358 trucks per day. Freight consists mainly of agricultural, food and lumber products. Average payload weights range from 19 to 21 tons across the seasons.
- Truck weight is an issue for street maintenance. Over half the trucks hauling agricultural products have a payload of 20 to 25 tons, with 6% weighing 30 tons or more.
- More than 20 percent of all truck traffic begins and ends within Yakima on the average day.

PLANNING FOR FREIGHT MOBILITY IN YAKIMA

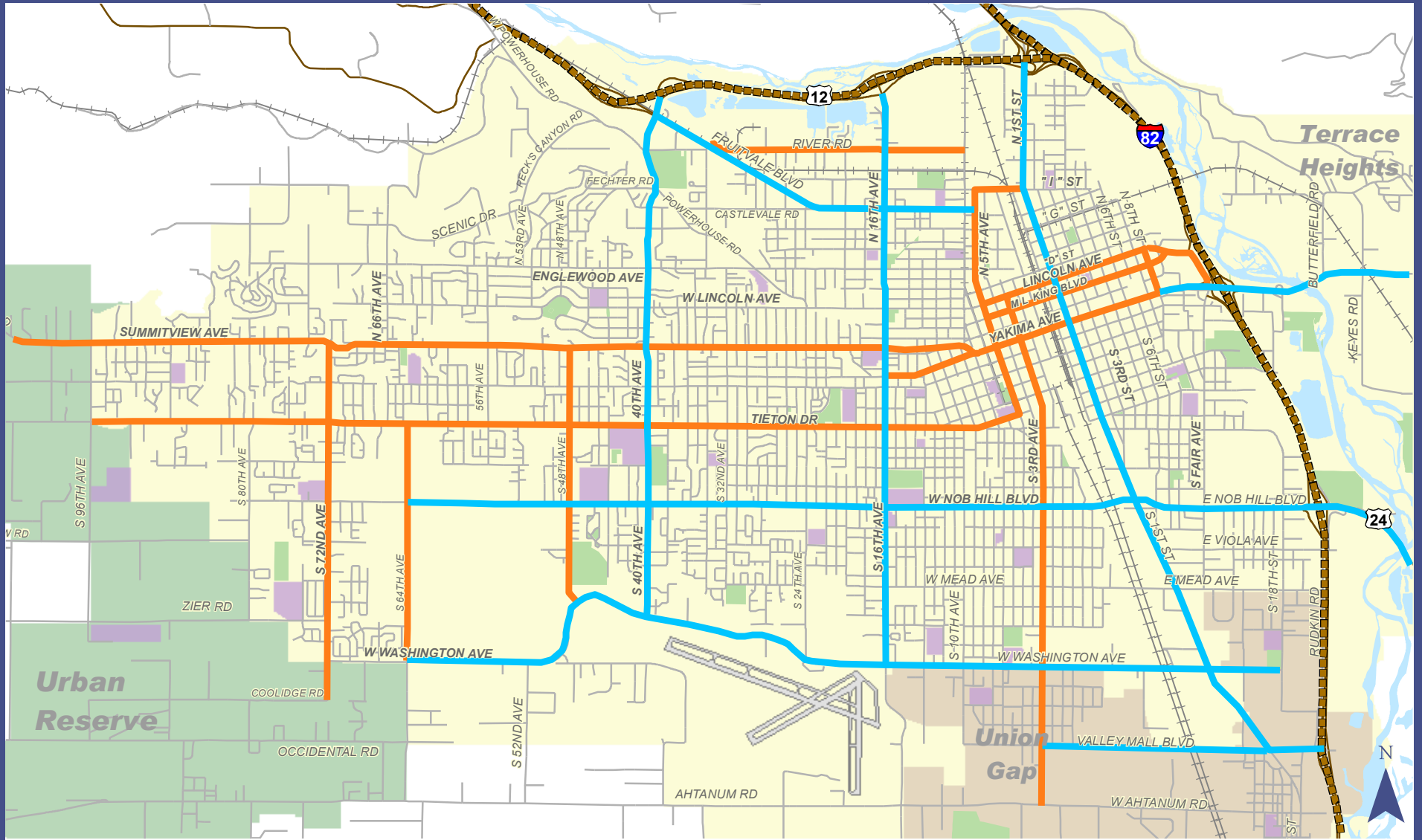
The accommodation of truck movements is an important component of Yakima's overall economy. Due to the dispersed nature of industrial and agricultural service land uses in the Yakima Urban Area, truck traffic must travel the entire classified street system to reach packing facilities, warehouses, freeways, the airport or rail service. To-date, the City of Yakima has not designated "Truck Routes" to try to limit truck traffic to certain streets. This can result in conflicts with neighborhood livability. Some residents have expressed concerns about truck traffic on neighborhood streets and have indicated support for restricting large trucks on some streets. Today, a few streets within Yakima are posted for NO TRUCKS, which is advisory and not enforceable. Chestnut Avenue is an example that is signed "NO TRUCKS" and is a designated bicycle route.

The transportation system should be planned to accommodate the efficient and effective movement of freight while still maintaining neighborhood livability. Three levels of freight routes are proposed to be identified within the Yakima Urban Area, including Through Routes, Primary Routes, and Secondary Routes.

The establishment of Through Truck routes provides for the most efficient movement of goods and services. The Through Truck Routes include the State Highway System of I-82 and SR12. Primary Truck Routes should be designated on those roadways that link the City roadway system to the regional through truck routes, which are largely Principal Arterial Streets. Secondary truck routes can provide link the industrial centers of the City to the Primary and Through truck routes and represent those roadways that are better suited to accommodate frequent truck movements. A map of the three truck route designations within the City is shown in Map 7-1. This map was developed based on existing freight route origins and destinations for trucks within the City and WSDOT's Freight Tonnage Street Class of the Washington State "Interim Freight and Good Transportation System."

MAP 7-1

Proposed Truck Route Map and Airport Vicinity



MAP LEGEND

- Urban Reserve
- Urban Area
- Schools
- Parks
- Union Gap
- Through Truck Routes
- Primary Truck Routes
- Secondary Truck Routes

The routes identified on this map are intended to guide decisions about which streets may require improvements to pavement width, surface strength and turning radius at intersections. Streets not identified as Truck Routes are not proposed to be regulated to prohibit trucks. However, the recommended Truck Routes would be signed and constructed for freight traffic.

1 inch equals 0.90 miles

Access to and from the State Highway system is the most critical traffic flow issue for the local freight system. The Primary Arterials with freeway interchanges are the most common Primary freight corridors. These include 1st Street between I-82 and Union Gap; 16th Avenue between US 12 and Washington Avenue; 40th Avenue between US 12 and Washington Avenue; Yakima Avenue, Fruitvale Boulevard, and Nob Hill Boulevard.

Additional Arterial streets that connect agricultural regions or industrial areas to the freeway system are also important Secondary Freight routes. Examples include Summitview Avenue, 5th Avenue, Meade Avenue, and Tieton Drive, which provide access to fruit orchards, warehouses, packing facilities and numerous industrial uses.

The Yakima Urban Area has a number of freight dependent industrial uses, such as Yakima Regional Wood Products (formerly Boise Cascade), Federal Express (located at the Yakima Airport) and various other land uses that are located throughout the Yakima area. Connection to the Yakima Airport is a growing issue in the Yakima Valley as opportunities increase for freight movement by air.

Truck Restrictions

Since 1965, the City of Yakima, under the authority of the Fire Codes Provisions of the Municipal Code, restricted gasoline and other tank vehicles for carriage of flammable liquids from traveling on certain streets. No specific signs are in place to identify restricted routes.

Use of compression brakes within the City limits was prohibited by the City Council in 2005. The regulation was in response to a citizen request to eliminate excessive noise near neighborhoods from trucks.

RAILROAD HISTORY IN YAKIMA

The development of rail service to the Yakima Valley dictated much of the built environment of early Yakima. On December 17, 1884, the tracks of the Northern Pacific (NP) Railroad's Cascade Branch began construction through "Yakima City" (now Union Gap). However, the NP announced there would be no depot or stops in Yakima City. Instead, a new townsite would be platted five miles northwest with the railroad depot. The new townsite became known as North Yakima, (later shortened to just Yakima). The previous Yakima City became known as Union Gap in 1918.

The Northern Pacific Cascade Branch line connected rail service between Pasco to the Puget Sound, via Stampede Pass. Inter-continental rail service on the Cascade Branch line between Pasco and Tacoma began in July of 1887, as did the Northern Pacific Railroad Telegraph Service.

RAILROAD ISSUES WITHIN THE YAKIMA URBAN AREA

Since the 1880's, the City of Yakima developed around the railroad, with core commercial services and industrial uses clearly planned around rail access. Consequently, the city's railroad corridor still bisects the Yakima central business district (CBD). As freight and passenger dependence has moved away from the rail-centered model to the current truck and automobile mode of transportation, conflict has increased between city streets and freeways with rail service in urban areas. More frequent or extended rail service presents significant disruption of traffic flow and delay to the urban arterial streets that have at-grade crossings.

Projected rail use by the Burlington-Northern Santa Fe (BNSF) Railroad show significant growth in the total number, frequency and length of trains that will travel through Yakima. The current average of 10 trains daily is expected to increase to an average of 25 daily trains by 2025. Rail service on the lines that bisect Yakima are largely regional lines and do not stop in Yakima to transfer goods from the Yakima Valley. This freight movement is vital to the state and national economy.

The local impact of increased train service over Yakima streets has safety and economic impacts. The disruption to traffic on the Principal Arterial Streets in the CBD compromises commerce, emergency access and ground freight. Delay of vehicles at railroad crossings causes air pollution from idling vehicles.

To reduce these negative impacts, high priority has been given to providing grade separation at the railroad crossing of Martin Luther King Jr. Boulevard and Lincoln Avenue. Additional grade separations of other at-grade railroad crossings will need to be evaluated for consideration of future needs. Future consideration will need to be given to the grade separation or other measures to mitigate the impacts of rail crossing at "I" Street, "D" Street, Yakima Avenue, Mead Avenue, and Washington Avenue.

IMPLEMENTATION TASKS

Actions should be taken to improve safety and traffic flow of freight in the Yakima Urban Area. Identification of high priority freight routes with freeway access for trucks should be considered for some or all of these improvements.

- Support implementation of grade separation of the railroad with Lincoln Avenue and Martin Luther King, Jr Boulevard. Study additional grade separations as necessary.
- Pavement depth of adequate strength to support heavy truck traffic on identified truck routes.
- Truck turning radius improvements at intersections of Principal Arterial streets on identified truck routes.
- Identify and sign Truck Routes to plan for appropriate infrastructure needs.
- Provide sidewalks along all truck routes to remove pedestrians from travel path.
- Support planned efforts at the Yakima Air Terminal for providing improved freight and passenger services.

Chapter 8

Public Transit

Chapter 8: Public Transit

Yakima Transit provides public transportation services within the Yakima Urban Growth Area. This service is performed primarily through the scheduling and routing of regular fixed-route bus service that includes Yakima, Selah and parts of Union Gap.



PUBLIC TRANSIT GOALS AND POLICIES -

Goal (T-8.1): Promote Transit Ridership to Help Reduce Future Street Capacity Constraints

Policies:

1. Promote increased transit usage by area residents to help offset street and traffic congestion occurring within our Urban Growth boundaries
2. Identify areas of future route expansion based on residential growth and destination generators.
3. Market our existing transit system to area merchants, employers, retirement homes and educational facilities with incentives/promotional activity that will encourage rider-ship as an alternative to making single occupied vehicle (SOV) trips,
4. Coordinate with new development in order to plan for the inclusion of new transit stops in the site design plans. This could incorporate bus signage, benches, shelters, and bus pull-outs.

Goal (T-8.2): Consider Special Population Needs with Transit Stop Improvement Projects

Policies:

1. Determine the requirements for accommodating special population groups at our Transit Stop Improvement Project level such as accessibility to the transit system, meeting ADA regulations, the concentration of school age children, serving our elderly residents and resolving other unique land use issues.

2. Coordinate Transit Stops and other facilities at the Project level, including the need for additional or relocated Transit Stops, Bus Pull-outs, Shelters or other special improvements.

YAKIMA TRANSIT

Yakima Transit's bustling transit system has been on the go since Christmas of 1907. That's when the first public rides were given on the new Yakima Valley Transportation Company trolleys. By 1910, riders could go for a three-hour, forty-mile round-trip over all the trolley routes (or streetcars as they were called then) for just 50 cents.

In 1924, the first motorbus service began and it was so instantly popular with the riders that three more "Mack" buses were purchased the following year. Both the buses and trolley system continued to operate until February 1, 1947 when the streetcars were finally discontinued. Yakima was the last city in the State of Washington to lose this service.

In March of 1957, the Yakima Valley Transportation Company, a subsidiary of the Union Pacific Railroad, was sold off to a private individual. Years of financial struggles followed and in May of 1966, the private company went out of business. This trend was repeated all across the nation as private companies were going bankrupt by the ever-increasing costs of operating a transit system.

After a few months without any bus service, the citizens of Yakima voted to pay a Household Tax to support a transit system and the Yakima City Lines began operation on October 3, 1966. In the winter of 1978, the name was changed to Yakima Transit.



Yakima Transit continued service through the support of the Household Tax until the end of 1980. At that time, operating expenses began exceeding income, so the citizens once again went to the polls and voted in a .03 percent sales tax dedicated solely to transit operations. This tax began on January 1, 1981 and replaced the Household tax that was no longer financially viable.

Yakima Transit continued to operate bus service entirely within the city limits of Yakima until the end of June 2005, when it was able to extend routes to the communities of Selah and Union Gap. The transit agency was able to utilize funds from a special Congestion Mitigation and Air Quality (CMAQ) grant to operate a two-year demonstration pilot projection to those localities.

Transit ridership has exceeded one million passenger boardings annually on the fixed route system over the past several years. In addition, Yakima Transit also

provides paratransit service to eligible riders with the Dial-A-Ride program and their Vanpool program is also expanding with over twenty vans either operating or available for service. Yakima Transit recently started a travel training program for those riders needing familiarization with the buses, routes and equipment.

EXISTING ROUTES AND SERVICES

The Yakima Transit system consists of ten separate bus routes that operate from 6:00 a.m. to 7:00 p.m. Monday through Friday. Saturday and designated holiday schedules consist of eight bus routes that run on an hourly schedule from 8:45 a.m. to 6:30 p.m. The established bus routes cover residential neighborhoods and commercial areas surrounding Summitview Avenue, Lincoln Avenue, Tieton Drive, Fruitvale Boulevard, Mead Avenue, East and West Nob Hill Boulevard, Fair Avenue, North and South 1st Street to the State Department of Transportation campus in Union Gap, 16th Avenue, 40th Avenue, Washington Avenue including the Airport vicinity and Selah. Map 8-1 illustrates these transit routes and the locations of designated Park-N-Ride lots.

Transit service routes were modified in late 2003 to be more responsive to the needs of passengers getting to work and school. This schedule re-alignment offered more direct routings and maximized transfer point connections, as well as overall frequency of transit service within the community. In mid-2005, transit service was extended to Selah and Union Gap with funding provided by a CMAQ to relieve traffic congestion on the north-south arterial streets. Continuation of this service will be dependent upon evaluations by the participating jurisdictions and their ability to fund these routes.

Special User Accommodations

Wheelchair Accessibility – All of Yakima Transit's buses accommodate walkers and those who have difficulty climbing stairs. Some of our buses are classified as 'low floor' which allow for a ramp like ingress/egress from the vehicle. Yakima Transit routes are now all designated as being "Accessible" because they have lift-equipped buses in order to accommodate passengers using mobility devices, such as wheelchairs.

Transit Accommodations for Bicycles- Each Yakima Transit bus is equipped with bike racks. Citizens may make biking part of their regular commute to work or use it for recreational purposes by utilizing Yakima Transit connections. There is no extra charge for loading a bicycle on the transit bus beyond the regular fare.

DIAL-A-RIDE TRANSIT SERVICE

Dial-A-Ride is a way for people with mobility impairments to travel in Yakima. It provides door-to-door transportation to pre-qualified riders. Dial-A-Ride was established to provide transportation for those not capable of using the regular Yakima Transit bus system. Two independent contractors provide these services: Access Para-Transit and People for People. Each reports directly to the Yakima

Transit Administration on a monthly basis and is paid on a reimbursement formula for its obligations.

People certified as eligible according to the standards of the Americans with Disabilities Act (ADA) may use Dial-A-Ride to travel to any destination within the city limits of Yakima for \$1 per ride. Persons with a disability or medical condition that prevents them from using a lift or ramp equipped bus some or all of the time, may be eligible for Yakima Transit's Dial-A-Ride Transit Service.

Disabilities which could qualify someone to use Dial-A-Ride include mobility, vision, respiration or cardiac impairment, mental or developmental disabilities. These conditions must prevent the rider from being able to use the regular Yakima Transit buses and the age of the person or their inability to drive is not considered a qualifying factor.

Each person must complete and submit an application form that includes a medical verification of their related disability. Dial-A-Ride ridership has remained fairly constant over the past few years with an annual budget allocation for these services costing approximately one million dollars.

VANPOOL PROGRAM

Yakima Transit's Vanpool program is rapidly expanding in ridership and in the number of vans on the road. Transit staff provides assistance to organize commuting groups and get them to participate in the program. Transit provides the vehicle, insurance and all maintenance to keep the van running. Fuel is also included in the program, as well as the other expenses of owning and operating the vehicle. Vanpool drivers are fellow commuters from the van itself, responsible for collecting the fees and keeping the rig fueled. In return, the driver may ride for free or at a reduced rate. All of the Yakima Transit Vanpools must have one end of the trip in the Yakima Urban Growth Area.

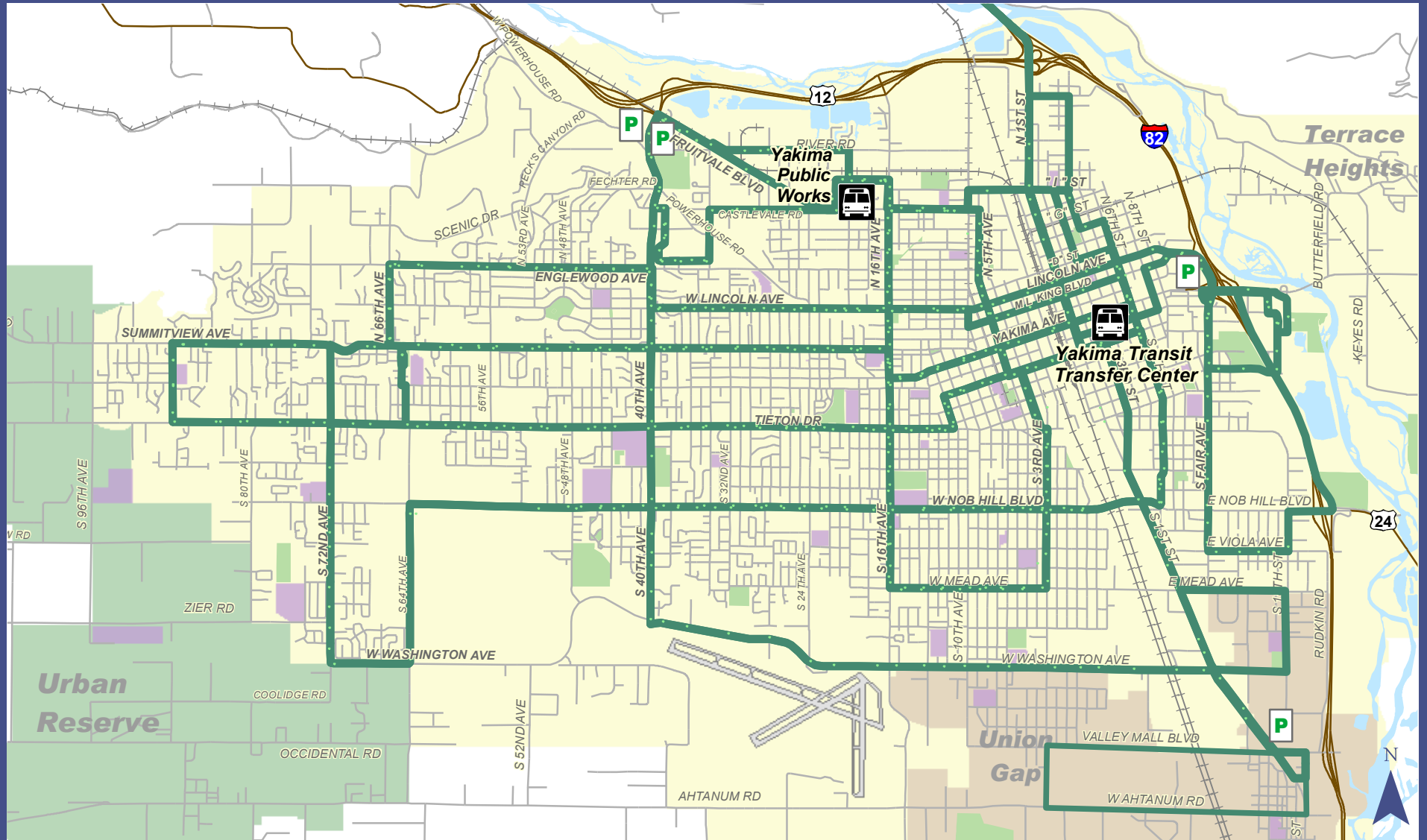
Monthly vanpool fares do vary according to the distance traveled. For example, a vanpool on a five-day workweek schedule, with ten paying passengers traveling twenty-two miles from Yakima to a Toppenish site, (forty-four miles per day round-trip) costs just under \$50. per month for each passenger (2005 rates). Since the monthly charges are shared, the more riders in the van reduce the payment or vice versa, the fewer riders in the van increase the shared cost of commuting.

In 2005, Yakima Transit purchased additional vans from the State Vanpool Program and now has a total of 20 individual vans in or available for service.









SPECIAL EVENT AND COMMUNITY ENHANCEMENT PROGRAMS

Yakima Transit offers several programs annually that promote bus ridership in our community on its fixed routes. Throughout the summer months each year, Yakima Transit provides free rides on each Wednesday and Saturday. In 2005, this promotion was used by more than 71,000 passengers. Additionally, during

In 2005, Yakima Transit sponsored over 20 individual vanpools daily.



MAP LEGEND

-  Urban Reserve
-  Urban Area
-  Schools
-  Parks
-  Union Gap
-  Transit Routes
-  Transit Stops
-  Park & Ride Lots

Yakima Transit provides public bus service within the City of Yakima and the immediate vicinity. Service is generally available Monday through Saturday from 6:00 AM to 7:00 PM. Transit buses run on thirty minute headways and stop every two blocks on route. Almost all Yakima Transit buses 'kneel' to the ground to accommodate walkers and those with difficulty climbing stairs. All routes are designated as "Accessible" and always have lift equipped buses to accommodate wheelchairs. All transit buses have bicycle racks to provide Bike and Ride connections.

1 inch equals 0.90 miles

special community events like the Fourth of July Celebration and the Central Washington State Fair in the fall, the Yakima City Council deems it appropriate for Yakima Transit to provide “extra” transportation services such as a series of shuttle buses. These are used to transport attendees from designated Park and Ride locations in Yakima directly to the event’s main entrance, thus saving parking charges, wait times and relieving traffic congestion in the area.

Yakima Electric Trolley

The City of Yakima now owns the Yakima Electric Trolley system including four streetcars, the car barn, powerhouse and several miles of track on 6th Avenue and the trolley bridge to Selah, Pine Street and 2nd Avenue (partially buried). Yakima is unique in owning and maintaining the original electric trolley-style street car system that has operated in Yakima for nearly 100 years (since 1907). The City of Yakima received Federal Enhancement funds to begin restoration of the trolley barn and powerhouse complex as a museum. Currently the system is used on summer weekends and other special events. Additional use of the trolley system will be explored in the future. The City of Yakima also retains the original Yakima Valley Transit (Trolley) right-of-way that extends several miles throughout the urban area.



CITIZEN PARTICIPATION AND PUBLIC PRIORITIZATION

There is a Citizen’s Advisory Panel that has been meeting quarterly for the past several years. It all started when a group of riders requested more input on transit operations and that format still continues. The eight member panel consists of two representatives from DSHS and the Horizon-Provident Group; heavy users of the transit system, two members from Transit and four from the community at large. These positions are voluntary, non-expiring unless requested and have no enforcing authority. However, this group’s suggestion does impact and are a focal point for new or improved service and schedule changes. They were a major contributor towards the expansion of the downtown transit center and incorporated many new trends and ADA improvements into its design and construction.

OTHER TRANSPORTATION MODES - CONNECTING TRANSIT SERVICES

There are a number of other public transportation services available within the Yakima Valley. These are highlighted below.

- *Yakima Air Terminal:* The Yakima airport serves all of Yakima County and portions of Kittitas, Klickitat and Lewis Counties. The airport is jointly owned by both the City and County. It is managed and operated by an independent Board of Directors and airport staff. Airport maintenance and the daily operations are funded solely through revenues generated at the airport by landing fees and facility leases. Passenger service is available at the airport via Horizon Air. Six flights per day are provided to and from the Seattle-Tacoma International Airport (SEA-TAC). Casino Express/Xtra Airways also provides intermittent charter service to Elko and other destinations in Nevada. The airport also supports a general aviation community with three Fixed Base Operators (FBO's) located on the airfield, the McAllister Museum, McCormick Air Center and Noland-Decoto Fly-ing Service.
- *Ben Franklin Transit:* This is the fixed route bus system serving the Tri Cities which also connects to the community of Prosser via Intercity Route 170 (serving the Tri Cities, Prosser and Benton City). The bus stops in Prosser on two-hour headways during the week and on Saturdays from approximately 6:00 a.m. to 8:00 p.m. There are no direct connections between Yakima Transit and Ben Franklin Transit's Route 170. (But see the Community Connector)
- *Central Washington Airporter:* This shuttle service provides four round trips daily between Central Washington and the Seattle-Tacoma International (SEATAC) Airport and the Seattle AMTRAK station. Within Yakima, the shuttle stops at the Yakima Air Terminal and at the Howard Johnson Hotel. The cost of a roundtrip fare is comparable to driving over and parking your vehicle for several days.
- *Greyhound Bus Service:* intercity bus service is available via Greyhound. Generally, the station, which is located on East Yakima Avenue, is open between 8:30 a.m. and 5:30 p.m. seven days a week, including holidays. Three trips per day are provided to both Seattle and Pasco. Other interstate destinations can be reached via transfers at Ellensburg, Pasco and Seattle
- *The Community Connector:* People for People provides service between Yakima, Wapato, Toppenish, Zillah, Granger, Sunnyside, Grandview, and Prosser. This service is intended to transport residents to their job sites. The service is funded by Intercity and Rural Mobility Grants from the Washington State Department of Transportation. Service is provided four times a day from the downtown Yakima Transit center with direct connections to the Ben Franklin Transit system (Inter-City Route 170) in Prosser.

Yakima departure times are 6:15 and 10:00 a.m. and 4:15 and 8:40 p.m. Monday through Friday.

IMPLEMENTATION TASKS

Yakima Transit has several planned projects for near-term and mid-term operations:

- Replace six older coaches with new low floor units. All will be ADA compliant.
- Expand the Yakima Transit operating hours to start earlier in the day, add to the evening routes and provide additional bus service on Saturday and Sunday.
- Secure permanent funding for bus service to the Se lah and Union Gap operations.
- Build a new Westside transfer location in the annexed areas around 72nd Avenue.
- Link the nearby communities in the Urban Growth Area together with Transit Service (includes Terrace Heights, Moxee, Yakima Training Center, Gled, Tieton, Cowiche and Naches).
- Offer regional transit service connections to Kittitas County (Ellensburg/CWU Campus).
- Continue to incorporate/maintain/improve ADA requirements within our transit system.

Chapter 9

State and Regional Street System

Chapter 9: State and Regional Street System

The Yakima Urban Area includes two State-owned highway facilities (Interstate 82 and State Route 12) that provide regional passenger and freight mobility throughout eastern and central Washington. These highways provide access to the city via five grade separated freeway interchanges with Yakima Principal Arterial streets and the surrounding area.



Within the Urban Area, State Route 24 is also owned by the State of Washington. Yakima County maintains numerous adjoining Arterial streets including Ahtanum Road, Terrace Heights Drive, Tieton Drive, Summitview Avenue, Wide Hollow Road and others. The City of Union Gap and Yakima County maintain extensions of the Yakima Arterial Street System outside the boundary of the urban area. Drivers within the Yakima Urban area often cross regional jurisdictional boundaries when using the street system for activities such as work commutes, recreational trips, shopping, and goods/freight movement.

STATE AND REGIONAL STREET SYSTEM GOALS AND POLICIES -

Goal (T-9.1): Support regionally important transportation projects

Policies:

1. Plan and support the Arterial Street System in collaboration with Yakima County, the City of Union Gap, the Washington State Department of Transportation, and other neighboring jurisdictions.
2. Support projects that benefit the entire region and do not have negative impacts on the State Highway System.
3. Support projects identified in the WSDOT TRANS-Action Plan.

Goal (T9. 2): Consider impacts of development upon State and regional facilities

Policies:

1. Coordinate with WSDOT and neighboring jurisdictions regarding level of service definitions, concurrency requirements, and other impacts.
-

EXISTING STATE AND REGIONAL SYSTEM FACILITIES

Two limited access state highways traverse the Yakima Urban Area: Interstate 82 and State Route 12.

- **Interstate 82** : a four-lane freeway that forms the easternmost boundary of the City of Yakima. I-82 is the main regional highway connecting Yakima to I-90, the Tri-Cities region and the State of Oregon. Four grade-separated interchanges on I-82 serve Yakima: Valley Mall Boulevard, Nob Hill Boulevard, East Yakima Avenue, and Highway 12/North First Street. This portion of I-82 is also known as State Route 97.
- **State Route (SR) 12** : a four-lane facility forming the northernmost boundary of the City of Yakima. This highway connects I-82 to the east and the City of Naches, Chinook Pass, and White Pass to the west. Interchanges to SR 12 are located at North 40th Avenue and North 16th Avenue.

In addition, several other regional facilities serve the urban area.

- **State Route 24** : a two-lane, WSDOT-maintained facility that connects the residential and industrial areas of Moxee to the Yakima Urban Area. SR 24 also provides access to the Vernita Bridge (over the Columbia River), Hanford, and other eastern Washington regions.
- **Ahtanum Road** : a two-lane Minor Arterial connecting Union Gap to the West Valley area. The street spans the jurisdictions of Union Gap, City of Yakima, and Yakima County. This roadway provides access to the communities of Wiley City and Ahtanum.
- **Terrace Heights Drive** : a four-lane Yakima County maintained street, classified as a Principal Arterial and a Collector Arterial, that provides primary access to the State Highway System and the City of Yakima via the Terrace Heights Neighborhood.

- **Summitview Avenue:** a two-lane Yakima County maintained Rural Collector Arterial street that provides access to the communities of Cowiche, Tieton, and other residential areas northwest of the Yakima Urban Area.
- **Tieton Drive :** a two-lane Yakima County-maintained Rural Collector Arterial street that provides access to residential and rural areas west of the Yakima Urban Area.
- **Wide Hollow Road:** a two-lane Yakima County-maintained Rural Collector Arterial street that provides access to rural and residential areas west of Yakima.

LEVEL OF SERVICE FOR STATE FACILITIES AND ADJOINING JURISDICTIONS

Washington State Department of Transportation has established Level of Service (LOS) “D” as the minimum acceptable level of service for State Owned facilities within Urban Areas. This LOS definition is consistent with the City of Yakima Transportation Concurrency Program. The City of Yakima circulates a request for public comment from the WSDOT South Central Planning office when considering development projects in the vicinity of a State-owned interchange. Mitigation payments or right of way to WSDOT from private development have been obtained under the authority of the Washington State Environmental Policy Act (SEPA).

Regional coordination of projects is a responsibility of the Yakima Valley Conference of Government (YVCOG) which serves as the Metropolitan Planning Organization (MPO) for the Yakima Urban Area. Union Gap and Yakima County have also established LOS D as the minimum standard for streets.

REGIONALLY SIGNIFICANT PROJECTS

The WSDOT South Central Region organized an effort among Yakima and other local jurisdictions to prioritize projects of regional significance, especially related to state highway facilities. The process became known locally as “TRANS-Action” and is facilitated by a group of local business leaders, elected officials, local jurisdiction representatives and other community members. The goal of TRANS-Action is to encourage economic vitality by developing a list of prioritized transportation strategies to meet the long-range needs of the greater Yakima area and explore funding opportunities.

Accomplishments to date include the State Route 24 corridor, the I-82/SR-24 interchange, beautification of the I-82 corridor, Union Gap interchange projects, and the study of a Westside Connector road. Other projects are under consideration for updating the TRANS-Action Priority List, such as the 40th Avenue Corridor, the 16th Avenue Corridor, and Nob Hill Boulevard. Each of

these projects includes high-volume Principal Arterial streets with free-way interchanges.

Following is a description and map of the Regionally Significant Projects within the Yakima Urban Area proposed by the WSDOT South Central Region, Yakima County, Union Gap, and the City of Yakima.

STATE SYSTEM PROJECTS

A series of improvement projects are planned for the State Highway System within the Yakima Urban Area. These projects are fully the responsibility of the Washington State Department of Transportation, and will be completed in cooperation with the local agencies. These priority projects were identified using the TRANS-Action committee process.

State Route 24 (SR 24) at Interstate 82 (I-82); SR 24 to Keys Road:

This road is characterized as a bottleneck at the interchange with I-82, and experiences daily congestion as well as safety concerns. This project includes improving SR 24 to four lanes, two in each direction, from Keys Road (Yakima County) through the interchange with I-82. A new bridge over the Yakima River and a new bridge over I-82 are included in the project. Cost of the project is estimated at \$50.5 million. Construction is scheduled to be complete in 2007.

State Route 12 (SR 12) and North 40th Avenue Interchange:

This project site experiences considerable congestion and delay. The planned improvement would add capacity to the interchange and relieve congestion occurring on the adjoining Principal Arterial. The project will add a second eastbound on-ramp, a second westbound off-ramp, and modify the signal system at 40th Avenue. Project cost is \$2 million and the construction is scheduled to be complete by 2007.

State Route 12 (SR 12) and Naches River Floodplain Work:

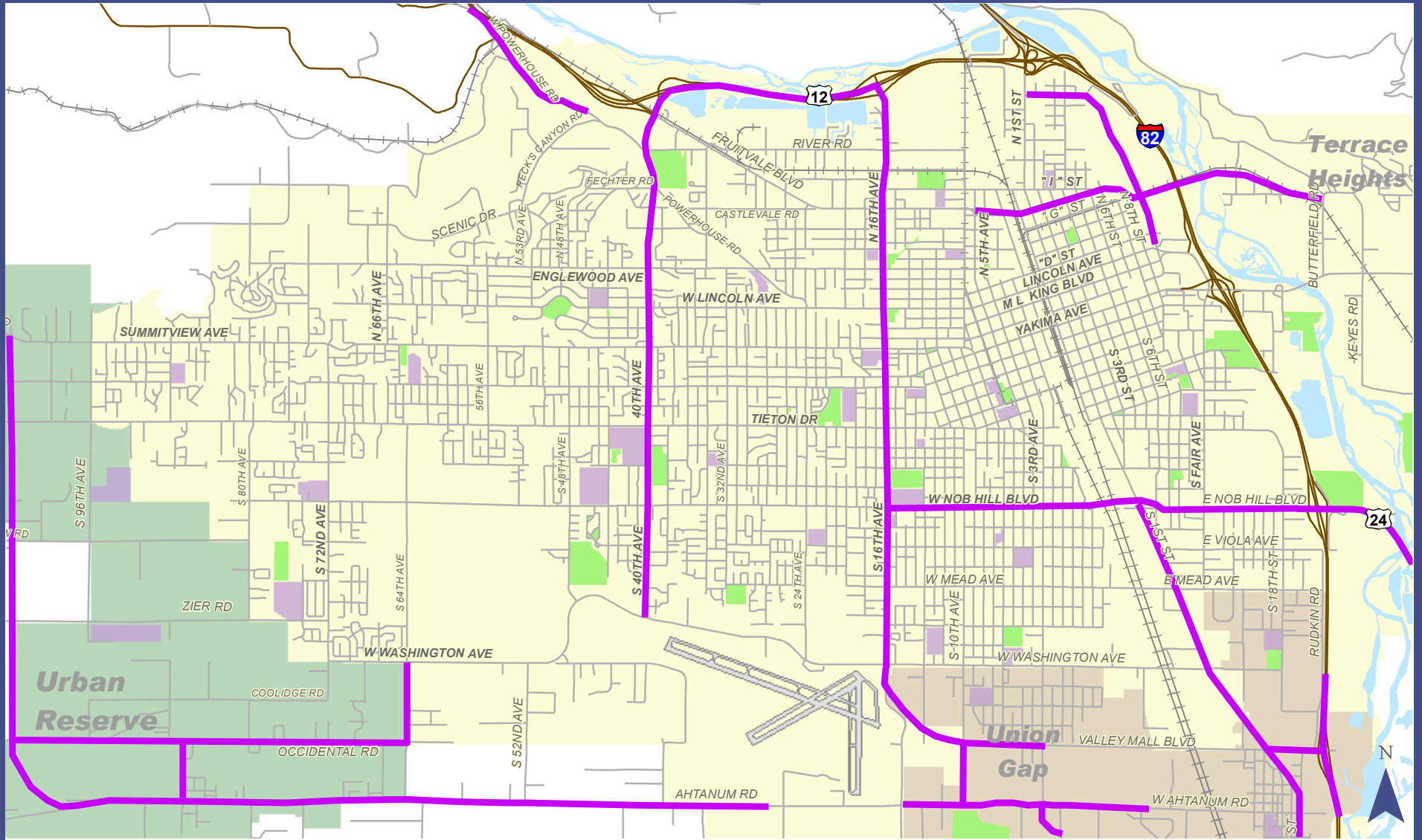
The project site is located west of the 16th Avenue interchange with SR 12. The planned improvement includes slope stabilization to correct erosion of the westbound lane of SR 12. The project cost is estimated at \$2.1 million and is scheduled for construction in 2008.

Interstate 82 (I-82) and Valley Mall Boulevard Interchange:

This interchange is a bottleneck area, characterized by congestion, delay and poor alignment. The improvement project will add additional travel lanes through the interchange on Valley Mall Boulevard and correct alignment deficiencies. The project cost is estimated at \$36 million and is scheduled for construction in 2009.

MAP 9 -1

Regional TRANS-Action Projects



MAP LEGEND

- Urban Reserve
- Urban Area
- Schools
- Parks
- Union Gap
- Regional Trans-Action Projects

This map illustrates the major projects that are of regional interest to the Yakima Urban Area and cooperatively supported through the TRANS-Action Partnership program. TRANS-Action Partnership is a cooperative effort between the Cities of Yakima, Selah, Union Gap, Yakima County and the WSDOT to identify and promote significant projects of regional interest.

1 inch equals 0.90 miles

Interstate 82 (I-82) and South Union Gap Interchange:

This project will enhance the efficiency and functionality of the grade-separated interchange to improve traffic flow and access to regional facilities, such as the airport. The project includes adding a northbound on-connection and a southbound off-connection. Cost estimates are \$24.9 million and the project is scheduled for construction in 2010.

State Route 12 (SR 12) and Old Naches Highway Interchange:

The project site is located just northwest of the Yakima Urban Area and is an at-grade intersection controlled by a traffic signal. There have been a number of vehicular collisions at this location which has led to safety concerns by the jurisdictions. The project includes a grade separated interchange. Project cost is estimated at \$38.3 million and is scheduled for construction in 2013.

REGIONALLY SIGNIFICANT PROJECTS BY JURISDICTION

Local jurisdictions are planning a number of significant Arterial Street projects within or adjacent to the Yakima Urban Area. These projects are either listed in the TRANS-Action Projects or within the Regional Transportation Planning Organization (RTPO) Plan.

Ahtanum Road: 26th Avenue to 104th Ave (Yakima County):

This street would provide the foundation for the southern leg of the “Western Bypass.” At this point, a 5-lane street with curbs, gutters, and sidewalks is planned. The cost and timing of project is not known at this time.

Wide Hollow Road: 80th Avenue to 96th Avenue (Yakima County):

Planned improvement to this street includes 3-lanes, with curb, gutter and sidewalk. The cost estimate of project is \$1.7 million and the project is scheduled for construction in 2009.

64th Avenue: Occidental to Ahtanum Road (Yakima County):

Preliminary concept for this street includes 4-lanes, with curb, gutter and sidewalk. The preliminary cost estimate is \$1 million and the project is scheduled for construction in 2011.

I-82 Frontage Road, Terrace Heights Connector: and Greenway Path Connector (City of Yakima, Yakima County):

This project includes a new bridge over the Yakima River and a new street under I-82 to connect Terrace Heights to Yakima, in the vicinity of “H” Street. Additionally, a frontage street would be built in the City of Yakima to connecting 9th Street to R Street, intersecting with the Terrace Heights Extension and provide

pedestrian and bicycle access to the Yakima Greenway. Project cost and timing are not known at this time.

Valley Mall Boulevard: Phase III, 3rd Avenue to 16th Avenue (Union Gap):

The planned improvement is for a four-lane road with divided median, curb, gutter, sidewalk, and bike-lane. A connector street aligned with 10th Avenue is planned to connect to Athanum Road. Project cost estimate is \$18.7 million and construction is scheduled to begin in 2007. Valley Mall Boulevard: Phase IV, I-82 to Main Street.

Valley Mall Boulevard: Phase IV, I-82 to Main Street (Union Gap):

The planned improvement is for a five-lane road with curb, gutter, sidewalk, and bike-lane. The project is directly related to the Interstate 82 (I-82) and Valley Mall Boulevard Interchange project. Project cost estimate is \$18.7 million and construction is scheduled to begin in 2010.

South 1st Street/Main Street: Nob Hill Blvd to Barker Mill Bridge (City of Yakima and Union Gap):

This project includes the reconstruction of curb, gutter, sidewalk, and storm drainage system. Intersection improvements and signal upgrades along the corridor are an important part of the project. Project cost and timing are not known at this time.

Goodman Road Extension: Washington Avenue to Valley Mall Blvd (Union Gap):

This project includes construction of a new 3-lane street, with curb, gutter, and sidewalk. Project cost and timing are not known at this time.

East Nob Hill Blvd Corridor: 16th Avenue to 18th Street (City of Yakima):

The project includes improvement of Nob Hill Boulevard to 5-lanes, with sidewalks, street lighting and a separate bike lane. The corridor may require some access management treatments at congested intersections. Project cost is estimated at \$7 Million. Preliminary engineering should begin by 2010.

40th Avenue Corridor – US 12 to Washington Avenue (City of Yakima):

The project includes improvement of 40th Avenue to 5-lanes, with sidewalks, street lighting and a separate bike lane. The corridor may require some access management treatments at congested intersections. Project cost is estimated at \$9 Million. Preliminary engineering should begin by 2010.

16th Avenue Corridor – US 12 to Washington Avenue (City of Yakima):

The project includes improvement of 40th Avenue to 5-lanes, with sidewalks, street lighting and a separate bike lane. The corridor may require some access management treatments at congested intersections. Project cost is estimated at \$11 Million. Preliminary engineering should begin by 2010.

IMPLEMENTATION TASKS

To implement the state and regional system element of the Transportation Plan, the city should implement the following measures:

- Continue coordination efforts with the City of Union Gap, Yakima County, the Washington State Department of Transportation and other neighboring jurisdictions to fund, prioritize and implement projects that provide regional transportation and economic benefits.
- Continue coordination with WSDOT and other neighboring jurisdictions regarding concurrency requirements and project-level impacts.

Chapter 10

Finance Element

Chapter 10: Finance Element

Whether driving, walking, bicycling, or riding the bus, each of us needs the transportation system to be convenient and efficient in our travels to work, school, shopping and recreation.



The efficient functioning of the transportation system is also vital for the transportation of products to market, mail to the post office and emergency vehicles access to neighborhoods. This chapter evaluates how future improvements to the transportation system can be funded to ensure that the city continues to support driving, transit, biking, walking and freight movement.

Even though functions of the roadway network and the transit system are closely entwined, they are also very distinct. Due to funding source opportunities and constraints, this Plan identifies future improvements as one of the following categories: 'capacity constrained projects', 'system improvement projects', 'multi-modal: sidewalks, transit and paths', and 'annual projects and operation'.

PLAN FINANCE GOALS AND POLICIES -

Goal (T-10.1): Address street segments that are projected to have future capacity constraints.

Policies:

1. Evaluate a variety of funding solutions to address future capacity constraints to minimize overall economic impact to the community while providing opportunity for growth.
2. Develop a dedicated funding source to provide local match funds in order to secure state or federal funding for capacity constraint projects.
3. Seek dedicated funding for intersection projects to address capacity constraints and optimize efficiency. Local dedicated funds may be used as local match or supply funds for annual programmed improvements that address capacity issues.

Goal (T1 0:2) Provide a balanced funding source for all infrastructure components of street maintenance and operations program.

Policies:

1. Provide funding to preserve, re-construct and maintain the existing street system, including street surfaces, drainage, sidewalk repairs, street lighting, traffic signals and bridges.
2. Require developers to repair/reconstruct street frontage improvements such as sidewalks that are in poor or failed condition as a condition of their approval.

Goal (T10:3) Provide for a multi-modal transportation system that includes transit, bicycles, pedestrians and individuals with special needs.

Policies:

1. Seek funding sources to expand Yakima Transit service into neighboring communities.
2. Maintain a dedicated funding source for capital, operation and maintenance of the City's Transit System.
3. Provide a dedicated funding source for system improvements that assist individuals with special needs, such as audible signals, ramps, and infill of missing sidewalk linkages.

STREET SYSTEM NEEDS

The transportation plan identifies street system needs for the next twenty years. These needs are based on traffic growth estimates generated by the City's land use forecasts, employment and population growth. The projects identified to meet the future needs include capacity, system improvements, multi-modal and annual maintenance and operations programs. The Growth Management Act states "A multiyear financing plan based on the needs identified in the comprehensive plan, the appropriate parts of which shall serve as the basis for the six-year street, road or transit program required by RCW 35.773.010" (RCW 36.70.070.6a). Over the 20-year life of this Plan, over \$103.9 million will be needed for transportation system improvements and maintenance. Additionally, current projects with funding secured exceed \$36.7 million with the majority of those costs consisting of the railroad grade separation of Lincoln Avenue and Martin Luther King, Jr

Boulevard. The program costs are divided evenly between projects needed to address existing deficiencies in the transportation system and those deficiencies that are forecast over the next twenty years. This level of expenditure for transportation will require an investment equivalent to \$5.19 million annually.

A description of each of the types of projects that are anticipated over the next twenty years is provided below.

Annual Maintenance and Operations

System and annual transportation projects include short-range annual maintenance and operation programs such as signal upgrades, surface preservation of both arterial and local streets through street maintenance programs and ADA ramp and sidewalk repairs. Funding for short-range programs is typically secured through the City's annual Budget approval process. The availability of matching funds to assist with the costs of these programs from state or federal sources is very restricted and limited. The majority of the program costs must be funded through local sources. The City of Yakima currently uses revenues from property taxes, gas taxes and real estate excise taxes. Direct allocation from the Surface Transportation Program fund could be directed toward some of the short-range and annual projects. Maintenance costs are estimated at \$1.5 million annually, which is 29.7 percent of the annual transportation program costs. Over the 20-year term of the plan more than \$30 million is proposed to be spent on maintenance and operation programs.

System Improvements

Long-range system projects are large-scale improvements that may be eligible for state or federal competitive funding sources. The City of Yakima is required to match competitive funds with a minimum of 10 to 20 percent local funds. Higher match levels typically receive higher placement in state/federal ratings due to the commitment shown by local government to address transportation needs. Using a conservative 15% match level for \$20.8 million of total system improvement costs requires a local match equivalent to \$3.2 million over the life of the plan.

Annualized over twenty years, this equates to approximately \$160,000 in local match funds per year. Long range system improvements over the 20-year term of the Plan are estimated to cost over \$20.7 million, which is 19.9 percent of the total transportation program costs.

Capacity Improvements

Capacity projects are also large-scale improvement that may be eligible for competitive state/federal funding sources. The local match requirement anticipated for the \$38.1 million program needed over the life of the plan is \$5.7 million (assuming a 15 percent match). Annualized over twenty years, this equates to approximately \$285,750 in local matching funds for capacity improvements per year.

One potential source of local match funds for capacity improvements over the plan's life is the development of a public-private partnership programs such as a fee-in lieu program, transportation benefit districts or traffic impact fees. The Growth Management Act provides the opportunity for local agencies to develop such programs to assist in financing those projects necessary to address growth. Fees are typically assessed based on trips generated by new development. Other public-private programs may be explored.

Capacity projects over the 20-year term of the Plan are estimated to cost over \$38 million, which is 36.6 percent of the total transportation system cost.

Multi-Modal and Transit Programs

Development of new sidewalks, pathways and support of the Yakima Transit System are financed largely through grants, Arterial Street Funds and Federal Transit entitlements. For example, the entire 75-mile William O. Douglas Trail (which spans 3 counties) received funding from the Federal Transportation Enhancement Program. School sidewalks have been constructed using State and Federal grant funds.

Over the 20-year term of the Plan, a total of over \$14.2 million are planned for Transit operations and trail, sidewalk or pathway construction, which represents 13.7 percent of the total transportation program.

Other Needs

Paying for Yakima's transportation system capital projects is one of the largest expenditures facing the city. Yet capital investment only constitutes a portion of transportation expenditures. Non-capital costs like maintenance and operations functions for the existing system, administration, and debt services and police enforcement of traffic laws require dedicated annual funding sources.

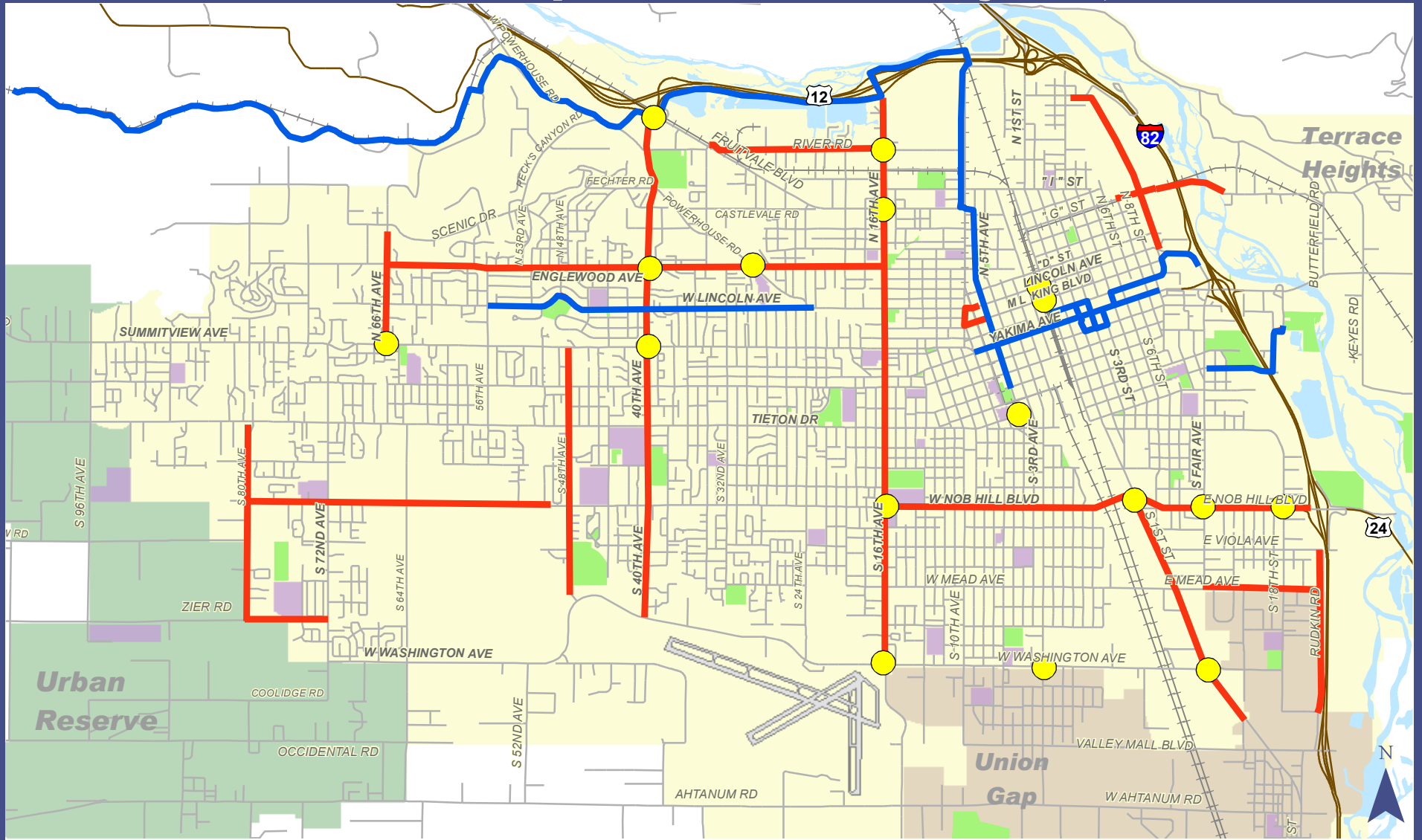
PROJECT LISTING

For the purpose of funding and Growth Management Act requirements, the projects identified in this Transportation Plan that are necessary to provide Future Arterial Street Capacity for projected Level of Service Deficiencies are grouped together. Future funding may include partnership of public and private sources, as authorized in the Revised Code of Washington 82.02.12.

Preliminary Project Lists

The projects identified in this Transportation Plan have been prioritized by type of improvement and short-term or long term implementation. The Transportation Plan contains detail on each of these projects (approximately 2 pages each), including projected cost, priority/time-line and funding sources. Table 10-1 provides a summary of each of the Plan projects with approximate cost estimates and targeted year of implementation.

Transportation Plan Projects, 2007 - 2025



MAP LEGEND

- Urban Reserve
- Urban Area
- Schools
- Parks
- Union Gap
- Planned Corridor Projects
- Planned Intersection Projects
- Planned Path, Sidewalk Projects

1 inch equals 0.90 miles

This map represents the major transportation improvement projects outlined in the Transportation Plan Update for 2007 to 2025. The projects include capacity constrained street corridors and intersections, system improvements, and multi-modal projects for sidewalks, pathways. Annual projects, operational costs, spot safety improvements and transit operations are not identified on this map. See Appendix 1 for project descriptions.

**Table 10-1
Transportation Plan Improvement Projects, 2006-2026**

FUNDED PROJECTS - CONSTRUCT BY 2008		Length	BEGIN	COST ESTIMATE
1	SR-12& N 40th Ave Interchange	Intersection	2006	\$2,820,000
2	Nob Hill Blvd & S 6th St Signal	Intersection	2006	\$537,000
3	N 16th Ave & River Rd Signal	Intersection	2006	\$344,000
4	RR Grade Separation of B St, Lincoln	Intersection	2007	\$31,000,000
5	River Rd: 16th Ave to Fruitvale Blvd	1.2 Miles	2007	\$2,020,000
Total Estimate				\$36,721,000
CAPACITY CONSTRAINED PROJECTS		Length	BEGIN	COST ESTIMATE
1	40th Ave Corridor: Fruitvale to Washington	3.3 Miles	2010	\$9,000,000
2	40th Ave & Summitview Signal	Intersection	2009	\$450,000
3	40th Ave & Englewood Signal	Intersection	2010	\$273,000
4	Nob Hill Blvd Corridor: 16th Ave to 18th St	2.5 Miles	2008	\$7,000,000
5	Nob Hill Blvd & 18th St Signal	Intersection	2008	\$750,000
6	Nob Hill Blvd & Fair Ave Signal	Intersection	2008	\$1,200,000
7	16th Ave Corridor: US-12 to Washington	3.6 Miles	2013	\$11,000,000
8	16th Ave & Fruitvale Signal	Intersection	2012	\$445,000
9	16th Ave & Washington Signal	Intersection	2008	\$455,000
10	1st St & Washington Signal	Intersection	2009	\$900,000
11	S 3rd Ave & Washington Ave Signal	Intersection	2009	\$295,000
12	S 1st St Corridor: Nob Hill Blvd to Union Gap	1.5 Miles	2015	\$2,755,000
13	W Nob Hill Blvd Corridor: 52nd to 72nd Ave	1.3 Miles	2008	\$3,555,000
Total Estimate				\$38,078,000
SYSTEM IMPROVEMENT PROJECTS		Length	BEGIN	COST ESTIMATE
1	Frontage Road, Terrace Hgt Connector, Path	2.5 Miles	2007	\$2,427,000
2	48th Ave Corridor: Summitview to Washington	1.6 Miles	2012	\$2,050,000
3	Englewood Ave Corridor: 16th Ave to 66th Ave	3.2 Miles	2014	\$5,550,000
4	Englewood Ave & Powerhouse Rd Intersection	Intersection	2012	\$822,000
5	66th Ave Corridor: Scenic to Summitview Ave	.75 Miles	2015	\$1,120,000
6	Mead Ave: Rudkin Rd to Fair Ave	.75 Miles	2015	\$1,212,000
7	80th Ave: Tieton Dr to Zier Rd	1.3 Miles	2011	\$2,000,000
8	Zier Rd: 72nd to 80th Ave	.50 Miles	2015	\$950,000
9	Lincoln Ave/B St Couplet Re-alignment	Intersection	2012	\$3,002,000
10	5th Ave & Tieton Dr	Intersection	2011	\$400,000
11	Rudkin Rd: Viola to Rainier Pl (UG)	1.0 Miles	2015	\$1,193,000
Total Estimate				\$20,726,000
MULTI-MODAL: SIDEWALKS, TRANSIT & PATHS		Length	BEGIN	COST ESTIMATE
1	W.O. Douglas Trail	75 Miles	2007	\$4,870,000
2	W Lincoln Ave Sidewalk (29th to 56th Ave)	1.8 Miles	2010	\$644,000
3	Yakima Ave/ Front St Pedestrian Project	2.5 Miles	2006	\$4,870,000
4	Beech St Ped Connector	.50 Miles	2009	\$875,000
5	Transit Operations	Operations	Yrly	\$2,988,000
Total				\$14,247,000
ANNUAL PROJECTS AND OPERATIONS		Length	BEGIN	COST ESTIMATE
1	Arterial Maintenance	5 Miles	Yrly	\$625,000
2	Unclassified Street Maintenance	20 Miles	Yrly	\$250,000
3	School Safety Projects	Spot	Yrly	\$100,000
4	Signal Upgrades	Intersection	Yrly	\$200,000
5	Paved Shoulders	.5 Miles	Yrly	\$100,000
6	Bridge Maintenance	Spot	Yrly	\$200,000
7	Sidewalk & ADA Ramp Repair	Spot	Yrly	\$70,000
Total				\$1,545,000

CURRENT FUNDING OPTIONS UTILIZED BY CITY

Annual revenue sources utilized for transportation programs and projects include property tax, gas tax, local real estate excise tax (REET) 1 and (REET) 2, a projection of direct allocation of Surface Transportation Program (STP) revenues, and National Highway System (NHS) funds. Table 10-2 summarizes fund revenues for 2006 with a projection of total fund potential over the 20-year term of the Transportation Plan.

Table 10-2
Existing and Projected Fund Revenue Potential 2006-2026

2006	Revenue	Potential 20-Year Estimate (2007-2026)
Property Tax	\$3,441,000	\$68,820,000
Gas Tax	\$1,684,000	\$33,680,000
REET1 \$750,000		\$15,000,000
REET2 \$750,000		\$15,000,000
STP \$2,406,239		\$48,124,780
NHS \$702,000		\$14,040,000
Other \$250,000		\$5,000,000
Total \$9,	983,239	\$199,664,780
<i>(Transit Operations)</i>	<i>\$2,988,000</i>	<i>\$69,760,000</i>

Expenditures the City of Yakima has dedicated revenues for debt service on project debt. Payoff dates noted in Table 10-3 below range from 2006 to 2015. The table details annual debt service payments. The payoff year is noted for each project in parenthesis. In addition, in 2006, \$508,000 of National Highway System funds are pledged to Union Gap's Valley Mall Project and \$2,006,000 Surface Transportation Program funds are currently pledged toward to projects on Nob Hill Blvd, Washington Avenue and signaling 72nd Avenue and Mead. The Railroad Grade Separation Project funding detailed in the 2006 Budget states that 86.5% of the project is funded by a Federal Grant with matching grant funds coming from TIB and Freight Mobility Funds. \$8.6 Million dollars is also pledged to the Railroad Grade Separation from the City's Cumulative Reserve for Capital Improvements Fund 392 (City of Yakima Preliminary Budget 2006, Section E, page 75).

**Table 10-3
Annual Debt Service Payments**

Description	Annual Amount
Fruitvale Phase 2 (2011)	\$16,875
1994 I-82 Bond (2013)	\$46,667
1998 Street Bond (2008)	\$122,000
Public Works Trust Fund Loan Yakima Ave (2011)	\$20,000
Tieton Drive/5th Avenue (2006)	\$37,472
North First Street (2011)	\$53,469
Fair Avenue (2015)	\$59,109
Public Works Trust Fund Loan Yakima Avenue (2011)	\$133,128
SEID Loan County - Yakima Avenue (2011)	\$5,476
Nob Hill Over Pass (2007)	\$10,637
Fruitvale Canal and Lighting (2009)	\$51,592
Fruitvale Canal (2011)	\$73,409
1998 Street Bond (2008)	\$60,000
Sun Dome County Bond (2007-2009)	\$40,000
TOTAL	\$729,834

OPTIONS AVAILABLE FOR FINANCING

It is readily apparent that future system funding will require additional revenue in order to address system needs. Possible funding sources and estimated annual revenues that are available to the City of Yakima are outlined below. No specific funding options have been selected for consideration at this time.

Private Utility Tax less than or equal to 6.0% - An ordinance by the City Council could remove the existing \$4,000 maximum assessment per customer for each month. An assessment of up to six percent with no maximums would impact primarily large manufacturing businesses and has the potential to generate an additional \$550,000 annually.

Private Utility Tax greater than 6% - An increase in utility taxes above six percent would require an approved ballot major by a simple majority of voters. Each one percent increase beyond six percent could generate an estimated \$900,000 annually.

Local Business and Occupation Tax – New revenue source? Assuming 0.2 percent? Used by other communities in eastern Washington? This potential revenue source requires an ordinance by the City Council and is subject to referendum. Estimated annual revenue is \$2.7 million annually. (\$1,350,000 per 0.1%).

Voter Approved Street Bond – Voters may approve a property tax levy to pay for bonds issues to fund capital projects. Any proposed voter approved bond levy requires 60 percent voter approval.

Non-voted Debt - The City Council may approve an ordinance to allow debt on a project for up to 1.5% of the assessed value. A dedicated revenue source must be identified and obligated to pay the debt service.

Development Contributions - Developers may be required through the State Environmental Policy Act to mitigate transportation impacts through cash contributions toward specified improvements. Contributions are calculated on a pro rata share, relative to the proportion of traffic the new development creates to the over-all traffic. This revenue source is currently being used by the city. The potential revenue stream varies depending on the extent of economic development that is occurring within the city during a given year.

Transportation Benefit Districts - Transportation Benefit Districts (TBDs) are governed by the legislative authority of the jurisdiction proposing to create a TBD. When multiple jurisdictions are involved in establishing a TBD the structure is controlled by interlocal agreement. TBDs have independent taxing authority to implement the following revenue measures: 1) excess property taxes; 2) general obligation bonds; 3) transportation impact fees; and 4) border area motor vehicle fuel taxes. In addition, TBDs may form local improvement districts with authority to impose special assessments on property benefited by the improvement and to issue special assessment bonds. TBDs may implement the following revenue sources by a revenue measure approved by the local voters: 1) local option sales and use taxes; 2) local option vehicle license fees; and 3) vehicle tolls. TBDs may fund projects that are of a statewide or regional significance contained in a state or regional transportation plan. A TBD may spend up to 40% of its generated revenue on local street road and highway improvements. Revenue projection unknown.

Motor Fuel Tax – Local County Option – This revenue source requires approval by Yakima County Commissioners and simple majority of the registered voters. No revenue estimates.

Impact Fees – State law allow the City to collect fees from owners or developers, as development occurs to fund transportation capital projects. The fee amount is determined by estimating the appropriate private sector cost of the capital facilities that are required to meet expected demand and achieve the established service level standard. The appropriate private sector cost is allocated to new development based in its estimated impact on demand. These impact fees must be expended on projects within six years from the date they were collected and must be matched by the appropriate amount of public funding. For example, it is typical to have a combination of impact fees, State grants and other City contribution used to fund City transportation capital projects.

Federal and State Grants - The City is very active in applying for grants from various federal and state agencies to fund capital facilities. These grants are typically available for a specific purpose. The City has had success in obtaining

grants for transportation and trails. Both state and federal grants typically require the commitment of local funding as a match to the grant. In addition to grants from state or federal agencies, the City may allocate a portion of its Community Development Block Grant funding to selected capital projects.

Other Agencies - The City actively seeks out partnerships with state, county and local agencies to help fund capital facilities. These partnerships have been used in projects such as Fruitvale Boulevard/SR 24/40th Avenue improvements.

Restricted Donations - Individual residents, local businesses and other organizations may also provide funding for specific capital projects.

Property Tax Levy - Requires a simple majority election and must be used for stated purpose. Each \$0.10/thousand raises \$400,000 annually. Rate cannot exceed Statutory Maximum Levy currently \$3.60/thousand.

Chapter 11

Plan Implementation and Updating


Chapter 11: Plan Implementation and Updating

The Yakima Urban Area Transportation Plan Update, 2006 - 2025 provides an over-view of a variety of policies and actions that require implementation. Greater detail of the plans and programs will be developed as City ordinances, budget policies and other programs are amended to implement the intent of this Transportation Plan.

IMPLEMENTATION GOALS AND POLICIES -

Goal (T- 11.1): Provide for broad public participation in the development and implementation of the tasks identified in the Transportation Plan Update.

Policies:

1. Conduct information meetings and workshops to receive comments and educate the public on the implementation measures of the Transportation Plan. Involve the Regional Planning Commission in Urban Area coordination.
- 
2. Coordinate with Yakima County, Washington State Department of Transportation, the City of Union Gap and other communities within the Yakima Valley in achieving the goals programs of the Transportation Plan Update and broad regional goals.
 3. Consider future amendments to the Transportation Plan as additional regions are added to the Urban Area or as necessary as policy or directions are modified

Goal (T-11.2): Promote internal consistency through the updating and amending of development regulations, funding programs and policy documents to implement the recommendations of the Transportation Plan.

Policies:

1. Update street standards for the Yakima Urban Area to reflect the policies and projects recommended in the Transportation Plan.

2. Update the Transportation Concurrency Program to include project level coordination with SEPA mitigation and other off-site improvements, as identified in the 6-Year Transportation Improvement Program.
3. Require developers to repair/reconstruct street frontage improvements such as sidewalks that are in poor or failed condition as a condition of their approval.
4. Develop a cost-sharing program for property owners and City to systematically repair/replace hazardous sidewalk sections.
5. Include multi-modal transportation facilities such as sidewalks/paths in future capacity and system projects.
6. Require development to review their frontages to establish that obstacles do not exist for multi-modal or individuals covered under the Americans with Disabilities Act.

RELATIONSHIP OF THE TRANSPORTATION PLAN TO OTHER POLICIES

Implementing the Yakima Urban Area Transportation Plan begins with the establishment of its legal standing through adoption. The Transportation Plan is adopted by City Council as an element of the Yakima Urban Area Comprehensive Plan. The Plan is considered a detailed component of the Comprehensive Plan; and, therefore, has the same legal standing, as the Comprehensive Plan. The goals, objectives, policies, maps and projects contained in both the Comprehensive Plan and Transportation Plan are legally adopted and binding.

When new studies, neighborhood plans, or private development plans make recommendations that would significantly change or improve upon the Yakima Urban Area Transportation Plan, the Plan can be amended to reflect those changes. Amendments to the Plan require a public hearing and ultimately a vote of approval by City Council.

POLICY FOUNDATION FOR DECISION-MAKING

The Transportation Plan provides the policy foundation for City decision-makers, staff, advisory bodies, and citizens. The goals, objectives, and policies of the Plan are to be considered in all decision-making processes that impact the transportation system. Specifically, the Plan is intended to guide decisions involving the following actions.

LAND USE ACTIONS AND DEVELOPMENT REVIEW

In accordance with requirements contained in the Yakima Municipal Code, the adopted goals, objectives, policies, projects and maps of the Plan will be considered and applied in the review and approval of land use actions and development applications.

CAPITAL INVESTMENTS

The project and program recommendations contained within the Plan form the basis from which projects are placed in the Six-Year Transportation Improvement Program (TIP), The Metropolitan Transportation Improvement Program (MTIP), The State of Washington TIP, and annual City Capital program and budget.

FUNDING PRIORITIES

The projects and programs recommended in the Plan are prioritized based on need and general timeframe. These priorities should be considered when preparing funding scenarios and measures. It is understood that priorities may change over time, and other factors need to be considered when preparing funding and construction priorities.

TRANSPORTATION PROGRAMS

This Plan identifies measures and programs to be undertaken to increase mobility for all travel modes. Development of the programs and initiatives must be consistent with the policies and recommendations of this Plan.

RELATIONSHIP TO YAKIMA URBAN AREA COMPREHENSIVE PLAN

The Transportation Plan represents the "Transportation Element" of the Comprehensive Plan, as required by RCW 36.70A.120, the Washington State Growth Management Act. The policies, objectives, programs and projects identified in the Transportation Plan are to be incorporated directly or by reference in the Comprehensive Plan in supporting accommodation of future growth and development of the City as directed by the Comprehensive Plan.

RELATIONSHIP TO 20 - YEAR CAPITAL FACILITIES PLAN (20-YEAR CFP)

The Transportation Plan project recommendations comprise a core foundation of the 20-year Capital Facilities Plan (CFP). The City's 20-year CFP is the listing of capital improvements that are needed to be constructed to support the build-out of the community according to the Comprehensive Plan.

RELATIONSHIP TO 6-YEAR TRANSPORTATION IMPROVEMENT PROGRAM (6-YEAR TIP)

The City's 6-year TIP is a program implementation plan for the City's new capital projects and yearly programs. The major transportation-related projects contained in future TIPs will be derived, in part, from the projects and needs identified in the Plan. All transportation projects contained in the TIP, whether major or minor, must be consistent with the goals, objectives, policies, and needs identified in the Plan.

RELATIONSHIP WITH REGIONAL TRANSPORTATION PLAN

The Metropolitan Transportation Plan, maintained by the Yakima Valley Conference of Government (YVCOG) is Yakima County's regional blueprint for transportation improvements and initiatives. Yakima, as the largest city within the region participates in the annual process of coordinating review and maintains a variety of projects, policies and initiatives within the Metropolitan Plan that support an integrated transportation system.

IMPLEMENTATION MEASURES

Several major tasks must be completed following adoption of the Transportation Plan in order to carry out the goals, policies and actions identified in the document. This is a summary of the major policy or ordinance implementation changes as outlined in the chapters of the Transportation Plan..

Street Development Standard Modifications: The Transportation Plan recommends revisions to the existing street standards contained in YMC 12.06. The Municipal Code will require modification through a public process cumulating with adoption by the City Council. The new street standards will provide direction to the City Engineer's Division for capital project design. Coordination with Yakima County is underway for the development of common street standards within the Yakima Urban Area. Revisions to the YMC should be completed by December 2007.

Functional Classification Map Revisions: The City of Yakima will work with the Yakima Valley Conference of Governments to implement changes to the Functional Classification Map as part of the Regional Transportation Organization, the Washington Department of Transportation policy and Federal Highway Administration process. The revisions should be also be adopted by Council's approval of a revised YMC 12.06, Street Types and Functional Classification. The City should begin to file the necessary documentation in early 2007.

Future Lane Map: Based upon the information provided in Chapter 5, Arterial and Collector Streets and the implementation of revised street standards, City staff will finalize and post a Future Lane Map that reflects the recommendations of the Transportation Plan. This map will be used by the Engineering Division for determining future project designs. The Planning Division will also be able to access this map to provide information to developers regarding roadway sections and required improvements for frontages. The map will also be posted on the City of Yakima's web site so that individuals may assess future road improvement impacts on existing properties. The Map will be available in early 2007.

Priority Listing of Street Capacity Projects: This list is contained within the Transportation Plan and should be incorporated into the City's Six Year Transportation Improvement Program. Priority should be given to funding these projects in order to provide for continued economic stability and growth of the community. The list should be complete at the time of the adoption of this plan in 2006.

Transportation Concurrency Ordinance Amendments: The existing Concurrency Ordinance and procedure will require modification if any revisions are made to the existing definitions, assumptions, equations, or procedures. Revisions may include collection of Impact Fees, revision of number of vehicles per lane in the capacity formula, and inclusion of intersection analysis. Development of a new concurrency program would be completed by the end of 2007.

Access Management Policies/Ordinances: Recommendations of the Transportation Plan may include investigation, presentation and adoption of access management strategies in the form of policies or ordinances. The transportation committee of the city council would preside over development and presentation of access management strategies with staff and members of the community. Final approval and adoption by the full Council would be in late 2008.

Street System Preservation Plan: The 2006 Budget and the Transportation Plan begin the process of identifying system needs and funding alternatives for the program. Ultimately, the breadth of this program will be a council policy issue. Staff will continue to prepare materials to educate the public of the infrastructure maintenance needs and provide alternative funding options for council and public consideration. This will be an ongoing program that is already underway.

Neighborhood Traffic Program: An annual budget and programmatic approach to address neighborhood concerns about speeding and cut-through traffic needs review and policy direction by City Council. Estimated date of completion is 2008.

Zoning Ordinance Amendments: There may be zoning ordinance amendments necessary to maintain compatibility between standards dealing with streets, access, neighborhoods, clear views, sidewalks, etc. Traffic Engineering will review current YMC and Zoning Language and recommend revisions as needed. This work should be complete in early 2008, with completion of the access management review and implementation.

Capital Facilities Plan Update: The Transportation Plan Update and Capital Facilities Plan Update have been developed concurrently. Final recommendations included in the adoption of the Transportation Plan will be reflected in the Capital Facilities Plan. Staff recommends that the City consider an annual program of review and update of the transportation plan, six-year transportation plan, capital facilities plan and budget. This will ensure that the documents remain consistent.

Corridor Plans: The Transportation Plan indicates that corridor plans will be developed for 40th Avenue, 16th Avenue, Nob Hill Boulevard and a portion of South First Street. These plans will provide the footprint for future capital projects to address capacity and safety improvements. Staff recommends that serious consideration be given to hiring consultants to work with the community to arrive at a plan for each corridor that not only addresses the transportation issues but develops a "sense of place" for each of these corridors. In this way improvements that are both functional and aesthetically pleasing may be developed.

Speed Limits: A comprehensive study and public review of speed limits on urban arterial streets will be presented for consideration. Project will begin in late 2007.

IMPLEMENTATION SUMMARY

This portion of the Transportation Plan consolidates the implementation tasks described in detail in each chapter of the Plan.

IMPLEMENTATION TASKS – Chapter 2, Local Streets

To implement the local streets element of the Transportation Plan, the city should implement the following measures:

- Provide a dedicated funding source for local street maintenance.
- Consider the adoption of a traffic calming program to evaluate, prioritize, and fund the construction of improvement measures that reduce traffic speeds and cut-through traffic in neighborhoods.
- Modify the Yakima Municipal Code to require the construction of half-street frontage improvements (including sidewalks, curb, and gutter) as part of all site development/redevelopment activities in the city. Provisions should be included in the Code to address situations where sidewalk construction is infeasible due to topographic, wetland or other constraints.
- Modify the Yakima Municipal Code to adopt new street design standards that preserve neighborhood safety and livability. Recommended standards are provided in Chapter 5.
- Modify the Yakima Municipal Code to encourage shorter block lengths and increased local street circulation to preserve neighborhood livability.
- Create a program (including a designated funding source) for the ongoing maintenance of alleyways.
- Investigate alternative treatments (such as County Lanes, pervious concrete, Gravelpave2) to address the system of unpaved alleyways within the city.

IMPLEMENTATION TASKS – Chapter 3, Pedestrians and the Walking Environment

To implement the pedestrian element of the Transportation Plan, the city should implement the following measures:

- Provide a dedicated funding source for sidewalk and pathway construction and maintenance.

- Modify the Yakima Municipal Code to require the construction of sidewalks along property frontages as part of all site development/redevelopment activities in the city. Provisions should be included in the Code to address situations where sidewalk construction is infeasible due to topographic, wetland or other constraints.
- Continue collaboration with the School District on the “Walk to School” program to prioritize and implement needed sidewalk, curb-ramp and other pedestrian-related improvements, especially in the vicinity of elementary schools.
- Pursue state and federal grants to construct/upgrade ADA-compliant curb ramps at key intersections throughout the city. Provide a guaranteed local match for these improvements.

IMPLEMENTATION TASKS – Chapter 4, Bicycles and other Wheeled Access

To implement the bicycle element of the Transportation Plan, the city should implement the following measures:

- Provide a dedicated funding source for the construction of bicycle lanes and trails at prioritized locations throughout the city.
- Modify the Yakima Municipal Code to adopt new street design standards that reflect the needs of different types of cyclists (e.g., recreational, commuter, children, etc.). Recommended standards are provided in Chapter 5.
- Modify the Yakima Municipal Code to require the installation of bicycle racks and other supportive facilities as part of new commercial development.
- Provide a dedicated funding source to install bicycle racks on all Yakima Transit buses.

IMPLEMENTATION TASKS – Chapter 5, Arterial and Collector Street System

To implement the arterial and collector streets element of the Transportation Plan, the city should implement the following measures:

- Provide a dedicated funding source for street maintenance and preservation.

- Modify the Yakima Municipal Code to require the construction of half-street frontage improvements (including sidewalks, curb, gutter and street lighting) as part of all site development/redevelopment activities in the city. Provisions should be included in the Code to address situations where sidewalk construction is infeasible due to topographic, wetland or other constraints.
- Modify the Yakima Municipal Code to adopt new street design standards that reflect multimodal user needs, neighborhood livability issues and promote a more efficient and environmentally-responsive transportation system.
- Modify the existing functional classification system to add a neighborhood collector classification.
- Amend the existing functional classification of the following streets:
 - Summitview Ave (west of 56th Ave), Fruitvale Blvd, and Washington Ave as Principal Arterials;
 - Nob Hill Blvd (west of 72nd Ave) and Lincoln Ave (east of N 8th Ave) as Minor Arterials;
 - 32nd Ave, Zier Rd (west of 72nd Ave), N 56th Ave (north of Tieton), Castlevale Rd (east of 34th Ave), E G St, and Pacific Ave as Collector-Arterials;
 - Scenic Dr, Englewood Ave (west of 40th Ave), Castlevale Rd (west of 34th Ave), 32nd Ave, and N 6th St, Mead Ave (24th to 32nd Ave), and S 56th Ave (south of Tieton Dr) as Neighborhood Collectors;
 - S 10th Ave, N 25th Ave, and N 48th Ave (north of Englewood,) as local streets.
- Update the Yakima Transportation Concurrency Program to include a revised definition of street capacity.
- Develop and implement project-level traffic impact study guidelines. These guidelines will include operational standards for arterial and collector intersections.
- Modify the Yakima Municipal Code to include an arterial access management policy to improve safety and capacity along arterial streets.
- Develop corridor plans for North 40th Avenue and Nob Hill Boulevard, at a minimum, to address future capacity, community

and aesthetic needs. Prioritize funding for the implementation of action items identified in the corridor plans.

- Prioritize the identified arterial and collector street improvements into near, mid and long-term improvements. Annually review the anticipated costs associated with each improvement project.
- Incorporate near-term arterial and collector street improvement needs into the city's six-year Transportation Improvement Program.
- Modify the Yakima Municipal Code to allow for the funding of planned capacity and safety improvements through public-private partnerships (e.g., proportionate share contributions, fee-in-lieu of construction)
- Evaluate the feasibility of adopting a Transportation Impact Fee or other forms of public-private partnerships to help fund future capacity improvements.
- Amend speed limit ordinance for various arterial streets.
- Develop neighborhood plans for the Terrace Heights and West Valley areas. Incorporate these neighborhood plans into the city's Transportation Plan.

IMPLEMENTATION TASKS – Chapter 6, Signalized and Other Major Intersections

To implement the major street intersections element of the Transportation Plan, the city should implement the following measures:

- Provide a dedicated funding source for the construction, maintenance and upgrading of intersection control devices, such as traffic signals and roundabouts.
- Establish a monitoring program for traffic operations and safety to identify the need and timing for intersection improvements. Investigate a number of capacity and safety-based strategies for these improvements.
- Implement strategies that increase the comfort and safety of pedestrians and bicyclists at arterial intersections.
- Adopt traffic impact study guidelines as part of project-level requirements related to SEPA. These guidelines should include a

definition of acceptable level of service for signalized and unsignalized intersections.

- Modify the Yakima Municipal Code to include an arterial access management policy to improve safety and capacity within the influence areas of intersections.
- Work with Yakima Transit to appropriately site bus stops at busy arterial intersections. Investigate the effectiveness of near-side and far-side bus stop placement.

IMPLEMENTATION TASKS – Chapter 7, Freight and Economic Development

Actions should be taken to improve safety and traffic flow of freight in the Yakima Urban Area. Identification of high priority freight routes with freeway access for trucks should be considered for some or all of these improvements.

- Pavement depth of adequate strength to support heavy truck traffic;
- Truck turning radius improvements at intersections of Principal Arterial streets;
- Identify and sign Truck Routes to plan for appropriate infrastructure needs;
- Provision of sidewalks along all truck routes to remove pedestrians from travel path.

IMPLEMENTATION TASKS – Chapter 8, Public Transit

Yakima Transit has several planned projects for near-term and mid-term operations:

- Replace six older coaches with new low floor units. All will be ADA compliant.
- Expand the Yakima Transit operating hours to start earlier in the day, add to the evening routes and provide additional bus service on Saturday and Sunday.
- Secure permanent funding for bus service to the Se lah and Union Gap operations.
- Build a new Westside transfer location in the annexed areas around 72nd Avenue.

- Link the n earby communities in th e Urban Growth Area together with Transit Service (includes Terrace Heights, Moxee, Yakima Training Center, Glead, Tieton, Cowicheand Naches).
- Offer regio nal tran sit service connection s to Kittitas County (Ellensburg/CWU Campus).
- Continue to incorporate/maintain/improve ADA requirements within our transit system.

IMPLEMENTATION TASKS – Chapter 9, State and Regional System

To implement the state and regional system element of the Transportation Plan, the city should implement the following measures:

- Continue coordination efforts with the City of Union Gap, Yakima County, the Washington State Department of Transportation and other neighboring jurisdictions to fund, prioritize and implement projects that provide regional transportation and economic benefits.
- Continue coordination with WSDOT and other neighboring jurisdictions regarding concurrency requirements and project-level impacts.

IMPLEMENTATION TASKS – Chapter 10, Finance

To implement the finance element of the Transportation Plan, the city should implement the following measures:

- Identify and evaluate a variety of funding solutions to address future capacity constraints, preserve system integrity, address safety concerns and promote responsible economic development.
- Prioritize transportation related funding based on the priorities and programs identified in the Transportation Plan.

Yakima Urban Area Transportation
Plan Update 2025
TECHNICAL APPENDIX I:
Transportation Plan Improvement
Project Detail

Transportation Plan Improvement Projects, 2007-2025

FUNDED PROJECTS - CONSTRUCT BY 2008

		Length	BEGIN	COST ESTIMATE
1	SR-12& N 40th Ave Interchange	Intersection	2006	\$2,820,000
2	Nob Hill Blvd & S 6th St Signal	Intersection	2006	\$537,000
3	N 16th Ave & River Rd Signal	Intersection	2006	\$344,000
4	RR Grade Separation of B St, Lincoln	Intersection	2007	\$31,000,000
5	River Rd: 16th Ave to Fruitvale Blvd	1.2 Miles	2007	\$2,020,000

Total Estimate

\$36,721,000

CAPACITY CONSTRAINED PROJECTS

		Length	BEGIN	COST ESTIMATE
1	Nob Hill Blvd Corridor: 16th Ave to 18th St	2.5 Miles	2008	\$7,000,000
2	Nob Hill Blvd & 18th St Signal	Intersection	2008	\$750,000
3	Nob Hill Blvd & Fair Ave Signal	Intersection	2008	\$1,200,000
4	16th Ave & Washington Signal	Intersection	2008	\$455,000
5	W Nob Hill Blvd Corridor: 52nd to 72nd Ave	1.3 Miles	2008	\$3,555,000
6	40th Ave & Summitview Signal	Intersection	2009	\$450,000
7	1st St & Washington Signal	Intersection	2009	\$900,000
8	S 3rd Ave & Washington Ave Signal	Intersection	2009	\$295,000
9	40th Ave Corridor: Fruitvale to Washington	3.3 Miles	2010	\$9,000,000
10	40th Ave & Englewood Signal	Intersection	2010	\$273,000
11	16th Ave & Fruitvale Signal	Intersection	2012	\$445,000
12	16th Ave Corridor: US-12 to Washington	3.6 Miles	2013	\$11,000,000
13	S 1st St Corridor: Nob Hill Blvd to Union Gap	1.5 Miles	2015	\$2,755,000

Total Estimate

\$38,078,000

SYSTEM IMPROVEMENT PROJECTS

		Length	BEGIN	COST ESTIMATE
1	Frontage Road, Terrace Hgt Connector, Path	2.5 Miles	2007	\$2,427,000
2	80th Ave: Tieton Dr to Zier Rd	1.3 Miles	2011	\$2,000,000
3	5th Ave & Tieton Dr	Intersection	2011	\$400,000
4	48th Ave Corridor: Summitview to Washington	1.6 Miles	2012	\$2,050,000
5	Englewood Ave & Powerhouse Rd Intersection	Intersection	2012	\$822,000
6	Lincoln Ave/B St Couplet Re-alignment	Intersection	2012	\$3,002,000
7	Englewood Ave Corridor: 16th Ave to 66th Ave	3.2 Miles	2014	\$5,550,000
8	66th Ave Corridor: Scenic to Summitview Ave	.75 Miles	2015	\$1,120,000
9	Mead Ave: Rudkin Rd to Fair Ave	.75 Miles	2015	\$1,212,000
10	Zier Rd: 72nd to 80th Ave	.50 Miles	2015	\$950,000
11	Rudkin Rd: Viola to Rainier PI (UG)	1.0 Miles	2015	\$1,193,000

Total Estimate

\$20,726,000

MULTI-MODAL: SIDEWALKS, TRANSIT & PATHS

		Length	BEGIN	COST ESTIMATE
1	Yakima Ave/ Front St Pedestrian Project	2.5 Miles	2006	\$4,870,000
2	W.O. Douglas Trail	75 Miles	2007	\$4,870,000
3	Beech St Ped Connector	.50 Miles	2009	\$875,000
4	W Lincoln Ave Sidewalk (29th to 56th Ave)	1.8 Miles	2010	\$644,000
5	Transit Operations	Operations	Yrly	\$2,988,000

Total

\$14,247,000

ANNUAL PROJECTS AND OPERATIONS

		Length	BEGIN	COST ESTIMATE
1	Arterial Maintenance	5 Miles	Yrly	\$625,000
2	Unclassified Street Maintenance	20 Miles	Yrly	\$250,000
3	School Safety Projects	Spot	Yrly	\$100,000
4	Signal Upgrades	Intersection	Yrly	\$200,000
5	Paved Shoulders	.5 Miles	Yrly	\$100,000
6	Bridge Maintenance	Spot	Yrly	\$200,000
7	Sidewalk & ADA Ramp Repair	Spot	Yrly	\$70,000

Total

\$1,545,000

FUNDED PROJECTS – UNDER CONSTRUCTION BY 2008

Project: SR 12 & N 40th Ave Intersection

Project Number:

Project Summary: The proposed project includes adding a new lane to the Northbound On-Ramp of US 12 from N 40th Avenue, adding a left turn lane to the southbound Off-ramp of US 12 to Fruitvale Blvd, adding missing sidewalk/pathway links and modifications to the southeast quadrant of the intersection to separate the right turn lane and through lane. The intent of the project is to reduce congestion, improve the efficiency and improve pedestrian, bicycle and transit access. The capacity improvements provided at this interchange will help reduce peak hour congestion, as well as construction impacts from routing detours of other nearby planned projects, such as the Suntides/US 12 interchange project, located 2 miles west.

Justification: Drivers in this interchange experience significant peak hour delay due to the restricted configuration which creates a bottleneck. When the On-ramp to US 12 is improved to a 2-lane section, and a left turn lane is added from the Off-ramp, the City of Yakima North 40th Avenue can be modified to convert a RIGHT TURN ONLY lane to a through lane. Capacity of the street will significantly improve with this action, improving the Volume-to-Capacity Ratio from 0.87 (LOS D) to 0.65 (LOS B).

Capacity improvements will allow for protected left turn lanes and an 8-phase signal operation.

Status: Preliminary engineering and design is being conducted by WSDOT and will be complete in 2006, with construction in 2007.

Links to Other Projects: Related projects include the following:

- Yakima Water Division - facility adjustments, relocation and /or replacements. No irrigation impact.
- Yakima Wastewater
- Private Franchised Utilities, including possible power pole relocation
- 40th Ave Corridor Capacity Improvement Project
- Greenway Path Linkage Project
- US 12 Interchange Project at Suntides Intersection (WSDOT)

Project Description: Improvements include additional outbound through and left turn lanes, sidewalk connectors, and stormwater improvements..

- Bicycle Facilities: Shared 14-foot curb lanes to accommodate bicycling, consistent with Bike Plan Map.

- Signal Improvements: This project will necessitate moving the controller cabinet, and relocation/replacement of two of the mast arm signal poles. Pedestrian actuation and displays will be enhanced.
- Illumination: Install standard levels at the intersection consistent with development standards.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Walk to School Route: Not part of walk to school route
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and ADA access ramps.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$400,000						
ROW		\$400,000						
Construction		\$2,020,000						
TOTAL EXPENSES		\$2,820,000						
SOURCES OF FUNDS								
Development Mitigation		\$33,000						
Surface Transportation Funds (Urban)		\$0						
State Funds - Other		\$2,500,000						
Arterial Improvement Project Funds		\$0						
Local Funds		\$320,000						
TOTAL FUNDS		\$2,820,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes -

Safety Project: Yes. Intersection safety improvement project with bicycle and pedestrian component, as well as vehicular safety

Preservation: NA.

Economic Development: Yes. North 40th Avenue is a Principal Arterial that provides access to the Yakima Regional Airport, residential, industrial and retail areas.

Project: Nob Hill Blvd & 6th St Signalized Intersection

Project Number:

Project Summary: This project includes installation of a traffic signal and associated street improvements at the intersection of Nob Hill Boulevard and South 6th Street. The traffic signal will be interconnected to the signal operation at the intersection of South 1st Street and Nob Hill Boulevard.

Justification: Intersection meets warrants for traffic signal based on broadside type collisions and volume. The severity of injuries at this unsignalized intersection is high with multiple injuries. Traffic volumes in 2005 entering this intersection were 20,750 average daily vehicles. A total of 41 vehicle collisions were reported between 1998 and 2004 at this intersection, with a high percentage of broadside and approach turn accidents.

Status: Final signal design and construction to be complete in 2006

Links to Other Projects: Related projects include the following:

- Yakima Water Division - facility adjustments, relocation and /or replacements.
- Irrigation replacement of wood main on 6th Street will likely be necessary.
- Yakima Wastewater
- Private Franchised Utilities, including power pole relocation
- Nob Hill Boulevard improvement project, including sidewalks needed

Project Description: Installation of traffic signal and related improvements including left turn lanes, sidewalks, curbs, gutter, and street lighting. Signal will use video detection and pedestrian actuation. Special population service groups have requested audible signals. Protected left turn phasing is planned.

- Illumination: Install standard levels at the intersection consistent with development standards.
- Audible and Accessible Traffic Signal planned
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Walk to School Route: Not part of walk to school route, but significant pedestrian use
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and ADA access ramps.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$0						
ROW		\$75,000						
Construction		\$462,000						
TOTAL EXPENSES		\$537,000						
SOURCES OF FUNDS								
Development Mitigation		\$0						
Surface Transportation Funds (Urban)		\$0						
State Funds - Other		\$465,000						
Arterial Improvement Project Funds		\$0						
Local Funds		\$72,000						
TOTAL FUNDS		\$537,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Preservation: No

Economic Development: No

Safety Project: Yes. Intersection meets warrants for collisions and volumes

Project: 16th Ave & River Road Signalized Intersection

Project Number:

Project Summary: This project includes installation of a traffic signal and associated street improvements at the intersection of North 16th Avenue and River Road.

Justification: Intersection meets warrants for traffic signal based on broadside type collisions and volume. The severity of injuries at this unsignalized intersection is high with multiple injuries. Traffic volumes entering this intersection in 2005 were 19,900 average daily vehicles. A total of 74 vehicle collisions were reported at this intersection between 1998 and 2004, with approach turn collisions consisting of 25% of the accidents. The severity of injuries has been also been significant.

Status: Final signal design to be complete in 2006, with construction in 2006

Links to Other Projects: Related projects include the following:

- Yakima Water Division City to replace existing 20" valves.
- No city irrigation impacts, but private irrigation companies impacted.
- Yakima Wastewater
- Private Franchised Utilities, including power pole relocation
- River Road Improvement project, North 16th Avenue to Fruitvale Blvd

Description: Installation of traffic signal and related improvements including left turn lanes, sidewalks, curbs, gutter, and street lighting. Signal will use vehicle detection and pedestrian actuation. Protected left turn phasing is planned.

- Bicycle Facilities: Shared 14-foot curb lanes to accommodate bicycling, consistent with Bike Plan Map.
- Illumination: Install standard levels at the intersection consistent with development standards.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Walk to School Route: Not part of walk to school route
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and ADA access ramps.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$30,000						
ROW		\$46,000						
Construction		\$268,000						
TOTAL EXPENSES		\$344,000						
SOURCES OF FUNDS								
Development Mitigation		\$75,000						
Surface Transportation Funds (Urban)		\$299,000						
Arterial Improvement Project Funds		\$0						
Local Funds		\$45,000						
TOTAL FUNDS		\$344,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No.

Safety Project: Yes. Intersection safety improvement project.

Preservation: 2005 Pavement Condition Index of 39.

Economic Development: Yes. River Road is a significant industrial corridor that has access to SR 12 at both the North 16th Avenue and North 40th Avenue interchanges.

Project: River Road Corridor- 16th Avenue to Fruitvale Blvd

Project Number:

Project Summary: This project includes widening of River Road from the existing two-lane facility to three-lane Minor Arterial standard. The entire road improvement will include 14-foot wide through-lanes for shared use with bicycles, sidewalks and 11-foot center left turn-lane, as well as street-light and storm-water drainage improvements. An average of 3,100 vehicles traveled on River Road in 2005. Truck traffic is estimated at 8% of the total volume.

Justification: Safety and System deficiencies of River Road exist due to the deteriorated condition of the pavement surface, lack of shoulders, sidewalks and street lighting. River Road is a significant industrial corridor, with high density residential located on the north side. The project is 1.2 miles in length.

Status: Final Engineering Plans will be complete in 2006, with construction scheduled in 2007

Links to Other Projects: Related projects include the following:

- Yakima Water Division – facility adjustments, relocations and replacements.
- No city irrigation impacts, but private irrigation companies impacted (Old Union)
- Yakima Wastewater
- Private Franchised Utilities
- N 16th Ave & River Road Signalization Improvement Project
- Intersection of Fruitvale, 34th Avenue and River Road not part of this project

Description: Widening of River Road from the existing two-lanes to three-lanes, including continuous left turn lane. A Wastewater trunk line, stormwater and irrigation improvements are also part of the project, but not included in the list of project components. Costs of the project include right of way, design, construction and inspection components. Transportation project components include:

- Bicycle Facilities: Shared 14-foot curb lanes to accommodate bicycling, consistent with Bike Plan Map.
- Illumination: Install standard levels along River Road consistent with development standards.
- Intersections at Grade: Continuous left turn at all street intersections will reduce delay for turning vehicles. Traffic signal is planned at 16th Avenue intersection. Future alignment and intersection improvement to Fruitvale, 34th Avenue and River Road intersection is not part of this project.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Walk to School Route: Not part of walk to school route
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and ADA access ramps.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE								
ROW		\$340,000						
Construction		\$1,680,000						
TOTAL EXPENSES		\$2,020,000						
SOURCES OF FUNDS								
Development Mitigation		\$150,000						
Surface Transportation Funds (Urban)		\$200,000						
Arterial Improvement Project Funds		\$1,456,000						
Local Funds		\$364,000						
TOTAL FUNDS		\$2,020,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No.

Safety Project: Yes. Provides pedestrian, bicycle components, as well as improves deficient lane width and center turn lane at intersections.

Preservation: 2005 Pavement Condition Index of 39.

Economic Development: Yes. River Road is a significant industrial corridor that has access to SR 12 at both the North 16th Avenue and North 40th Avenue interchanges.

CAPACITY CONSTRAINED PROJECTS

Project: 40th Avenue Corridor – Fruitvale Boulevard to Washington Avenue

Project Number:

Project Summary: This project includes widening of 40th Avenue from the existing four-lane facility to five-lane Principal Arterial standard. Segments with traffic volumes greater than 25,000 ADT will include access management or raised median separation. The entire road improvement will include with dedicated-lanes for bicycles, sidewalks and 11-foot center left turn-lane. Capacity improvements to signalized intersections are planned to maintain Level of Service standards. The project is 3.3 miles in length and will require phasing to implement. In addition to other projects listed specifically in the Transportation Plan, the corridor project includes several key intersections of 40th Avenue, especially those with River Road and Nob Hill Boulevard.

Justification: Future level of service for 40th Avenue will be deficient and not meet Concurrency standards as adopted in the Transportation Plan. Signalized intersections are a particular concern for congestion. Current traffic on the 40th Avenue corridor averages nearly 23,000 vehicles daily, with segments in the northern area exceeding 27,000 average daily trips. Future traffic estimates for 2025 will approach 32,000 daily vehicles, with the northern segments exceeding 38,000 daily trips. The 40th Avenue Corridor is a primary route for regional freight and truck use.

Status: Conceptual planning and preliminary engineering and design in process. May begin in 2010 and take several years to complete.

Links to Other Projects: Related projects include the following:

- Yakima Water Division – facility adjustments, relocations and replacements. Portion of project in Nob Hill Water Company.
- No city irrigation impacts, but private irrigation companies impacted
- Yakima Wastewater
- Private Franchised Utilities
- US 12\N 40th Ave Interchange Improvement Project
- Airport access and Washington Avenue improvements

Description: Widening of 40th Avenue from the existing four-lanes to five lanes, including continuous left turn lane or access management. The project is 3.3 miles in length and will likely be implemented in phases. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include right of way, design, construction and inspection components. Transportation project components include:

- Bicycle Facilities: Dedicated 5-foot bike lane to accommodate bicycling, consistent with Bike Plan Map.
- Illumination: Continue standard levels along 40th Avenue consistent with development standards.

- Intersections at Grade: Left turn channelization at all classified street intersections. Level of service improvements for signalized intersections to maintain acceptable traffic flow.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Walk to School Route: Existing school zone flashers to be relocated with durable plastic pavement markings.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$1,800,000						
ROW		\$2,000,000						
Construction		\$5,200,000						
TOTAL EXPENSES		\$9,000,000						
SOURCES OF FUNDS								
Development Mitigation		\$500,000						
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$8,000,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$500,000						
TOTAL FUNDS		\$9,000,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes. Corridor and intersections will be deficient without improvements.

Safety Project: Yes. Provides pedestrian, bicycle components for Walk-to-School Route, as well as channelization at intersections.

Preservation: 2005 Average Pavement Condition Index of 50.

Economic Development: Yes. Provides maintains level of service standards. Critical corridor connection between US 12 and airport. Major north-south connector street.

Project: 40th Avenue and Summitview – Signal and Intersection Upgrade

Project Number:

Project Summary: This project includes upgrading the existing signal system at 40th Avenue and Summitview and providing adequate facilities for turning movements.

Justification: This is an intersection of two high volume Principal Arterial streets with heavy turning movements. Existing signal system is at capacity – improvements for right turn lanes and additional left-turn lanes to be made. Access restrictions or limitations may be necessary to provide for capacity and safety. The intersection is a Primary trucking route and existing radius are not adequate for freight movement. Traffic entering this intersection in 2005 was approximately 40,800 daily trips. A total of 111 vehicle collisions were reported at this intersection between 1998 and 2004. The 2005 Level of Service (LOS) for this intersection is LOS “F” based upon vehicle delay.

Status: Preliminary engineering. May begin project in 2009.

Links to Other Projects: Related projects include the following:

- 40th Avenue Corridor

Project Description: This project includes additional right-turn only storage, the addition of a second left-turn lane. Minor radius improvements to include ADA facilities. Transportation project components include:

- Sidewalks: Sidewalks exist on all sides of roadway at the intersection and include curbs, gutters, and access ramps. ADA improvements will be made as necessary.
- Traffic Control Signals: Signal and video detection installation
- Roadway: Widening to accommodate right-turn lane storage (Southbound to Westbound movement) and additional left-turn/through lane for Eastbound to Northbound movement.
- Walk-to-School Route: This intersection is not a Walk-to-School Route. However, significant pedestrian traffic uses this intersection, including a high proportionate share of Senior citizens, due in part to the surrounding retirement and related facilities and the commercial nature of the land uses in the vicinity.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$113,000			\$113,000		
ROW		\$57,000			\$57,000		
Construction		\$280,000				\$280,000	
TOTAL EXPENSES		\$450,000					
SOURCES OF FUNDS							
Development Mitigation							
Surface Transportation Funds (Urban)		\$400,000			\$150,000	\$250,000	
Arterial Improvement Project Funds							
Other							
Local Funds		\$50,000			\$20,000	\$30,000	
TOTAL FUNDS		\$450,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes

Safety Project: Yes.

Preservation: Yes.

Economic Development: Yes.

Project: 40th Avenue and Englewood – Signal and Intersection Upgrade

Project Number:

Project Summary: This project includes upgrading the existing signal system at 40th Avenue and Englewood and providing adequate facilities for turning movements.

Justification: Existing signal system is in need of replacement due to multiple collisions with signal poles. Mast arm length and capacity is not adequate for additional signal heads. Sight distance at the intersection is limited due to topography. Improvements for left turn phases to be made. Traffic entering this intersection in 2005 was 32,675 vehicles daily. A total of 53 vehicle collisions were reported at this intersection between 1998 and 2004.

Status: Preliminary engineering. May begin project in 2010.

Links to Other Projects: Related projects include the following:

- 40th Avenue Corridor
- Englewood Corridor Project

Project Description: This project includes replacing existing signal poles and mast arms and minor radius improvements to include ADA facilities. Transportation project components include:

- Sidewalks: Sidewalks exist on all sides of roadway at the intersection and include curbs, gutters, and access ramps. ADA improvements will be made as necessary.
- Traffic Control Signals: Signal and video detection replacement, as well as radio interconnect from existing facilities
- Roadway: Widening to accommodate turning radius.
- Walk-to-School Route: this intersection is not a Walk-to-School Route. However, pedestrian use is high in this area.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$85,000			\$85,000		
ROW		\$57,000			\$57,000		
Construction		\$131,000				\$131,000	
TOTAL EXPENSES		\$273,000					
SOURCES OF FUNDS							
Development Mitigation							
Surface Transportation Funds (Urban)		\$240,000			\$125,000	\$115,000	
Arterial Improvement Project Funds							
Other							
Local Funds		\$33,000			\$17,000	\$16,000	
TOTAL FUNDS		\$273,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes

Safety Project: Yes.

Preservation: Yes.

Economic Development: Yes.

Project: Nob Hill Boulevard Corridor- 16th Avenue to 18th Street

Project Number:

Project Summary: This project includes widening of an existing four-lane facility to five-lane Principle Arterial standard with median/boulevard to prevent left turns in some areas, longer channelized left turn lanes at major intersections, separate bicycle lanes, street lights and sidewalks. In addition to the projects listed specifically in the Transportation Plan, the Nob Hill Boulevard Corridor Project includes the upgrade of several key intersections, especially the intersections of Nob Hill Boulevard with South 1st Street, South 16th Avenue and South 3rd Avenue.

Justification: Reconstruction of existing street for safety and future capacity needs. Average traffic volumes on this corridor in 2005 were nearly 21,000 vehicles. Future volumes in 2025 are expected to exceed 29,000 vehicles daily. The street is currently narrow, with an average of only 60 feet of right of way and many sections lack sidewalks or any ADA accessible facilities.

Status: Preliminary Engineering. May begin project in 2008 and take several years to implement. Intersection projects may be scheduled separately.

Links to Other Projects: Related projects include the following:

- I-82 and SR 24 projects
- Yakima Water Division – Facility adjustments, replacements or relocation. Possible main replacement. Irrigation impact include service replacements.
- Yakima Wastewater
- Private Franchised Utilities
- Nob Hill Sidewalk project

Project Description: Widening of Nob Hill Boulevard from the existing four-lane to a 4 lane with boulevard and left turn lanes at major intersections. Access Management techniques may be necessary at some locations to control turning movements. The project is 2.5 miles in length and may need to be implemented in phases. Includes street lighting, sidewalks and bike lanes. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components.

Transportation project components include:

- Bicycle Facilities: Five-foot lanes consistent with Bike Plan Map.
- Illumination: Continue standard levels along Principle arterial consistent with development standards.
- Intersections at Grade: Left turn channelization and signals at classified intersections.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.

- Walk-to-School Route: Two elementary schools have patrolled school crossings on the 16th Avenue corridor. Other schools are within close proximity. This corridor is a major pedestrian network.
- Traffic Control Signals: Major to minor radius return work at intersections.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$500,000						
ROW		\$1,300,000						
Construction		\$5,200,000						
TOTAL EXPENSES		\$7,000,000						
SOURCES OF FUNDS								
Development Mitigation		\$500,000						
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$6,000,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$500,000						
TOTAL FUNDS		\$7,000,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes

Safety Project: Yes.

Preservation: 2005 Average Pavement Condition Index of 66.

Economic Development: Yes.

Project: Nob Hill Blvd & 18th Street Intersection

Project Number:

Project Summary: This project includes improvement of the signalized intersection of Nob Hill Boulevard with 18th Street to reduce congestion and delay.

Justification: Reconstruction of existing street intersection for safety and future capacity needs. Daily traffic entering this intersection in 2005 was 25,525 vehicles. The rate of collisions and severity of injuries were among the highest in the Urban Area. A total of 125 vehicle collisions were reported at this intersection between 1998 and 2004.

Status: Preliminary Engineering. May begin project in 2008.

Links to Other Projects: Related projects include the following:

- Yakima Water Division – Facility adjustment, relocation and/or replacements. No city irrigation.
- Yakima Wastewater
- Private Franchised Utilities
- Fiber Optic line
- I-82/SR 24 Project
- Nob Hill Blvd Corridor Upgrade

Project Description: Improvement of the intersection of 18th Street and Nob Hill Blvd is important because it creates a choke-point for traffic flow. Increased demand for Westbound Left turns support a double left lane and Northbound right turns do not have adequate stacking for vehicles. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Dedicated Bike lane of 5-foot width
- Intersections at Grade: Improvement includes double- Left turn for Westbound to Southbound; lengthen receiving area to allow two southbound lanes on 18th Street; Widen South leg for longer Right turn only lane.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: signal displays will need upgrading. Controller cabinet is adequate.
- Walk-to-School Route: This intersection is not on a Walk-to-School Route. However, the intersection has had four bicycle or pedestrian related injuries since 1998.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$45,000						
ROW		\$300,000						
Construction		\$405,000						
TOTAL EXPENSES		\$750,000						
SOURCES OF FUNDS								
Development Mitigation		\$50,000						
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$600,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$100,000						
TOTAL FUNDS		\$750,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes

Safety Project: Yes. This intersection has a history of severe injuries and high rate of collisions, including 4 bicycle or pedestrian collisions since 1998.

Preservation: The Nob Hill Corridor project is a preservation issue, closely related to this intersection.

Economic Development: Yes. This is a critical gateway into the City of Yakima, Union Gap and the growing East Valley area. This intersection provides access to a vital freight corridor as well as retail centers.

Project: Nob Hill Blvd & Fair Ave Intersection

Project Number:

Project Summary: This project includes the improvement of the signalized intersection of Fair Avenue with Nob Hill Boulevard. Currently, the intersection lacks right of way and left turn lanes on the Nob Hill Blvd approaches. Consequently, the signal must be operated as a split phase operation that increases delay. The controller and all related equipment is in need of replacement. Visibility of the signal heads is poor due to span wire mount and out-dated equipment. The intersection lacks sidewalks, ADA ramps and pedestrian actuation facilities. Stormwater is a significant problem at this intersection.

Justification: Reconstruction of existing street intersection for safety and future capacity needs. This intersection is a key location for access to the Central Washington State Fair Park, site of multiple on-going community and regional events, as well as provides access from the I-82 area to the Central Business District and south to the South First Street and Union Gap retail centers. Traffic entering this intersection in 2005 was estimated at 23,150 vehicles daily. Approach turn and broadside collisions constitute a significant share of the collision types at this intersection. A total of 71 vehicle collisions between 1998 and 2004 with 40 percent of the collisions attributed to broadside or approach turn accidents.

Status: Preliminary engineering and coordination with property owners. May begin project in 2008.

Links to Other Projects: Related projects include the following:

- Yakima Wastewater
- Yakima Water Division – Facility adjustment, relocation and /or replacement. No city irrigation.
- Private Franchised Utilities
- Mitigation measures as required with various developments in the vicinity, including the Washington State Fair Park

Project Description: Improvement of the intersection approaches and traffic signal will improve traffic flow in the vicinity. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use, or installation of a 5-foot bike
- Illumination: Lighting level at intersection will likely be improved as a result of this project.
- Traffic Control Signal: Left turn channelization at all street approaches to the intersections.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.

- Walk-to-School Route: This intersection is not part of a Walk-to-School Route, but is a heavily used pedestrian corridor, due in part to the location of the State Fair Park and the proximity of the residential neighborhood. Two pedestrian collisions have occurred at this intersection since 1998.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$65,000						
ROW		\$505,000						
Construction		\$630,000						
TOTAL EXPENSES		\$1,200,000						
SOURCES OF FUNDS								
Development Mitigation		\$50,000						
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$1,050,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$100,000						
TOTAL FUNDS		\$1,200,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes

Safety Project: Yes. Provides pedestrian, bicycle components, as well as left turn protection

Preservation: This project is closely related to the Nob Hill Corridor project

Economic Development: Yes. The intersection provides primary access to the Washington State Fair Park, the Yakima CBD and the commercial areas of South First Street and the Union Gap area.

Project: 16th Ave Corridor– US-12 to Washington Avenue

Project Number:

Project Summary: This project includes widening of an existing four-lane facility to five-lane Principal Arterial standard with bike lanes for bicycles, sidewalks and 11-foot center left turn-lane. Due to the length of the project, it will likely be implemented in phases and may include access management strategies. In addition to the projects listed specifically in the Transportation Plan, the 16th Avenue Corridor Project includes the upgrade of several key intersections, especially the intersections of 16th Avenue with Summitview and Tieton Drive.

Justification: Reconstruction of existing street for safety and future capacity needs. The corridor includes two Elementary school patrolled crossings as well as Yakima Valley Community College. Average daily traffic on the 16th Avenue Corridor was nearly 21,000 vehicles, with the highest volumes between Lincoln Avenue and Nob Hill Boulevard. Future volumes for the 16th Avenue corridor will average over 30,000 daily vehicles, with peak volumes exceeding 33,000 vehicles daily.

Status: Preliminary engineering and design in process. May begin project in 2013 and take several years to implement. Intersection upgrade projects may be scheduled independently of the 16th Avenue Corridor project.

Links to Other Projects: Related projects include the following:

- Yakima City Water Division – facility adjustment, relocation and/or replacement. Portion of project within Nob Hill Water Company. Possible replacement of some irrigation services.
- Yakima Wastewater
- Private Franchised Utilities
- Improvement projects for intersections along corridor

Project Description: Widening of 16th Avenue from the existing four-lanes to five lanes, including continuous left turn lane, sidewalks, ADA ramps, curb, gutter and street lighting. Access Management techniques may be necessary in some locations to control turning movements. Stormwater improvements are also part of the project, but not included in the list of project components. The project is 3.6 miles in length and may need to be implemented in phases. Costs of the project include right of way, design, construction and inspection components. Transportation project components include:

- Bicycle Facilities: Bike lane of 5 feet in width, consistent with Bike Plan Map.
- Illumination: Continue standard levels along 16th Avenue consistent with development standards.
- Signalized Intersections: Left turn channelization at all street intersections.
- Access Management: The 16th Avenue corridor north of Nob Hill Boulevard is projected to exceed 28,000 Average Daily Trips by 2025. Therefore, controlling access and turning movements will be included in the design of this project to facilitate safe and efficient traffic flow.

- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Walk to School Route: Existing school zone flashers to be relocated with durable plastic pavement markings.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$350,000						
ROW		\$2,500,000						
Construction		\$8,150,000						
TOTAL EXPENSES		\$11,000,000						
SOURCES OF FUNDS								
Development Mitigation		\$500,000						
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$10,400,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$100,000						
TOTAL FUNDS		\$11,000,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian, bicycle components for Walk-to-School Route, as well as channelization at intersections.

Preservation: 2005 Average Pavement Condition Index of 85.

Economic Development: Yes. The 16th Avenue corridor is an important freight route. It also provides access to many significant community land uses, such as the Yakima Valley Community College, the Airport, vacant parcels and industrial zoned area.

Project: 16th Avenue & Fruitvale Blvd – Signal Upgrade

Project Number:

Project Summary: This project includes replacing and upgrading the existing span-wire signal system at 16th Avenue and Fruitvale. Also included in the project are sidewalks with ADA ramps, as well as increased radius returns for freight movement.

Justification: Existing span-wire signal system is failing and requires replacement. There are no ADA facilities at this intersection. Large tract of vacant industrial and commercial zoned properties on both Fruitvale Blvd and 16th Ave will increase traffic at this intersection. Daily traffic entering this intersection in 2005 was 31,500 vehicles. Between 1998 and 2004 a total of 67 vehicle collisions were reported at this intersection.

Status: Preliminary Engineering. May begin project in 2012.

Links to Other Projects: Related projects include the following:

- 16th Avenue Corridor Project

Project Description: This project includes installation of poles, mast arms, video detection and signal components at the intersection of 16th Avenue and Fruitvale Blvd. Improved turning radii and right-turn storage lanes. Transportation project components include:

- Sidewalks: Sidewalks exist on all sides of roadway at the intersection and include curbs, gutters, and access ramps. ADA improvements are necessary.
- Traffic Control Signals: Signal poles, mast arms, signals and video detection installation, improved right turn lane storage for Westbound to Northbound Right turn.
- Walk-to-School Route: This intersection is not on a Walk-to-School Route. However, pedestrian use is high in this area. Since 1998, the intersection has had two pedestrian accidents.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$114,000			\$114,000		
ROW		\$57,000			\$57,000		
Construction		\$284,000			\$284,000		
TOTAL EXPENSES		\$455,000					
SOURCES OF FUNDS							
Development Mitigation							
Surface Transportation Funds (Urban)		\$400,000			\$400,000		
Arterial Improvement Project Funds							
Other							
Local Funds		\$55,000			\$55,000		
TOTAL FUNDS		\$455,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes.

Preservation: Yes.

Economic Development: No.

Project: S. 16th Avenue & Washington Avenue Signal Upgrade

Project Number:

Project Summary: This project includes upgrading the signalized intersection at 16th Avenue and Washington to provide protected left-turns, free right-turns, minor widening to lengthen left-turn storage and improve alignment, and improved intersection radius returns. Included is ADA ramps and pedestrian activated signals.

Justification: Reconstruction of existing intersection for safety and future capacity needs. Traffic entering this intersection in 2005 was 27,500 vehicles. The intersection was characterized by a high severity of injuries and rate of collisions. Between 1998 and 2004, a total of 74 vehicle collisions were reported at this intersection. Broadside and approach turn collisions were 58% of the total collisions.

Status: Preliminary Engineering. Project may begin in 2008.

Links to Other Projects: Related projects include the following:

- Yakima Wastewater
- Private Franchised Utilities
- Yakima Water and Irrigation
- The location is directly related to the Valley Mall Boulevard Phase 3 project. Increased traffic from the improvement and extension of valley Mall Boulevard will create safety and congestion concerns without the upgrade to this intersection.

Project Description: Upgrading the signal at 16th Avenue and Washington to provide protected left-turns, minor widening to lengthen left and right-turn storage and improve alignment, and improved intersection radius returns. This intersection is currently a major freight route and with the Valley Mall Blvd extension, increased freight will use this area. The project also includes ADA ramps and pedestrian activated signals. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Illumination: Continue standard levels along arterial consistent with development standards.
- Traffic Control Signals: Signal upgrade for left turn phasing and protection, as well as improved lane storage for turn pockets.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Walk-to-School: This intersection is not on a Walk-to-School Route.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$114,000			\$114,000		
ROW		\$57,000			\$57,000		
Construction		\$284,000			\$284,000		
TOTAL EXPENSES		\$455,000					
SOURCES OF FUNDS							
Development Mitigation							
Surface Transportation Funds (Urban)		\$400,000			\$400,000		
Arterial Improvement Project Funds							
Other							
Local Funds		\$55,000			\$55,000		
TOTAL FUNDS		\$455,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes

Safety Project: Yes. Provides signal phasing for left turn phasing. The intersection has been a location for high rate of broadside and approach turn collisions.

Preservation: The Valley Mall Blvd project stops just short of this intersection. Improvement to the safety and flow of traffic at this intersection will be impeded without this project.

Economic Development: Yes – Airport related development is directly influenced by the operation of this intersection, as well as the traffic flow from the Valley Mall Blvd project .

Project: 1st Street & Washington Avenue Intersection Improvement

Project Number:

Project Summary: This project includes intersection realignment, additional lanes and signal reconstruction.

Justification: Reconstruction of existing intersection for safety and future capacity needs. Traffic entering this intersection in 2005 was 36,550 vehicles. The intersection is among the highest in rate of collisions and severity of injuries in the Yakima Urban Area. Between 1998 and 2004 a total of 170 vehicle collisions were reported at this intersection. The Level of Service (LOS) for this intersection was LOS “D” in 2005 due to vehicle delay.

Status: Preliminary Engineering. Project may begin in 2009.

Links to Other Projects: Related projects include the following:

- Yakima Wastewater
- Private Franchised Utilities
- Yakima Water Division – Facility adjustments, relocation and /or replacements. No city irrigation system
- South 1st Street/Main Street (Union Gap) Projects
- Valley Mall Blvd projects, including the I-82 Interchange

Project Description: This project includes intersection improvement to realign intersection approaches, additional lanes and storage length for dedicated turn lanes and signal reconstruction. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use or a 5-foot dedicated bike lane..
- Illumination: The intersection will require an upgrade in illumination.
- Traffic Signal: Reconstruction of the intersection including realignment, widening and channelization.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Walk-to-School: This intersection is not on a Walk-to-School Route. However, it has been the site of 5 pedestrian or bicycle related collisions since 1998.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$150,000						
ROW		\$300,000						
Construction		\$450,000						
TOTAL EXPENSES		\$900,000						
SOURCES OF FUNDS								
Development Mitigation		\$50,000						
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$750,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$100,000						
TOTAL FUNDS		\$900,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes

Safety Project: Yes.

Preservation: N/A.

Economic Development: Yes.

Project: S. 3rd Avenue & Washington Signal Upgrade

Project Number:

Project Summary: This project includes upgrading the signal at 3rd Avenue and Washington to provide protected left-turns, minor widening to lengthen left-turn storage and improve alignment, and improved intersection radius returns. Included is ADA ramps and pedestrian activated signals.

Justification: Reconstruction of existing intersection for safety and future capacity needs. Traffic entering this intersection in 2005 was estimated at 30,050 vehicles daily. The rate of collisions and injury severity may be reduced with safety measures. Between 1998 and 2004 a total of 89 vehicle collisions were reported. Broadside and approach turn collisions were 42 percent of the total accidents. Left turn protection was added in 2002, but the traffic signal still operates with only a 4-phase controller, thereby limiting flexibility and traffic flow responsiveness.

Status: Preliminary Engineering. Project may begin in 2009.

Links to Other Projects: Related projects include the following:

- Yakima Water Division – Facility adjustments, relocation and /or replacements. No city irrigation system. Nob Hill Water system.
- Yakima Wastewater
- Private Franchised Utilities
- Yakima Water and Irrigation

Project Description: Upgrading the signal at 3rd Avenue and Washington to provide protected left-turns, minor widening to lengthen left-turn storage and improve alignment, and improved intersection radius returns. Included is ADA ramps and pedestrian activated signals. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Illumination: Continue standard levels along arterial consistent with development standards.
- Intersections at Grade: Turn channelization and signal upgrade.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: Fully actuated signal.
- Walk-to-School Route: This intersection is not on a Walk-to-School Route. However, pedestrian use is high.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$15,000						
ROW		\$30,000						
Construction		\$250,000						
TOTAL EXPENSES		\$295,000						
SOURCES OF FUNDS								
Development Mitigation		\$0						
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$270,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$25,000						
TOTAL FUNDS		\$295,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides signal phasing for pedestrian crossings.

Preservation: 2005 Pavement Condition Index of 40.

Economic Development: No.

Project: W. Nob Hill Blvd Corridor- 52nd Ave to 80th Ave

Project Number:

Project Summary: This project includes widening of an existing two-lane facility to five-lane to 72nd Avenue and 3-lanes from 72nd Avenue to 80th Avenue. The street will be improved to a Principal Arterial standard with shared curb-lanes for bicycles, sidewalks and 11-foot center left turn-lane. The project is 1.8 miles in length and may be implemented in phases. The intersections of West Nob Hill Boulevard with 64th Avenue and 72nd Avenue may require upgrade projects.

Justification: Reconstruction of existing street for future capacity and safety needs. A significant amount of vacant land exists in the corridor, zoned for commercial and various densities of residential use. Existing traffic on this section of Nob Hill Boulevard was approximately 8,500 average daily vehicles in 2005. Future traffic on this street corridor is expected to reach nearly 12,000 vehicles by 2025, without major new development. As development occurs in the vicinity, traffic volumes on this segment of Nob Hill Boulevard may exceed 21,000 daily vehicles by 2025.

Status: Design plans not yet available. Project may begin in 2008, depending upon adjacent private, commercial development. Intersection upgrade projects may be scheduled independently of the Corridor improvement project.

Links to Other Projects: Related projects include the following:

- Nob Hill Water
- Yakima Wastewater and stormwater
- Private Franchised Utilities
- Mitigation measures as may be required with proposed retail center at 64th Avenue and Nob Hill Blvd, especially for 64th Avenue. Additional mitigation will likely be available as other vacant parcels develop.

Project Description: Widening of Nob Hill Boulevard from the existing two-lanes to five-lanes, including continuous left turn lane. The corridor is 1.8 miles and may be improved in phases. All intersections are planned to be two-way stop control following construction. The intersections of 64th Avenue and 72nd Avenues are currently signalized. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width or separate bike lane of 5-feet to accommodate share use, consistent with Bike Plan Map.
- Illumination: Continue standard levels along Nob Hill Boulevard to urban standard.
- Intersections at Grade: Left turn channelization at all street intersections.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: Upgrade to traffic signal at 64th Ave & Nob Hill Blvd from 2-phase operation to 8 phase operation for left turn protection.

- Walk-to-School Route: This section of Nob Hill Boulevard is on a Walk-to-School Route and has two patrolled school crossings for Wide Hollow School..

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$549,000						
ROW		\$700,000						
Construction		\$2,301,000						
TOTAL EXPENSES		\$3,550,000						
SOURCES OF FUNDS								
Development Mitigation		\$0						
Federal Funds - other								
Surface Transportation Funds (Urban)		\$921,000						
State Funds - TTP		\$1,183,000						
Arterial Improvement Project Funds		\$826,000						
Local Funds		\$620,000						
TOTAL FUNDS		\$3,550,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes, with proposed retail development

Safety Project: Yes. Provides pedestrian, bicycle components, as well as channelization at

Preservation: 2005 Pavement Condition Index of 71.

Economic Development: Yes. Retail development in vicinity of 64th Ave & Nob Hill Blvd.

SYSTEM IMPROVEMENT PROJECTS

Project: Railroad Grade Separation of “B” Street and Lincoln Avenue

Project Number:

Project Summary: This project includes the construction elevated grade separated railroad track facilities and an underpass for both B Street and Lincoln Avenues between 1st Street and 1st Avenue. In the vicinity of the project Front Street will also be elevated and grade separated from B Street and Lincoln Avenue, due to the proximity to the railroad.

Justification: Projected rail use by the Burlington-Northern Santa Fe (BNSF) Railroad show significant growth in the total number, frequency and length of trains that will travel through Yakima. The current average of 10 trains daily is expected to increase to an average of 25 daily trains by 2025. Rail service on the lines that bisect Yakima are largely regional lines and do not stop in Yakima to transfer goods from the Yakima Valley. This freight movement is vital to the state and national economy. Traffic on Lincoln Avenue (Westbound) and B Street (Eastbound) average a total of nearly 22,000 vehicles daily. Future traffic on these Principal Arterial Streets will exceed 31,000 vehicles by 2025.

The local impact of increased train service over Yakima streets has safety and economic impacts.

Status: Final engineering and design in process. Construction scheduled to begin in 2007.

Links to Other Projects: Related projects include the following:

- City of Yakima Water – water-main abandonment, new water-main install. Facility adjustments, relocation and replacements. No city irrigation.
- Yakima Wastewater
- Private Franchised Utilities
- Front Street Historic District Improvement Project

Project Description: Construction of the bridge and underpass facilities is a major construction project that requires phasing and traffic detours during construction. Transportation project components include:

- Bicycle Facilities: A separate bike lane will be included along both Lincoln Ave and B Street.
- Illumination: Street lighting will be replaced along both Lincoln and B Street as a result of the grade separation construction.
- Intersections at Grade: There are no at grade intersections for the length of the project. Some driveway and property access is integrated into the design.
- Transit: Both Lincoln and B Street are core Yakima Transit Routes.
- Walk to School Route: No school routes are impacted by the grade separation project.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$7,000,000						
ROW		\$3,000,000						
Construction		\$21,000,000						
TOTAL EXPENSES		\$31,000,000						
SOURCES OF FUNDS								
Development Mitigation		\$0						
Federal Funds - other		\$15,125,000						
Surface Transportation Funds (Urban)		\$15,125,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$1,250,000						
TOTAL FUNDS		\$31,000,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Emergency access and arterial street access is impeded when a train blocks the existing at-grade railroad track crossing of Lincoln and B Street.

Preservation: 2005 Pavement Condition Index of 70.

Economic Development: Yes. Improves access to the Yakima downtown core and freight mobility

Project: I-82 Frontage Road, Terrace Heights Connector and Pedestrian Access - Fair Avenue to R Street

Project Number:

Project Summary: This project construction of a new 3-lane urban Collector Arterial Street (curb, gutter, sidewalks, bike lanes and street lighting) from Fair Avenue Extended along the frontage of I-82 to R Street. The Frontage Road would provide access to redevelopment acreage in the Yakima Regional Wood Products site (formerly Boise Cascade). In addition, the new street will provide a connection to the proposed Yakima County Terrace Heights Connector street which is intended to provide an alternate route into the Yakima Urban Area from the Terrace Heights neighborhood. The Terrace Heights Connector Street would utilize the existing I-82 Underpass to provide a surface road and pedestrian access between Yakima and the residential areas of the Terrace Height neighborhood.

Justification: The I-82 Frontage Road opens redevelopment opportunities for the former Boise Cascade site, while creating excellent connections to the Yakima Greenway trail. The Terrace Heights connector will provide east-west pedestrian/bicycle facility across I-82.

Status: Preliminary Engineering. Project may begin in 2008 and take several years to implement in phases.

Links to Other Projects: Related projects include the following:

- WSDOT
- Yakima Wastewater
- Yakima Water Division – no existing water service. Possible new waterlines and facilities.
- Private Franchised Utilities
- Yakima Greenway
- Private Development may contribute mitigation
- Yakima County will take lead on Terrace Heights Connector street

Project Description: Construction of a two new streets as well as pedestrian/bicycle facility under I-82 to provide east-west connectivity from the visitor's center and east Yakima to the Yakima Greenway.

Transportation project components include:

- Bicycle and Pedestrian Facility: New street connection at the I-82/ Railroad underpass will accommodate shared use for vehicles, pedestrians, and bicyclists.
- Illumination: Install standard pedestrian lighting level standards.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$227,000			\$227,000		
ROW							
Construction		\$2,270,000			\$2,270,000		
TOTAL EXPENSES		\$2,497,000					
SOURCES OF FUNDS							
Development Mitigation		\$0					
Surface Transportation Funds (Urban)		\$2,200,000			\$200,000	\$2,000,000	
Arterial Improvement Project Funds							
Local Funds		\$227,000			\$27,000	\$200,000	
TOTAL FUNDS		\$2,427,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: The Terrace Heights Connector street would provide relief to congestion on Yakima Avenue

Safety Project: Yes. Provides pedestrian, bicycle components.

Preservation: N/A.

Economic Development: Yes. Tourism.

Project: 48th Avenue Corridor – Summitview Ave to Washington Ave

Project Number:

Project Summary: This project includes minor widening of an existing two-lane facility to two-lane Collector Arterial standard with shared curb-lanes for bicycles, and sidewalks. In addition to the projects listed in the Transportation Plan, several key intersections may require upgrading, especially the intersections of 48th Avenue with Summitview Avenue and Tieton Drive.

Justification: Reconstruction of existing street for safety and future capacity needs. Traffic on 48th Avenue averaged nearly 5,000 vehicles in 2005. Projected traffic volumes will exceed 8,000 vehicles daily by 2025.

Status: Preliminary Engineering. Project may begin in 2012 and take several years to implement. Intersection upgrade projects may be scheduled independently of the corridor improvement project.

Links to Other Projects: Related projects include the following:

- Nob Hill Water
- Yakima Wastewater
- Private Franchised Utilities

Project Description: Widening of 48th Avenue from the existing two-lanes to two wide lanes, including sidewalks, curb, gutter and shared bike-lanes. The project corridor is 1.6 miles in length Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate shared use, consistent with Bike Plan Map.
- Illumination: Continue standard levels along Collector arterial consistent with development standards.
- Intersections at Grade: Left turn channelization and signal at intersections with Summitview, Tieton and Nob Hill
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: Existing signals at Tieton and Nob Hill may need to be upgraded with minor radius return work, consider left turn protection and pedestrian detection
- Walk-to-School Route: The 48th Avenue Corridor is not part of a Walk-to-School Route. However, there is a well-used student crossing at the intersection of 48th Avenue and Arlington Street that is no longer patrolled, but still used to access a pathway leading to Wilson Middle School, Whitney Elementary School and Eisenhower High School.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
ALL		\$2,043,000	\$1,800,000				
PE							
ROW							
Construction							
TOTAL EXPENSES		\$2,043,000					
SOURCES OF FUNDS							
Development Mitigation		\$0					
Surface Transportation Funds Urban		\$1,800,000	\$1,800,000				
Arterial Improvement Project Funds							
WSDOT							
Local Funds		\$243,000	\$243,000				
TOTAL FUNDS		\$2,043,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian and bicycle components.

Preservation: 2005 Average Pavement Condition Index of 35.

Economic Development: No.

Project: Englewood Ave Corridor– North 16th Avenue to North 66th Avenue

Project Number:

Project Summary: This project includes minor widening of an existing two-lane facility to two-lane Collector Arterial standard with shared curb-lanes for bicycles, and sidewalks. Due to the length of the project, it will likely be phased. In addition to the projects specifically listed in the Transportation Plan, several key intersections may require upgrading, especially the intersections of Englewood Avenue with 16th Avenue, 20th Avenue and others.

Justification: Reconstruction of existing street for safety and future capacity needs. Traffic on Englewood Avenue averaged nearly 4,000 daily vehicles in 2005, with the segments near 40th Avenue exceeding 7,000 daily vehicles. Future traffic on Englewood Avenue will exceed 6,000 daily vehicles by 2025, with the most heavily segments exceeding 10,000 average daily vehicle trips.

Status: Preliminary Engineering. Project may begin in 2014 and take several years to implement. Intersection improvement projects may be scheduled independently of the corridor improvement project.

Links to Other Projects: Related projects include the following:

- Yakima Water Division – facility adjustments, relocations and replacements. Possible new water main between 40th and 44th Avenues. No city irrigation.
- Yakima Wastewater
- Private Franchised Utilities
- 40th Avenue and Englewood Signal Project

Project Description: Widening of Englewood from the existing two-lanes to two wide lanes, including sidewalks. The corridor is 3.2 miles in length and will likely need to be implemented in phases. The entire corridor is primarily residential, with access to churches, schools and some commercial/industrial use in the vicinity of 20th Avenue. In the commercial land use locations, a center left turn lane may be appropriate. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use, consistent with Bike Plan Map.
- Illumination: Continue standard levels along Collector arterial consistent with development standards.
- Intersections at Grade: Left turn channelization and signal at intersection with 40th Avenue.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: Existing signal at 40th Avenue should be upgraded to replace existing poles and mast arms. Minor radius return work.
- Walk-to-School Route: Englewood Avenue is a Walk-to-School for Robertson Elementary near Powerhouse Road and for Gilbert Elementary near 44th Avenue

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$150,000						
ROW		\$400,000						
Construction		\$5,000,000						
TOTAL EXPENSES		\$5,550,000						
SOURCES OF FUNDS								
Development Mitigation		\$50,000						
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$5,300,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$200,000						
TOTAL FUNDS		\$5,550,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian and bicycle components.

Preservation: 2005 Pavement Condition Index of 62 to 100.

Economic Development: No.

Project: Powerhouse Road & Englewood Road Intersection

Project Number:

Project Summary: This project includes realignment of the intersection, minor widening of an existing two-lane facility to two-lane Collector Arterial standard with shared curb-lanes for bicycles, sidewalks and a safety flasher or roundabout.

Justification: Reconstruction of existing intersection for school safety and future capacity needs. The current alignment of the intersection of these two Collector Arterials is poorly suited to an all-way stop and intersection sight distance is poor. Traffic volumes are evenly split between the approaches. For school safety reasons, this intersection has been considered for upgrading to allow better traffic control and improve pedestrian safety. Current entering volume in 2005 of the intersection is approximately 6,800 vehicles. A total of 12 reported vehicle collisions occurred between 1998 and 2004.

Status: Preliminary Engineering. Project may begin in 2012.

Links to Other Projects: Related projects include the following:

- Yakima Water Division – Facility adjustment, relocation and/or replacements. No city irrigation.
- Yakima Wastewater
- Private Franchised Utilities
- Englewood 24th Avenue to 40th Avenue Project

Project Description: Widening and realignment of existing intersection of Powerhouse and Englewood to include two wide lanes, sidewalks, safety flasher or roundabout. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use, consistent with Bike Plan Map.
- Illumination: Continue standard levels along Collector arterial consistent with development standards.
- Intersections at Grade: Left turn channelization and safety flasher or roundabout.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: Safety Flasher or roundabout.
- Walk-to-School Route: The intersection of Powerhouse Road and Englewood Avenue is a patrolled school crossing.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$23,000	\$23,000				
ROW		\$454,000	\$454,000				
Construction		\$345,000	\$345,000				
TOTAL EXPENSES		\$822,000					
SOURCES OF FUNDS							
Development Mitigation		\$0					
Surface Transportation Funds (Urban)		\$720,000	\$720,000				
Arterial Improvement Project Funds							
Local Funds		\$102,000	\$102,000				
TOTAL FUNDS		\$822,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian and bicycle components.

Preservation: 2005 Pavement Condition Index of 40.

Economic Development: No.

Project: 66th Avenue Corridor – Scenic Drive to Summitview Avenue

Project Number:

Project Summary: This project includes minor widening of an existing two-lane facility to two-lane Collector Arterial standard with shared curb-lanes for bicycles, and sidewalks. In addition to the projects listed specifically in the Transportation Plan, key intersections on the 66th Avenue Corridor may also require upgrading, specifically the intersections of 66th Avenue with Summitview Avenue and Englewood Avenue.

Justification: Reconstruction of existing street for safety and future capacity needs. The Corridor is 0.75 miles in length. Existing traffic volumes on 66th Avenue in 2005 averaged approximately 4,000 vehicles. Future traffic will be approximately 6,500 by 2025.

Status: Preliminary Engineering. Project may begin in 2015. Intersection improvement projects may be scheduled independently of the corridor improvement project.

Links to Other Projects: Related projects include the following:

- Nob Hill Water
- Yakima Wastewater
- Private Franchised Utilities

Project Description: Widening of 66th Avenue from the existing two-lanes to two wide lanes, including sidewalks, curb, gutter and shared bike-lanes. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use, consistent with Bike Plan Map.
- Illumination: Continue standard levels along Collector arterial consistent with development standards.
- Intersections at Grade: Left turn channelization and signal at intersection with Summitview and roundabout at 66th Avenue and Englewood.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: Possible installation of signal at 66th Avenue and Summitview.
- Walk-to-School Route: The 66th Avenue corridor is not on a Walk-to-School Route.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$160,000			\$160,000		
ROW		\$60,000			\$60,000		
Construction		\$900,000			\$900,000		
TOTAL EXPENSES		\$1,120,000					
SOURCES OF FUNDS							
Development Mitigation							
Surface Transportation Funds (Urban)		\$1,000,000			\$1,000,000		
Arterial Improvement Project Funds							
Other							
Local Funds		\$120,000			\$120,000		
TOTAL FUNDS		\$1,120,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian and bicycle components.

Preservation: 2005 Pavement Condition Index of 70.

Economic Development: Vacant residential land west of 66th Avenue will continue to add traffic to this Collector Arterial.

Project: Mead Ave Corridor - Rudkin Ave to Fair Ave

Project Number:

Project Summary: This project includes widening of an existing two-lane facility to three-lane Minor Arterial standard with shared curb-lanes for bicycles, sidewalks and 11-foot center left turn-lane.

Justification: Reconstruction of existing street for safety and future capacity needs. Existing traffic on Mead Avenue in 2005 was approximately 5,800 vehicles near Fair Avenue. Future volumes may exceed 9,000 by 2025.

Status: No engineering plans available at this time. Project may begin in 2015.

Links to Other Projects: Related projects include the following:

- Yakima Wastewater
- City of Yakima Water and Irrigation – Facility adjustments, relocation or replacements. No city irrigation.
- Union Gap Water System
- Private Franchised Utilities
- Rudkin Road improvement project
- .

Project Description: Widening of Mead Avenue from the existing two-lanes to three lanes, including continuous left turn lane. The corridor is 0.75 miles in length. Stormwater improvements would need to be included as part of the project. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use, consistent with Bike Plan Map.
- Illumination: Urban Standard lighting level would be installed.
- Intersections at Grade: Continuous left turn lane would provide storage for turning vehicles at intersections.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: No signals are anticipated as part of this project. The intersection of Mead Avenue and 18th Street may need roundabout or traffic signal in the future.
- Walk-to-School Route: Mead Avenue is not a Walk-to-School Route. However, Martin Luther King Jr. Elementary School is located just south of Mead Avenue on 18th Street, where a patrolled school crossing is located.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$121,000						
ROW		\$0						
Construction		\$1,091,000						
TOTAL EXPENSES		\$1,212,000						
SOURCES OF FUNDS								
Development Mitigation		\$0						
Federal Funds - other								
Surface Transportation Funds (Urban)		\$970,000						
State Funds - TTP		\$181,000						
Arterial Improvement Project Funds		\$0						
Local Funds		\$61,000						
TOTAL FUNDS		\$1,212,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian, bicycle components.

Preservation: 2005 Pavement Condition Index of 55

Economic Development: Yes. Mead Avenue provides access to residential, commercial and industrial land uses and is classified as a Minor Arterial Street. It also a shared border with Union Gap.

Project: 80th Ave Corridor– Tieton Drive to Zier Rd

Project Number:

Project Summary: This project includes widening of an existing two-lane facility to three-lane Minor Arterial standard with shared curb-lanes for bicycles, sidewalks and 11-foot center left turn-lane. The project length is 1.2 miles and may be improved in phases.

Justification: Reconstruction of existing street for safety and future capacity needs. Traffic volumes on 80th Avenue in 2005 were approximately 6,500 in the vicinity of Nob Hill Boulevard. Future volumes may exceed 9,800 by 2025.

Status: The approach of 80th Avenue to Tieton Drive from the south has been re-constructed (by Yakima County, prior to annexation). The remainder of the project is in preliminary design and may begin in 2011.

Links to Other Projects: Related projects include the following:

- Nob Hill Water
- Yakima Wastewater
- Private Franchised Utilities

Description: Widening of 80th Avenue from the existing two-lanes to three lanes, including continuous left turn lane. All intersections are planned to be two-way stop control following construction. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use, consistent with Bike Plan Map.
- Illumination: Continue standard levels consistent with development standards.
- Intersections at Grade: Left turn channelization at major street intersections. No traffic signals are planned along the corridor.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$120,000						
ROW		\$350,000						
Construction		\$1,530,000						
TOTAL EXPENSES		\$2,000,000						
SOURCES OF FUNDS								
Development Mitigation		\$50,000						
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$1,730,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$220,000						
TOTAL FUNDS		\$2,000,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian, bicycle components.

Preservation: 2005 Pavement Condition Index was not available for 80th Avenue.

Economic Development: Yes.

Project: Zier Rd- 72nd Ave to 80th Ave

Project Number:

Project Summary: This project includes minor widening of an existing two-lane facility to two-lane Collector Arterial standard with shared curb-lanes for bicycles, and sidewalks.

Justification: Reconstruction of existing street for safety and future capacity needs. Traffic volumes on Zier Road in 2005 were 2,500 average daily vehicle trips. Volumes by 2025 may exceed 4,000 vehicles.

Status: Preliminary Engineering. Project may begin in 2015.

Links to Other Projects: Related projects include the following:

- Nob Hill Water
- Yakima Wastewater
- Private Franchised Utilities

Project Description: Widening of Zier Road from the existing two-lanes to two wide lanes, including sidewalks. All intersections are planned to be two-way stop control following construction. The project is 0.50 miles in length. The intersections of 72nd and 75th and Zier have existing traffic signals. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use, consistent with Bike Plan Map.
- Illumination: Continue standard levels along Collector arterial consistent with development standards.
- Intersections at Grade: Left turn channelization at major street intersections. The intersections of 72nd Avenue and Zier and 75th and Zier are signalized.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: Existing traffic signal at 72nd Avenue and Zier Road.
- Walk-to-School Route: West Valley Middle School and Junior High School are located along this portion of Zier Road and are within the required walk to school radius of the West Valley School District.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$50,000						
ROW		\$150,000						
Construction		\$750,000						
TOTAL EXPENSES		\$950,000						
SOURCES OF FUNDS								
Development Mitigation		\$0						
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$850,000						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$100,000						
TOTAL FUNDS		\$950,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian and bicycle components.

Preservation: 2005 Pavement Condition Index of 77.

Economic Development: No.

Project: Lincoln and 'B' Street Realignment – 5th Avenue to Custer

Project Number:

Project Summary: This project includes realignment of the two principle arterial street segments and associated intersections. Project may include roundabouts and/or signal installations at major intersections.

Justification: Reconstruction of existing street segments and intersection for safety and future capacity needs, as well as improve traffic flow. Average traffic on Lincoln Avenue in the vicinity of the one-way couplet was nearly 15,000 vehicles in 2005, and is expected to exceed 20,000 vehicles by 2025. B Street in the vicinity of the couplet carried nearly 10,000 vehicles in 2005, and is expected to exceed 14,000 vehicles by 2025. Vehicle collisions have been especially problematic at the intersections of North 6th Avenue with both B Street and Lincoln Avenue(both with entering volumes of 14,800 vehicles in 2005 with 36 and 33 collisions respectively between 1998 and 2004).

Status: Preliminary Engineering. Project may begin in 2012.

Links to Other Projects: Related projects include the following:

- Yakima Wastewater
- Private Franchised Utilities
- Yakima Water and Irrigation – Facility adjustments, relocations and /or replacements. No city irrigation impacts.
- Railroad grade separation

Project Description: Widening and realignment of Lincoln and 'B' Street with associated intersections to wide lanes, sidewalks, safety flashers, roundabouts and/or signals. Improvement would also address safety problems at the intersections of North 6th Avenue with B Street and Lincoln Avenue. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Dedicated 5-foot wide bike lanes consistent with Bike Plan Map.
- Illumination: Continue standard levels along Principal Arterial streets consistent with development standards.
- Intersections at Grade: Turn channelization, safety flasher, roundabout and/or signals.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: Safety Flasher, signal and/or roundabout.
- Walk-to-School Routes: Neither B Street nor Lincoln Avenue are located on Walk-to-School Routes in this location.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$390,000			\$390,000		
ROW		\$960,000				\$960,000	
Construction		\$1,652,000					\$1,652,000
TOTAL EXPENSES		\$3,002,000					
SOURCES OF FUNDS							
Development Mitigation		\$0					
Surface Transportation Funds (E??)		\$2,597,000			\$337,000	\$831,000	\$1,429,000
Arterial Improvement Project Funds							
Local Funds		\$405,000			\$53,000	\$129,000	\$223,000
TOTAL FUNDS		\$3,002,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides motorist, pedestrian and bicycle components.

Preservation: 2005 Pavement Condition Index of 40 to 70.

Economic Development: No.

Project: 5th Avenue & Tieton Drive - Intersection

Project Number:

Project Summary: This project includes replacing a traffic signal with a roundabout and surface street repairs for all four approaches.

Justification: Reconstruction of existing intersection for safety and future capacity needs. In 2005, this intersection had an entering volume of 24,100 vehicles with 23 vehicle collisions occurring between 1998 and 2004. The signal controller and existing detection are in very poor condition and functionally obsolete. The intersection is characterized by heavy Eastbound left and Southbound right turning movements.

Status: Preliminary Engineering. Project may begin in 2011.

Links to Other Projects: Related projects include the following:

- Yakima Wastewater
- Private Franchised Utilities
- Yakima Water and Irrigation- Facility adjustments, relocation and /or replacements. Existing pump station at SE corner may be impacted.

Project Description: This project includes intersection improvement to replace existing signal with roundabout and surface street repairs for all four approaches. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Illumination: Continue standard levels along arterial consistent with development standards.
- Intersections at Grade: Remove signal and install roundabout.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: Remove existing signal
- Walk-to-School Route: This intersection is adjacent to Davis High School and within the Walk to school radius required by the Yakima School District.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
ALL		\$400,000	\$400,000				
PE							
ROW							
Construction							
TOTAL EXPENSES		\$400,000					
SOURCES OF FUNDS							
Development Mitigation		\$0					
Surface Transportation Funds Urban		\$200,000	\$200,000				
Arterial Improvement Project Funds							
WSDOT		\$200,000	\$200,000				
Local Funds							
TOTAL FUNDS		\$400,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes.

Preservation: Yes, existing signal system in need of replacement.

Economic Development: No.

Project: Rudkin Road- Viola Ave to Rainier Place

Project Number:

Project Summary: This project includes widening of an existing two-lane facility to three-lane Minor Arterial standard with shared curb-lanes for bicycles, sidewalks and 11-foot center left turn-lane.

Justification: Reconstruction of existing street for safety and future capacity needs. The City of Yakima portion of Rudkin Road includes the segment from Viola Avenue to Mead Avenue (0.25 miles). The remaining portion of Rudkin Road from Mead Avenue to Valley Mall Boulevard is within Union Gap (0.75 miles). The intersection of Valley Mall Boulevard with Rudkin Road is a known capacity problem and under design review by WSDOT. In 2005, Rudkin Road carried an average of 1,120 average daily vehicle trips and is projected to increase to approximately 1,800 vehicle trips by 2025.

Status: Conceptual project only. No preliminary designs at this time. Project may begin in 2015.

Links to Other Projects: Related projects include the following:

- Yakima Wastewater
- Yakima Water and Irrigation – (Viola to Mead Ave) Facility adjustment, relocation and or replacements. New waterline cross I-82 between Viola and Mead. No city irrigation. Old Union Irrigation Company.
- Private Franchised Utilities
- Coordinated and joint project with Union Gap and Union Gap Water
- Coordination with WSDOT interchange design project for Rudkin Road and Valley Mall Boulevard intersection.

Project Description: Widening of Rudkin Road from the existing two-lanes to three lanes, including continuous left turn lane. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use, consistent with Bike Plan Map.
- Illumination: Urban level lighting standards would be incorporated
- Intersections at Grade: Left turn channelization at all street intersections.
- Transit: Not used by Transit at this time.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Walk-to-School Route: Rudkin Road is not a Walk-to-School Route.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$109,000						
ROW		\$0						
Construction		\$1,084,000						
TOTAL EXPENSES		\$1,193,000						
SOURCES OF FUNDS								
Development Mitigation		\$0						
Federal Funds - other								
Surface Transportation Funds (Urban)		\$587,000						
State Funds - TTP		\$500,000						
Arterial Improvement Project Funds		\$0						
Local Funds		\$106,000						
TOTAL FUNDS		\$1,193,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian, bicycle components, as well as continuous left turn lane

Preservation: 2005 Pavement Condition Index of 48.

Economic Development: Yes. Rudkin Road is a significant freight service road with various trucking related businesses. The intersection of Rudkin Road with Valley Mall Blvd is a critical development project and bottleneck for local traffic congestion.

MULTI-MODAL PROJECTS: TRANSIT & PATHWAYS

This table represents a list of project priorities from the City of Yakima Bicycle and Pedestrian Advisory Committee, 2005. Project selection of these listed projects will be on an annual basis and will depend upon availability of grant programs from various State and Federal programs.

<u>Project</u>	<u>From</u>	<u>To</u>	<u>Description</u>	Est Cost (000)	Length (mi)
Annual ADA Ramp Improvements			Upgrade of ramps to ADA standards at Arterial Street intersections, selected on annual basis	200	
CBD Pedestrian Connector			Improve pedestrian conditions in CBD	2,000	
Sidewalk Repair and Replacement			Annual program, locations selected based on condition, safety	250	
16th Ave Pedestrian Crossing	Bonnie Doone	YVCC	Install in-pavement flasher or similar system	50	
N 8th St Pedestrian Crossing	Convention Center		Install in-pavement flasher or similar system	50	
16th Ave & Nob Hill Intersection			Improve pedestrian conditions and safety	100	
Bike Route Upgrade			Upgrade lane markings and signage. Annual program, locations selected based on condition, safety	50	
Lincoln Ave	24th Ave	40th Ave	Resurface and Restripe from 4- lanes to 3-lanes with Bike Lane, missing sidewalks	750	1
6th St	Nob Hill Blvd	Lincoln Ave	Resurface and Restripe with bike lane, missing sidewalks	920	0.92
Greenway Path Connectors	Fruitvale Blvd	Yakima Greenway	Intersection improvement and pathway extension	300	0.15
Canal Path Extension	McGinness Park	Naches Ave	Cover open irrigation canal with bike/ped pathway	500	0.63
Nob Hill Blvd	3rd Ave	12th Ave	Missing sidewalks on south side of Principal Arterial	2,125	0.73
Beech St - 18th St Connector	Fair Ave	18th St	Missing sidewalks, connects Sarge Hubbard Park/Greenway to Kiwanis Park	195	0.43
S 32nd Ave	Tieton Dr	Nob Hill Blvd	Missing sidewalks on Collector Arterial	221	0.49
Summitview Ave	7th Ave	40th Ave	Missing sidewalks on south side of Principal Arterial	350	0.75
80th Avenue	Tieton Dr	Zier Rd	Sidewalks, shared bike lane	550	1.2
Powerhouse Road	Lincoln Ave	40th Ave	Sidewalks, shared bike lane	550	1.2
Mead Ave	Rudkin Rd	1st St	Missing sidewalks, bike lane improvement	420	0.94
Zier Rd	72nd Ave	80th Ave	Missing sidewalks, shared bike lane	250	0.5
Englewood Ave	16th Ave	66th Ave	Missing sidewalks, shared bike lane	2,400	3.2
16th Ave	SR 12	Washington Ave	Missing sidewalks, bike lane improvement	2,700	3.6
40th Ave	SR 12	Washington Ave	Missing sidewalks, bike lane improvement	2,400	3.2
Terrace Heights, Greenway Connector	Under I-82 to Greenway		Provide pathway connection between Yakima CBD, I-82 Frontage Road, Yakima Greenway and Terrace Heights		

Project: William O. Douglas Pathway

Project Number:

Project Summary: This project includes the construction and connection of existing trails, sidewalks and paths to form a continuous trail system from the Yakima Valley Trolley Barn at 3rd Avenue and Pine to the Cowiche Canyon. The trail outside of the city continues on to Goose Prairie.

Justification: Connection and construction of pedestrian facilities to mark those areas walked by William O. Douglas as a young man growing up in the Yakima Valley.

Status: Preliminary Engineering underway. Construction, right of way and development to begin in 2006.

Links to Other Projects: Related projects include the following:

- Greenway
- Cowiche Trail
- Private Franchised Transportation
- Railways

Project Description: This project is at the preliminary design level. The goal is to create a pedestrian system that connects the area near the Yakima Valley Transportation Barn (Electric Trolley) and areas to the west in the Cascade Mountain Range along pathways that William O. Douglas walked as a child and young man in the Yakima Valley. Transportation project components include:

- Bicycle Facilities: Some areas may allow mountain bikes.
- Signs or trailblazer markers: Signs would be installed to mark the trail or pathways.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$870,000	\$870,000				
ROW							
Construction		\$4,000,000	\$4,000,000				
TOTAL EXPENSES		\$4,870,000					
SOURCES OF FUNDS							
Development Mitigation		\$0					
Surface Transportation Funds Urban							
Arterial Improvement Project Funds							
Other		\$4,870,000	\$4,870,000				
Local Funds							
TOTAL FUNDS		\$4,870,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: No.

Preservation: Not applicable.

Economic Development: Yes.

Project: West Lincoln Avenue Sidewalks 56th to 29th Avenue

Project Number:

Project Summary: This project includes minor widening of an existing facility to provide sidewalk on both sides of Lincoln Avenue from 56th Avenue to 29th Avenue.

Justification: Reconstruction of existing street for pedestrian safety and mobility needs.

Status: Preliminary Engineering. Project may begin in 2010.

Links to Other Projects: Related projects include the following:

- Yakima Wastewater
- Private Franchised Utilities
- Yakima Water Division - Facility adjustments, relocation and/or replacements. Irrigation services may need replacement.

Project Description: Widening of Lincoln Avenue to provide pedestrian mobility by the construction of missing sidewalk sections on both sides of the street between 56th Avenue and 29th Avenue. Two elementary schools are located along this section of Lincoln and have several children walking to school each day. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use, consistent with Bike Plan Map.
- Illumination: Continue standard levels along street to provide consistent pedestrian and street level development standards.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Reduction of Travel Lanes: Lincoln Avenue will be evaluated for possible conversion from 4-lanes to 3-lanes
- Walk to School Route: This portion of Lincoln Avenue has two walk-to school zones. Robertson Elementary School has crosswalks between 28th Avenue and 32nd Avenue; Gilbert Elementary School has crosswalks near 44th Avenue.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$40,000				\$40,000	
ROW		\$80,000				\$80,000	
Construction		\$524,000					\$524,000
TOTAL EXPENSES		\$644,000					
SOURCES OF FUNDS							
Development Mitigation		\$0					
Surface Transportation Funds (Urban)		\$556,000				\$102,000	\$454,000
Arterial Improvement Project Funds							
Local Funds		\$88,000				\$18,000	\$70,000
TOTAL FUNDS		\$644,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian and bicycle components.

Preservation: Not applicable

Economic Development: No.

Project: Yakima Avenue and Historic District Pedestrian Projects

Project Number:

Project Summary: This project includes the removal and replacement of sidewalks, sections of curb and gutter, streetlights, and ADA facilities.

Justification: Reconstruction of existing sidewalks for safety and economic revitalization.

Status: Design, under construction in 2006. To be developed over several years in phases.

Links to Other Projects: Related projects include the following:

- Yakima Water – Facility adjustments, repair and /or replacement.
- Yakima Wastewater
- Private Franchised Utilities

Project Description: Removal and replacement of sidewalks and sections of curb and gutter, streetlights and ADA facilities along Yakima Avenue from Front Street to 9th Street, on Front Street from Yakima Avenue to ‘A’ Street, and on 1st Street from ‘A’ to Yakima Avenue. Period lighting will be installed to connect the Front Street Historical District with the tourism and convention areas to the east near 9th Street. Decorative brick, art fences, banner poles and planters will create a sense of place to encourage the revitalization of the Yakima Downtown. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Bike racks are to be installed.
- Illumination: Pedestrian and street level lighting will be installed.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Traffic Control Signals: Existing signals exist; minor modifications will be made to the location of pedestrian push buttons for ADA access issues. A signal phase will be added at 4th Street and Yakima Avenue for the north side of the intersection.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$870,000	\$870,000				
ROW							
Construction		\$4,000,000	\$4,000,000				
TOTAL EXPENSES		\$4,870,000					
SOURCES OF FUNDS							
Development Mitigation		\$0					
Surface Transportation Funds Urban							
Arterial Improvement Project Funds							
Other		\$4,870,000	\$4,870,000				
Local Funds							
TOTAL FUNDS		\$4,870,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian and bicycle components.

Preservation: Not applicable.

Economic Development: Yes.

Project: Beech Street Pedestrian Connection – Fair Ave to Chalmers Street

Project Number:

Project Summary: This project includes minor widening of an existing facility to provide a pedestrian connection under I-82 from the Yakima Greenway and shopping center on the east side of the Interstate to the Kiwanis Park and other destinations in Yakima.

Justification: Reconstruction of existing street for pedestrian safety and mobility needs.

Status: Preliminary Engineering. Project may begin in 2009.

Links to Other Projects: Related projects include the following:

- Yakima Wastewater
- Yakima Water Division – No waterline in Beech street other than minor stub out at Fair Ave. Possible new waterline.
- Private Franchised Utilities
- Widening of I-82

Project Description: Widening of Beech Street to provide pedestrian connection under I-82 to Yakima Greenway and shopping center on the east side of the Interstate to Kiwanis Park and other destinations in Yakima. Stormwater improvements are also part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Bicycle Facilities: Curb-lanes of 14-feet in width to accommodate share use, consistent with Bike Plan Map.
- Illumination: Continue standard levels along street to provide consistent pedestrian and street level development standards.
- Transit: Designated bus stops as designated by Yakima Transit to serve adjacent land uses.
- Sidewalks: Walkways for pedestrians on both sides of roadway includes curbs, gutters, and access ramps.
- Walk-to-School Route: This portion of Beech Street is not a Walk to School route.

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$51,000				\$51,000	
ROW		\$170,000				\$170,000	
Construction		\$454,000					\$454,000
TOTAL EXPENSES		\$675,000					
SOURCES OF FUNDS							
Development Mitigation		\$0					
Surface Transportation Funds (Urban)		\$595,000				\$195,000	\$400,000
Arterial Improvement Project Funds							
Local Funds		\$80,000				\$26,000	\$54,000
TOTAL FUNDS		\$675,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian and bicycle components.

Preservation: Not applicable

Economic Development: No.

Project: Annual Yakima Transit Operating Program

Project Number:

Project Summary: This project includes the annual operating and maintenance program for Yakima Transit. As a transportation component, Transit expenditures are included in the City of Yakima 6-Year Transportation Improvement Program and are a vital portion of the transportation network in the Yakima Urban Area. .

Justification: Annual expenditures of operation, route and equipment maintenance, planning and services, including purchase of new busses, demonstration service program to Selah and Union Gap.

Status: Annual program adopted during each Budget session.

Links to Other Projects: Related projects include the following:

- Arterial Street Maintenance Program
- ADA sidewalk ramp update program
- Sidewalk and pathway construction and repair
- Congestion improvement programs

Project Description: Yakima Transit offers bus and related public transit services to the greater Yakima Urban Area. Certain required ADA compliant services are contracted with private providers.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$2,430,000	\$405,000	\$405,000	\$405,000	\$405,000	\$405,000	\$405,000
ROW		\$0						
Construction/Services		\$15,498,000	\$2,583,000	\$2,583,000	\$2,583,000	\$2,583,000	\$2,583,000	\$2,583,000
TOTAL EXPENSES		\$17,928,000	\$2,988,000	\$2,988,000	\$2,988,000	\$2,988,000	\$2,988,000	\$2,988,000
		\$0						
SOURCES OF FUNDS		\$0						
Development Mitigation		\$0						
Federal Funds - other		\$9,048,000	\$1,508,000	\$1,508,000	\$1,508,000	\$1,508,000	\$1,508,000	\$1,508,000
Surface Transportation Funds (Urban)		\$0						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$0						
Local Funds		\$8,880,000	\$1,480,000	\$1,480,000	\$1,480,000	\$1,480,000	\$1,480,000	\$1,480,000
TOTAL FUNDS		\$17,928,000	\$2,988,000	\$2,988,000	\$2,988,000	\$2,988,000	\$2,988,000	\$2,988,000

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes- Transit availability provides alternatives to single vehicle trips and offers mode choices.

Safety Project: Transit services are used by many handicapped citizens, elderly and youth which reduce the incidence of some high risk driving groups

Preservation: Preservation of the fleet is incorporated into the annual budget.

Economic Development: Yes. Provides valuable component of the transportation system for the Urban Area

ANNUAL OPERATING AND MAINTENANCE PROJECTS

Project: Annual Arterial Maintenance Program

Project Number:

Project Summary: This project includes an annual pavement maintenance program, which consists of pothole repairs, wheel-path grinding, crack-filling, chip seal and asphalt overlays. The program's sole purpose is asphalt rehabilitation and preservation.

Justification: Preservation and rehabilitation programs a core component of being good stewards of the infrastructure investments of the citizens. The only alternative to preservation and maintenance is complete reconstruction of streets. The cost of a preservation, rehabilitation and reconstruction increases dramatically as streets deteriorate. (Chip seal estimated at \$30,000 per lane mile – reconstruction estimated at \$1,000,000 per lane mile.)

Status: Annual program adopted during 2006 Budget.

Links to Other Projects: Related projects include the following:

- Nob Hill Water
- Yakima Water Division – facility adjustments, relocations and/ or replacements.
- Yakima Wastewater
- Private Franchised Utilities
- Annual Capital Projects

Project Description: A Pavement Management System shall be used to determine the pavement condition index, new ratings will be conducted every three years. Pavement surface imperfections will be addressed through specific area repairs, wheel-path grinding and patching, crack-filling and one to three applications of a chip seal. In some circumstances a complete grind and overlay may be required. Grind and overlays will be restricted to roadway sections that have degraded to a point beyond rehabilitation through the other measures noted above:

- **Bicycle Facilities:** Streets will be evaluated to determine if bicycle facilities are included in the city's comprehensive plan. Where feasible wide curb lanes or marked bicycle lanes will be considered.
- Lane line and crosswalk markings will be replaced as determined by the supervising traffic engineer.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$0			\$0			
ROW		\$0			\$0			
Construction		\$3,600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
TOTAL EXPENSES		\$3,600,000						
SOURCES OF FUNDS								
Development Mitigation								
REET 2			\$400,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Gas Tax- New			\$25,000	\$40,000	\$45,600	\$50,000	\$50,000	\$50,000
Property Tax			\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Surface Transportation Funds (Urban)								
Arterial Improvement Project Funds								
Debt service retirement						\$122,000	\$122,000	\$122,000
Local Funds								
TOTAL FUNDS		\$0	\$625,000	\$440,000	\$445,600	\$572,000	\$572,000	\$572,000

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Possible, minor safety measures may be implemented.

Preservation: Varied

Economic Development: Yes. Provides viable transportation system for the movement of goods and people.

Project: Annual Unclassified Street Maintenance Program

Project Number:

Project Summary: This project includes an annual pavement maintenance program, which consists of pothole repairs, wheel-path grinding, crack-filling, and chip seal. The program's sole purpose is asphalt rehabilitation and preservation. The Program will operate on an 11-year cycle.

Justification: Preservation and rehabilitation programs a core component of being good stewards of the infrastructure investments of the citizens. The only alternative to preservation and maintenance is complete reconstruction of streets. The cost of a preservation, rehabilitation and reconstruction increases dramatically as streets deteriorate.

Status: Annual program started in 2005.

Links to Other Projects: Related projects include the following:

- Nob Hill Water
- Yakima Water Division – water and irrigation facility adjustments, relocations and /or replacements.
- Yakima Wastewater
- Private Franchised Utilities
- Annual Capital Projects
-

Project Description: Pavement surface imperfections will be addressed through specific area repairs, wheel-path grinding and patching, crack-filling and one to three applications of a chip seal. In some circumstances a complete grind and overlay may be required. Grind and overlays will be restricted to roadway sections that have degraded to a point beyond rehabilitation through the other measures noted above:

- **Bicycle Facilities:** Streets will be evaluated to determine if bicycle facilities are included in the city's comprehensive plan. Where feasible wide curb lanes or marked bicycle lanes will be considered.
- Lane line and crosswalk markings will be replaced as determined by the supervising traffic engineer.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$0			\$0			
ROW		\$0			\$0			
Construction		1,200,000	200,000	200,000	200,000	200,000	200,000	200,000
TOTAL EXPENSES		1,200,000						
SOURCES OF FUNDS								
Development Mitigation								
REET 2			\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Gas Tax- New			0					
Property Tax								
Surface Transportation Funds (Urban)								
Arterial Improvement Project Funds								
Debt service retirement								
Local Funds								
TOTAL FUNDS		\$0	\$200,000	200,000	200,000	200,000	200,000	200,000

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Possible, minor safety measures may be implemented.

Preservation: Varied

Economic Development: Yes. Provides viable transportation system for the movement of goods and people.

Project: School Safety Projects – Citywide improvements

Project Number:

Project Summary: This project includes the installation of warning flashers, signing, pavement marking and other features associated with school pedestrian crossings and Walk-to-School zones.

Justification: Safety improvements at public or private school pedestrian crossings, to be identified on an annual basis. Locations for projects include recommendations from the Yakima School District, West Valley School District or one of the private schools in the Urban Area. Criteria for project selection will vary annual depending upon availability of grant funding from the Washington Traffic Safety Commission or other School Safety programs sponsored by the Washington State Department of Transportation.

Status: Preliminary Engineering. Project Selection on an annual basis

Links to Other Projects: Related projects include the following:

- Yakima Wastewater
- Private Franchised Utilities
- Yakima Water and Irrigation

Project Description: This project includes the installation of warning flashers, signing and other features associated with school pedestrian crossings. Stormwater improvements may also be a part of the project, but not included in the list of project components. Costs of the project include construction and inspection components. Transportation project components include:

- Sidewalks: Walkways for pedestrians includes curbs, gutters, and access ramps.
- Traffic Control Devices: Safety Flasher, signals or other device determined on a case-by-case basis. Improved signage, street striping, crosswalk marking or other innovative measures may be investigated.
- Education programs: may be in conjunction with schools or other non-profit organizations

Funding Sources:

Expenses and Sources							
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010
EXPENSES							
PE		\$12,000	\$12,000				
ROW							
Construction		\$228,000	\$228,000				
TOTAL EXPENSES		\$240,000					
SOURCES OF FUNDS							
Development Mitigation		\$0					
PSMP???		\$200,000	\$200,000				
Arterial Improvement Project Funds							
Local Funds		\$40,000	\$40,000				
TOTAL FUNDS		\$240,000					

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No
 Safety Project: Yes. Provides pedestrian components.
 Preservation: Not applicable.
 Economic Development: No.

Project: Annual Traffic Signal System Upgrades – Citywide improvements

Project Number:

Project Summary: This project includes the upgrading of existing traffic signals, including replacement of vehicle or pedestrian detection devices, upgrading or repair of controller cabinets and components, upgrading of traffic signal display heads to include left turn phasing or other changes. Project selection may be the result of changing vehicle or pedestrian conditions that require revisions to the existing operation; or may be necessary to preserve existing operation of the traffic signal.

Justification: Identified safety, congestion or maintenance improvements. Project selection may be result of vehicle collision data analysis, traffic signal warrant analysis, changing traffic volumes or patterns, or other modified safety issues.

Status: Annual evaluation process to select priority locations.

Links to Other Projects: Related projects include the following:

- Private Franchised Utilities
- Yakima Water and Irrigation

Project Description: This project includes the installation or repair of traffic signal components, including vehicle or pedestrian detection, controller cabinet upgrade or repairs and pedestrian or vehicle signal head displays. Changes in the signal system may be required due to age or condition of equipment, safety concerns or in response to improving traffic flow to handle congestion conditions. Examples of possible future Traffic Signal projects in this category include:

N 1st St & “I” Street
56th Avenue and Summitview Avenue
3rd Avenue and Washington Avenue
48th Avenue and Summitview Avenue
48th Avenue and Tieton Drive
72nd Avenue and Washington Avenue
72nd Avenue and Mead Avenue
North 40th Avenue & River Road
Custer St & Lincoln Avenue

Transportation project components include:

- Pedestrian needs including audible signals and ADA sidewalk ramps may be added if necessary
- Lane line and crosswalk markings will be replaced as determined by the supervising traffic engineer.
- Illumination: Changes to street lighting may be required if video detection is added in an intersection with inadequate lighting levels.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$120,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
ROW		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Construction		\$1,080,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000	\$180,000
TOTAL EXPENSES		\$1,200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
		\$0						
SOURCES OF FUNDS		\$0						
Development Mitigation		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Federal Funds - other		\$0						
Surface Transportation Funds (Urban)		\$960,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000
State Funds - TTP		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Arterial Improvement Project Funds		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local Funds		\$240,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
TOTAL FUNDS		\$1,200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: Yes – changes in system often in response to congestion

Safety Project: Yes, if collision history identifies a correctable safety problem

Preservation: Maintenance and upgrade of the signal system is vital to efficient traffic flow

Economic Development: Yes – traffic flow and efficient services are indicators of a healthy local street system.

Project: Paved Shoulders

Project Number:

Project Summary: This project includes hard surfacing of existing unpaved shoulders on streets within the Yakima Urban Area. Priority will be given to classified streets that are located on or near Walk-to-School Routes or other significant pedestrian generators, where no sidewalk is present or planned in the near future.

Justification: Air quality improvement and safety measure.

Status: Local selection on a priority basis, where right of way is available

Links to Other Projects: Related projects include the following:

- Nob Hill Water
- Yakima Wastewater
- Private Franchised Utilities
- Coordination with school districts.

Project Description: Hard surfacing of unpaved gravel shoulders may be accomplished using several different treatments. As a walking surface, these are considered temporary until sidewalk construction can be implemented. As an air quality measure, they provide immediate relief from fugitive street-related dust. Material and construction will require storm-water component. Costs of the project include construction and inspection components. Transportation project components include:

- Stormwater: Design of paved shoulders will require stormwater component.
- Bicycle Facilities: Paved shoulders will improve cycling conditions, but are not considered a dedicated bike lane.
- Illumination: No changes to street lighting are included with this program.
- Transit: Transit use will be enhanced in areas that currently do not have sidewalks.
- Sidewalks: Paved shoulders are considered temporary surfaces until such time that a permanent sidewalk may be installed..
- Underground Utilities: Some coordination with utility companies will be necessary, as a base is established for the paved shoulder.

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$10,000						
ROW		\$0						
Construction		\$100,000						
TOTAL EXPENSES		\$110,000						
SOURCES OF FUNDS								
Development Mitigation		\$0						
Federal Funds - other		\$50,000						
Surface Transportation Funds (Urban)		\$0						
State Funds - TTP		\$0						
Arterial Improvement Project Funds		\$25,000						
Local Funds		\$25,000						
TOTAL FUNDS		\$100,000						

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes. Provides pedestrian, bicycle components

Preservation: Interim measure.

Economic Development: Air Quality measures and walk-ability should enhance Economic Development.

Project: Bridge Preservation and Repair Program

Project Number:

Project Summary: This proposes a maintenance and preservation program for structures such as Nob Hill Overpass, Walnut Underpass, Yakima Avenue Overpass, and other minor bridge structures in the city of Yakima.

Justification: Preservation and rehabilitation programs a core component of being good stewards of the infrastructure investments of the citizens. The only alternative to preservation and maintenance is complete reconstruction of structures. The cost of a preservation, rehabilitation and reconstruction increases dramatically as these structures deteriorate.

Status: Inspection Program through WSDOT.

Links to Other Projects: Related projects include the following:

- Nob Hill Water
- Yakima Wastewater
- Private Franchised Utilities
- Annual Capital Projects

Project Description: The Yakima Avenue Overpass, near 18th Street and the Yakima River currently has weight restrictions; other structures have noted deficiencies that will need to be addressed. However, no dedicated funding source has been identified:

Funding Sources:

Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$0						
ROW		\$0						
Construction		0						
TOTAL EXPENSES		0						
SOURCES OF FUNDS								
Development Mitigation								
REET 2								\$200,000
Gas Tax- New			0					
Property Tax								
Surface Transportation Funds (Urban)								
Arterial Improvement Project Funds								
Debt service retirement								
Local Funds								
TOTAL FUNDS								

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Possible, minor safety measures may be implemented.

Preservation: Varied

Economic Development: Yes. Provides viable transportation system for the movement of goods and people.

Project: Annual Sidewalk Repair/ ADA Transition Program

Project Number:

Project Summary: This project includes an annual repair and replacement of public sidewalks and associated ADA ramps. The program's sole purpose is rehabilitation and preservation. The responsibility of maintaining a safe walking surface on sidewalks belongs to the adjacent property owner. However, the city recognizes the benefit of providing safe walking conditions and to that end funds an annual 50/50 Sidewalk Program to share with property owners the cost of replacing sections of existing sidewalks.

ADA Transition Program funds the replacement of existing broken ADA ramps or the installation of new based on criteria contained in the City's Transportation Plan.

Justification: Preservation and rehabilitation programs a core component of being good stewards of the infrastructure investments of the citizens. The only alternative to preservation and maintenance is complete reconstruction of streets. The cost of a preservation, rehabilitation and reconstruction increases dramatically as sidewalks deteriorate.

Status: Annual 50/50 Sidewalk Program funded at \$50,000.
ADA Transition Plan funded beginning in 2007 at \$20,000.

Links to Other Projects: Related projects include the following:

- Nob Hill Water
- Yakima Water Division – water and irrigation facility adjustments, relocations and/or replacements
- Yakima Wastewater
- Private Franchised Utilities
- Annual Capital Projects
- Transit

Description: Property owners will be contacted based on citizen complaints or staff observations of the need to replace sidewalks that are a possible tripping hazard. ADA ramp replacement or installation will be based on priorities arrived at through the criteria stated in the city's transportation plan.

Funding Sources:

50/50 Sidewalk Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$0			\$0			
ROW		\$0			\$0			
Construction		\$300,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
TOTAL EXPENSES		\$300,000						
SOURCES OF FUNDS								
Development Mitigation								
REET 2			\$0	\$0	\$0	\$0	\$0	\$0
General Fund		\$300,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Property Tax								
Surface Transportation Funds (Urban)								
Arterial Improvement Project Funds								
Debt service retirement								
Local Funds								
TOTAL FUNDS		\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

ADA Transition Program Expenses and Sources								
Item	Prior to 2006	Period Total	2006	2007	2008	2009	2010	2011
EXPENSES								
PE		\$0			\$0			
ROW		\$0			\$0			
Construction		\$220,000	\$0	\$20,000	\$25,000	\$25,000	\$25,000	\$25,000
TOTAL EXPENSES		\$220,000						
SOURCES OF FUNDS								
Development Mitigation								
REET 2			\$0	\$0	\$0	\$0	\$0	\$0
Gas Tax - New		\$220,000	\$0	\$20,000	\$25,000	\$25,000	\$25,000	\$25,000
Property Tax								
Surface Transportation Funds (Urban)								
Arterial Improvement Project Funds								
Debt service retirement								
Local Funds								
TOTAL FUNDS		\$0	\$0	\$20,000	\$25,000	\$25,000	\$25,000	\$25,000

TRANSPORTATION PLAN CATEGORY

Capacity / Concurrency Project: No

Safety Project: Yes.

Preservation: Varied

Economic Development: N/A

