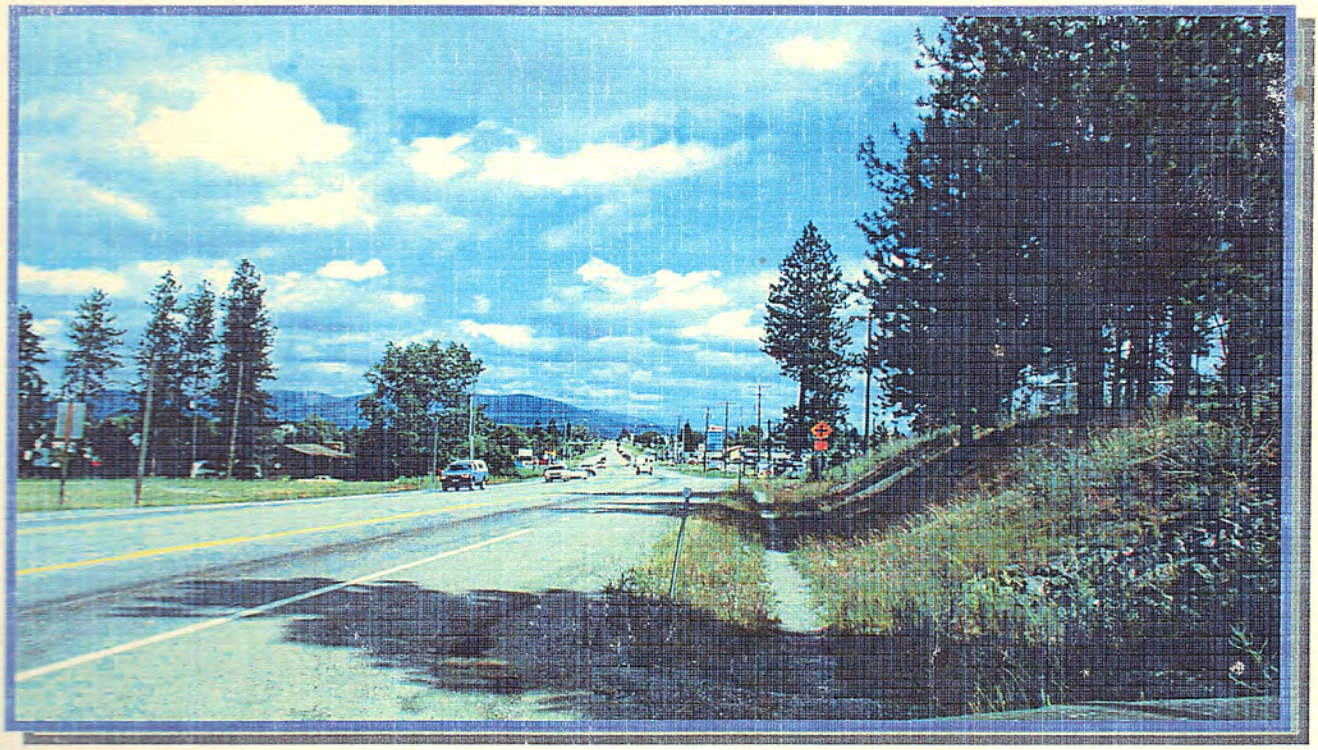

Highway 41 Corridor Master Plan

A Guide for Land Use and Transportation Improvements

Prepared for the City of Post Falls

April 2002

TCSP

Transportation and Community and System Preservation Pilot Program

Funded by the Federal Highway Administration

Highway 41 Corridor Master Plan

A Guide for Land Use and Transportation Improvements

Prepared for:

City of Post Falls

April 2002

Prepared by:

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Funded under a grant by the Federal Highway Administration

TCSP
Transportation and Community and System Preservation Pilot Program

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Development of the Plan was a collaborative effort with the Project Team, the Project Advisory Committee, and the public. Sincere thanks to all involved in Plan development.

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Introduction

Population growth within Kootenai County has occurred during the past ten years at an approximate 54-percent rate and is projected to continue with approximately a 50 percent increase by the year 2020 with resulting increases in single (79 percent) and multi-family (81 percent) housing. The impacts of growth within the Rathdrum Prairie, and within the Highway 41 Corridor in particular, will impact land use and the resulting traffic generation and distribution. Traffic volumes are projected to nearly double within that time frame. Access management is a key component of the preservation of the highway function. The needs of the area to preserve and manage highway function and access, while enhancing current and future development potential have been addressed through a concerted effort with the agencies within the corridor and a public outreach program with affected stakeholders. Agencies of local and regional jurisdiction and property owners have a vested interest in the continued management of the corridor to sustain its functional integrity and maintain the community's quality of life. To further this interest, community values and visions, engineering alternatives, community acceptance, and fundable solutions were used to determine the blueprint for the Prairie corridor development.

Land use and transportation policies guide both private investment and public expenditures within the Highway 41 corridor. Comprehensive land use plans and zoning ordinances set a framework for how and where development will occur, and how development will be coordinated and interact with the transportation system. The plan will guide corridor development and provide a framework for policy direction for the jurisdictions along the corridor for future implementation and controls.

The Corridor Plan study area (see Figure 1) is the area bounded by Interstate 90 (I-90) on the south, Lancaster Road to the north, Greensferry Road to the west, and Meyer Road to the east. The area is generally one mile on either side of Highway 41. The corridor is approximately a 6-mile-long section connecting the Cities of Post Falls and Rathdrum, with agricultural uses still being practiced within the corridor. Both community's Areas of City Impact are within the study area, with unincorporated Kootenai County in the middle.

Project acceptance will control the utility of the corridor for existing users, as well as serve to attract future development to the area. The purpose of the Highway 41 Corridor Plan is to integrate land use and transportation plans which sustain community development; build an environmentally sound plan for preserving highway integrity and functions, while enhancing safe local access options; provide off corridor access alternatives which compliment local development; maintain commercial viability; coordinate jurisdictional and public interests; and provide direction for the adjoining jurisdictions in future management of the corridor.

Plan Development

Evolution of the plan was a cooperative effort in determining possible land use scenarios and supportive transportation infrastructure. Several efforts occurred over the years that resulted in agreements between the agencies and the Idaho Transportation Department (ITD) regarding Highway 41 have resulted in development occurring primarily at the north and south end of the corridor adjoining both Post Falls and Rathdrum. Limitation on large-scale development, due to limited wastewater treatment alternatives, has slowed Prairie development. Farming activities on the Prairie have gradually declined part due to limitation on field burning and land sales of prior agricultural lands. The evolution of the scope of the project was developed as jurisdictions, the Project Advisory Committee, and the public came to agreement on a preferred alternative.

Figure 1

orridor Study Area

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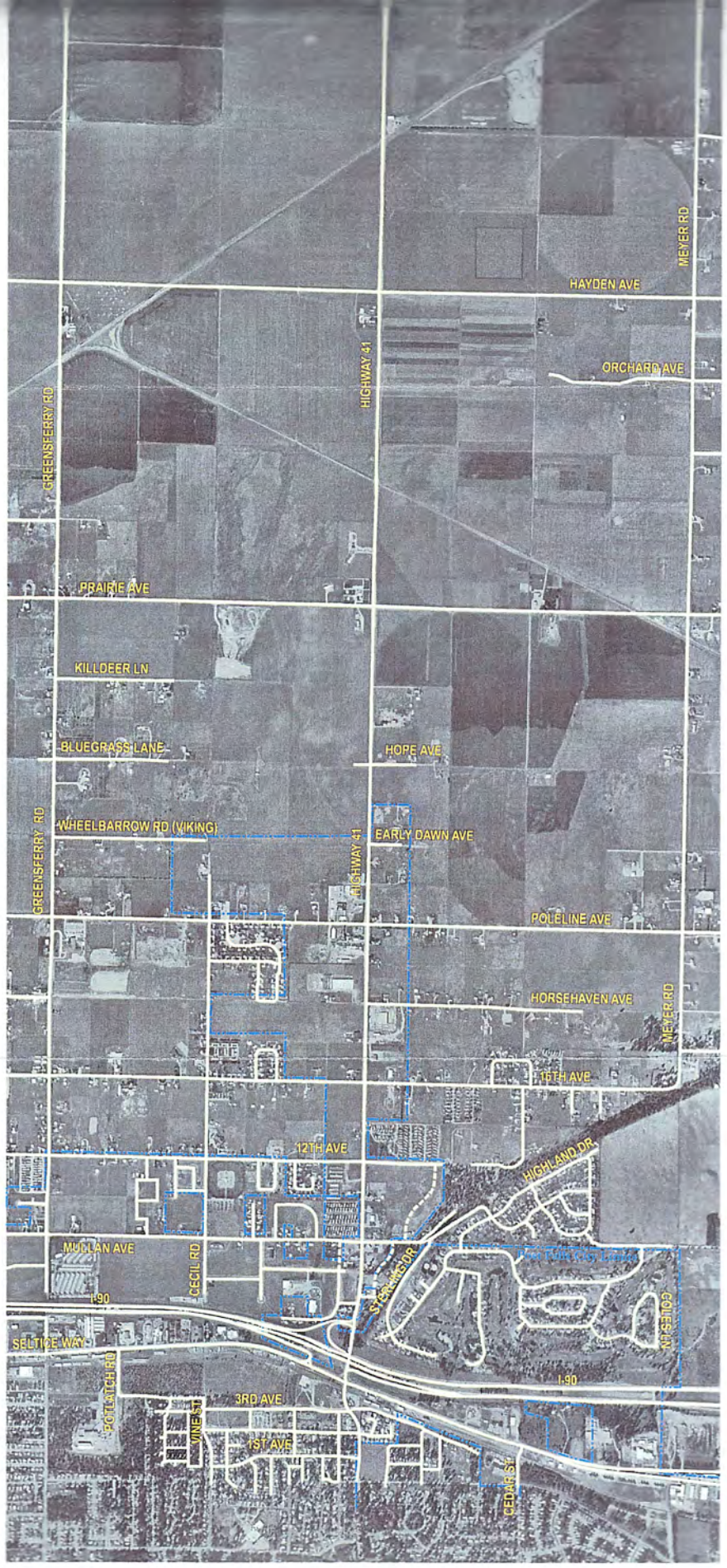
Not To Scale



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Public Involvement

The main goal of the project was to work with the public to set plan alternatives and develop a transportation network that would serve the land use alternatives. Concerns relating to the implementation schedule and how the preferred alternative would impact individual property were central points of discussion. Within the corridor, Post Falls had recently annexed adjoining parcels (approximately 300 acres) to the City. A Project Advisory Committee of corridor stakeholders consisting of property and business owners within the corridor served as a study group for the process. Through public involvement, the plan engaged the community, corridor property owners, and users and built consensus towards land use and transportation solutions within the corridor. The process addressed key issues: (1) development and identification of corridor issues; (2) evaluation of the opportunities and constraints as part of the alternatives analysis; (3) understanding and evaluation of transportation and land use alternatives; and (4) funding options. The public involvement plan was set to educate key audiences along and adjacent to the corridor on a variety of issues including land use, alternative access options, corridor preservation, access management, transportation safety, freight mobility, urban growth, commercial viability of the corridor, and environmental issues, as they relate to Highway 41.

Highway 41 Public Meeting

Methods of engagement with the public included open house meetings, informational postings on the City of Post Falls website, and articles in local newspapers. Goals of the study were developed at the onset and reviewed throughout the process. The goals included:

- Maximize coordination of jurisdictional interests;
- Provide safe corridor circulation alternatives that maximize highway preservation;
- Direct and coordinate development opportunities through access management and policy directions;
- Protect agricultural /open space areas along the corridor;
- Provide multi-modal facilities along the corridor;
- Provide land use and transportation alternatives that address community values;
- Reduce congestion on Highway 41 and intersecting roadways;
- Minimize impacts to farmland/operations;
- Minimize impacts to residential properties;
- Encourage mixed-use development along the corridor;
- Minimize costs to acquire future right-of-way (ROW) and build new road improvements;
- Maximize use of Transportation System Management strategies along the corridor to improve safety and capacity (traffic signal system coordination and access management improvements); and
- Protect and preserve natural resources.

Several issues and concerns emerged in the study as a result of input from the Project Advisory Committee, agency concerns within the corridor, and from the general public.

These issues provided the basis of the plan analysis and served as the over-riding guidelines for development of land use and transportation alternatives.

- Access Management/Secondary Access Roadways
- Safety
- ROW Width
- Property Values
- Land Use- Current and Future
- Coordination of Agencies/Studies
  - Bridging the Valley
  - US 95 Plan - Mica Creek to Ohio Match Road
  - Rathdrum Prairie Open Space Project
  - Rathdrum Prairie Implementation Strategy
  - Coeur d'Alene 2020
  - Formation of a Municipal Planning Organization in Kootenai County
- Environmental and Development Standards
- Quality of Life
- Economic Development
- Open Space Retention
- Water Quality/Aquifer Protection
- Wastewater Treatment

Land Use Alternatives

Existing Comprehensive Plans and Zoning

Each of the jurisdictions within the corridor operates under their own adopted Comprehensive Plans and Zoning Ordinances. In general, the jurisdictional zoning applicable to the Highway 41 corridor designates a majority of the land (generally located north of Prairie Avenue) for agricultural purposes. Commercial development is primarily located adjacent to Highway 41 within the Cities of Post Falls and Rathdrum, with residential land uses planned for those areas extending east and west of the commercial areas (Figure 2).

While development regulations within respective zoning codes are not consistent from one jurisdiction to another, Comprehensive Plans generally indicate similar development plans for residential, commercial, and agricultural lands. The Kootenai County Future Land Use Plan (March 1999) designates small pockets of land for commercial development at the intersections of Highway 41 with Hayden and Prairie Avenues. All agencies support and emphasize the need to protect the Rathdrum Prairie Aquifer as a sole source aquifer. Equally important on the Rathdrum Prairie is the concern for retention of open space. Open space designation can be used for passive (natural vegetation areas), active (golf courses), or agricultural uses. Open space can also be viewed as building setback areas and landscaping within a project. Quality of life issues have become central within planning efforts and will continue to drive future planning within the Rathdrum Prairie.

Highway 41 looking north to Mullan Avenue

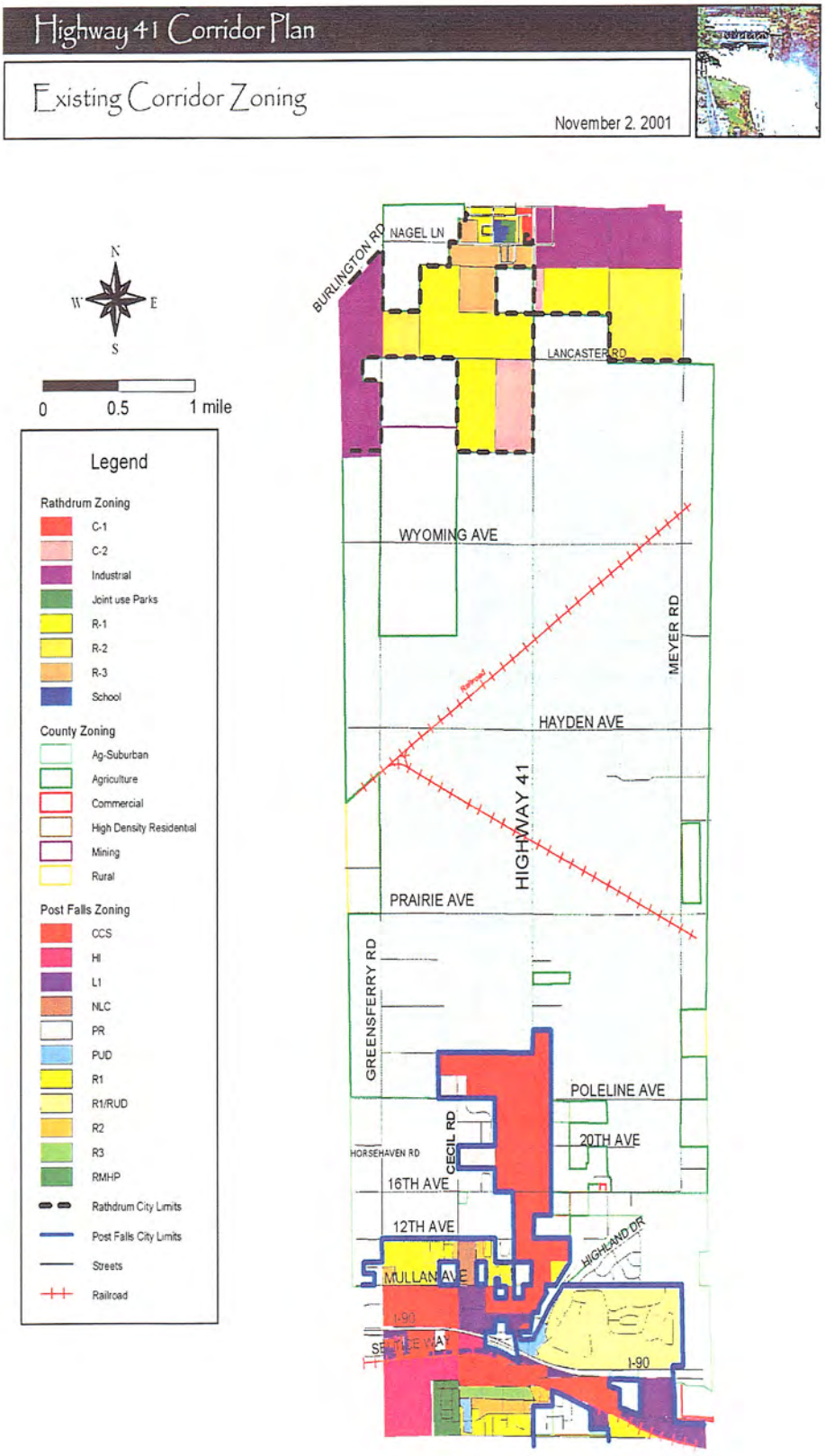
Development Trends

During recent years, pressure for commercial development along Highway 41 has increased, primarily between Mullan and Poleline Avenues. Very little commercial activity has occurred or will occur north of Prairie Avenue due to lack of public utilities, primarily public wastewater service to the unincorporated areas of the County. Recent residential development has occurred in both Post Falls and Rathdrum and within their respective Areas of City Impact, primarily to the west of Highway 41. Existing land use is generally concentrated along roadways with large tracts of undeveloped or farmed land within the center of the sections (Figure 3).

Other developments within the corridor study area include commercial/industrial uses adjacent to I-90 and south of Mullan Avenue, limited commercial development along Highway 41, redevelopment of residential uses along the highway, build-out of a 300-unit manufactured home park in Rathdrum, and two planned subdivisions within Rathdrum, with 100 maximum combined single-family housing units. Traffic from these developments will primarily impact the intersections between Mullan and Lancaster Avenues and the west extensions of each road.

Given current development trends, the Cities of Post Falls and Rathdrum will continue to grow. It is anticipated that increases in retail, high-tech, and industrial employment will follow these trends, with resultant traffic increases occurring within the study area. A recent demographic and land use analysis (origin and destination survey as defined by Traffic Analysis Zones- TAZs) conducted for the US 95 Corridor study indicates these trends will

Figure 2


Highway 41 Corridor Plan
Existing Corridor Zoning
November 2, 2001
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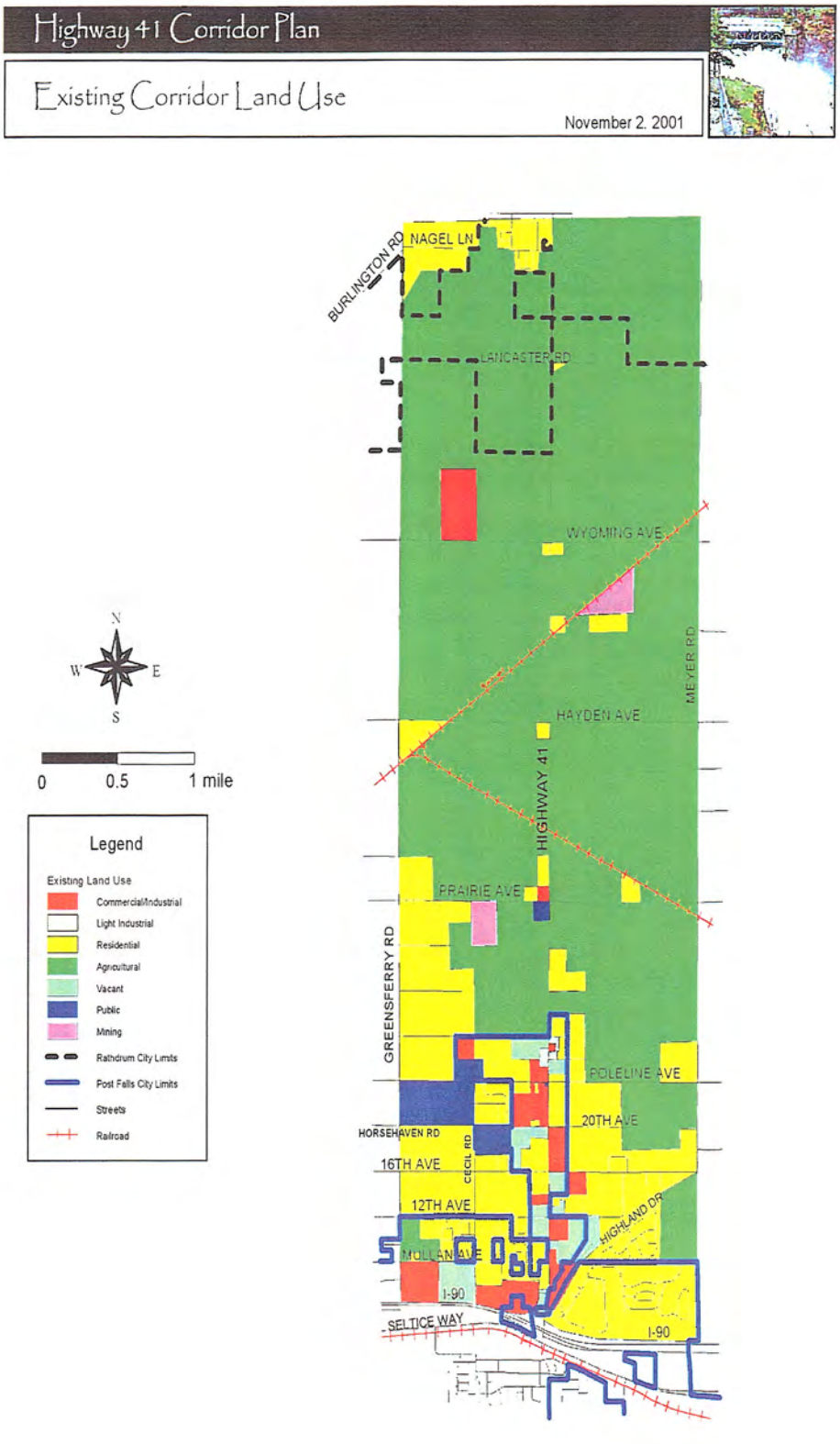
1 mile
Legend
Rathdrum Zoning
C-1
C-2
Industrial
Joint use Parks
R-1
R-2
R-3
School
County Zoning
Ag-Suburban
Agriculture
Commercial
High Density Residential
Mining
Rural
Post Falls Zoning
CCS
HI
LI
NLC
PR
PUD
R1
R1/RUD
R2
R3
RMHP
Rathdrum City Limits
Post Falls City Limits
Streets
Railroad
BURLINGTON RD
NAGEL LN
LANCASTER RD
WYOMING AVE
MEYER RD
HAYDEN AVE
HIGHWAY 41
PRAIRIE AVE
GREENSFERRY RD
POLELINE AVE
CECIL RD
HORSEHAVEN RD
20TH AVE
16TH AVE
12TH AVE
HIGHLAND DR
MULLAN AVE
I-90

Figure 3


Highway 41 Corridor Plan
Existing Corridor Land Use
November 2, 2001
BURLINGTON RD
NAGEL LN
LANCASTER RD
WYOMING AVE
MEYER RD
HAYDEN AVE
HIGHWAY 41
PRAIRIE AVE
GREENSFERRY RD
POLELINE AVE
20TH AVE
HORSEHAVEN RD
CECIL RD
16TH AVE
12TH AVE
HIGHLAND DR
MULLAN AVE
I-90
SELTICE WAY
I-90
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1 mile
Legend
Existing Land Use
Commercial/Industrial
Light Industrial
Residential
Agricultural
Vacant
Public
Mining
Rathdrum City Limits
Post Falls City Limits
Streets
Railroad

continue to the 2020-planning horizon. Projected growth areas with current development trends will be concentrated near the urban areas (Figure 4).

Land Use Issues

Land along Highway 41 is considered by many as prime commercial property. Commercial development along the highway has not included the use of secondary access roads to serve as collectors to serve local traffic needs. Highway 41 is expected to move traffic quickly through the community, but due to numerous points of direct access to individual properties, continual flow of traffic along the corridor is impeded.

The stated desire of the community is to avoid corridor land uses from developing as strip commercial. Retention of the existing rural character is preferred through mixed-use development, separated by areas of open space. Several commercial developments along Highway 41 are non-compliant with existing Kootenai County land use and zoning regulations.

Street Connectivity

Street connectivity is key to accommodating local traffic circulation, without relying primarily on Highway 41 as the primary access to properties within the study area. East-west arterial roads between Coeur d'Alene and Highway 41 are limited to Interstate 90, Prairie, Hayden, and Lancaster Avenues. Few secondary north-south connector roads exist in the area. Additional east-west and north-south routes are needed to alleviate congestion on Highway 41 and provide route options to other areas of the Prairie. Current street naming conventions have roadways along the same general alignment with differing road names. Efforts are underway to provide consistency in names.

Access Management/Development Review

Access management is a critical element of an efficient transportation system, and is supported by affected jurisdictions as a technique to promote continual traffic flow with minimal turning movements. Three separate transportation controls have been established, limiting access along the highway, including a "Memorandum of Understanding" and an Overlay Zone. The "Memorandum of Understanding" (MOU) between the City of Post Falls and ITD is the most concise and in-depth regulatory tool of the two controls. The MOU is a joint and collaborative agreement for access management of that portion of the Highway located between I-90 and Poleline Avenue. The MOU establishes a set of uniform standards for obtaining right of way, limiting access, and road design that is endorsed and adopted by the City of Post Falls and ITD. Recently, Rathdrum and ITD have also executed an MOU regarding Highway 41.

The second tool is Kootenai County's Highway 41 Overlay Zone (Article 18 of the Kootenai County Zoning Code). The Article significantly restricts access and provides setbacks for development along the Highway from Prairie to Lancaster Avenue.

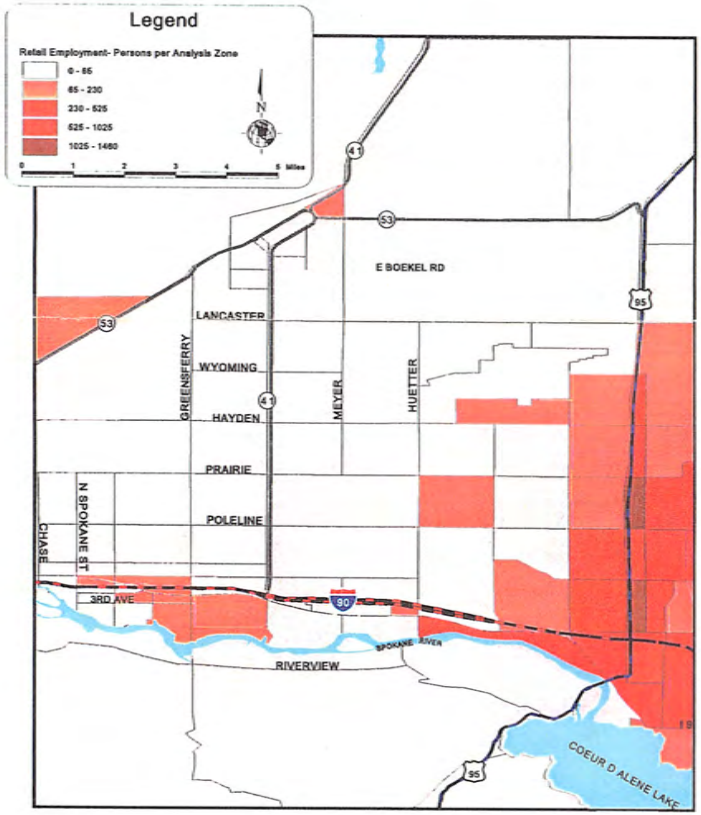
The third control is ITD's State Highway Access Control Policy, adopted in August 2001. The Policy sets forth ITD's effort and intent to provide access control on State highways. The Policy sets limits on access and provides for access decisions to be determined by the State Traffic Engineer.

Figure 4

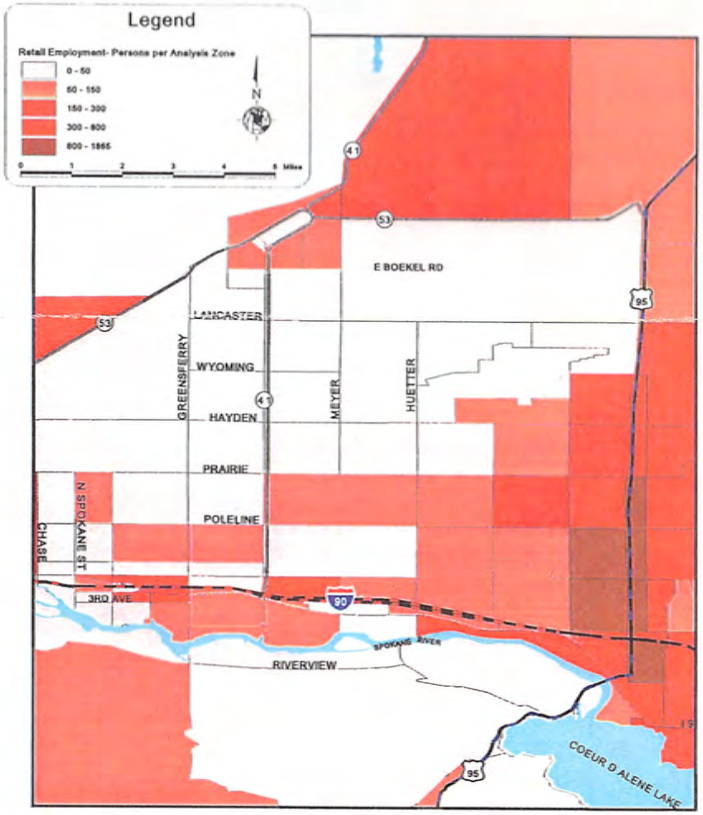
Where People Work, Shop, and Live

Retail Employment

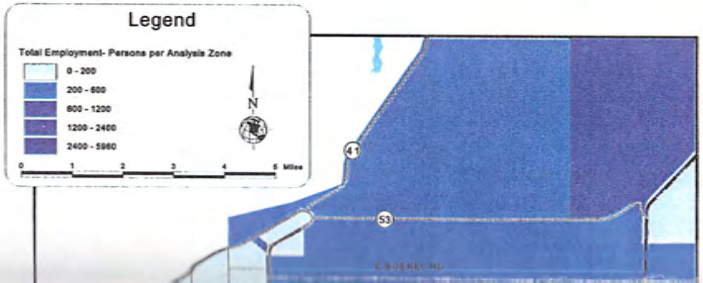
2000



2020



Total Employment



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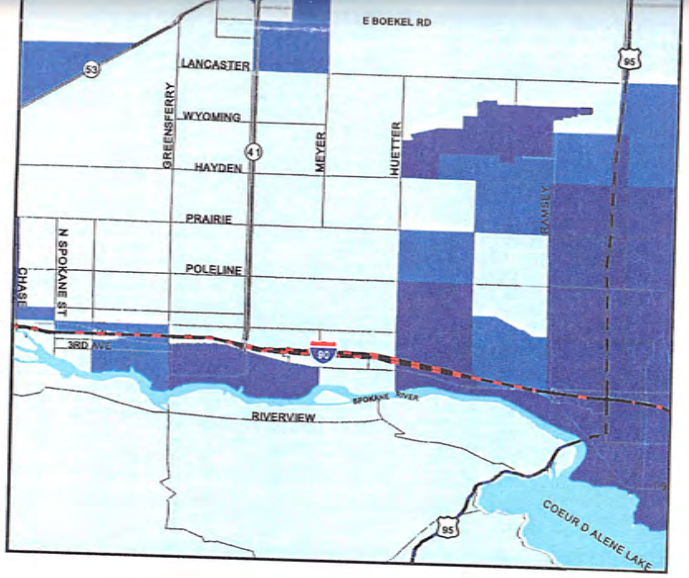
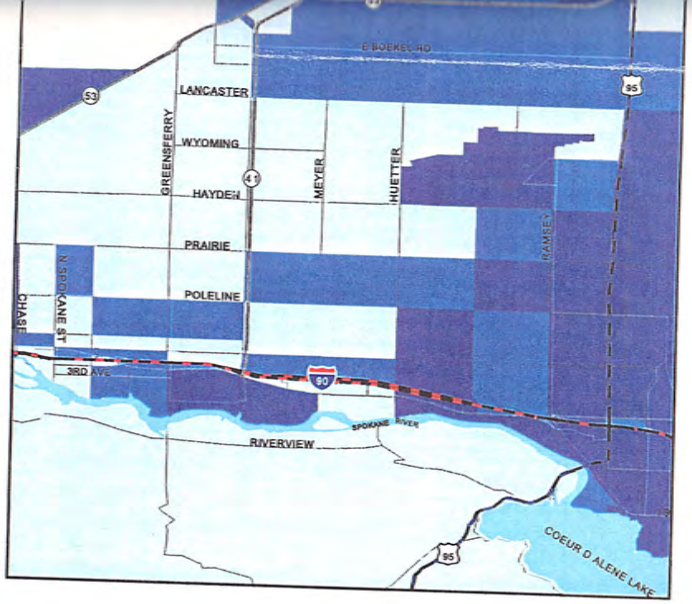
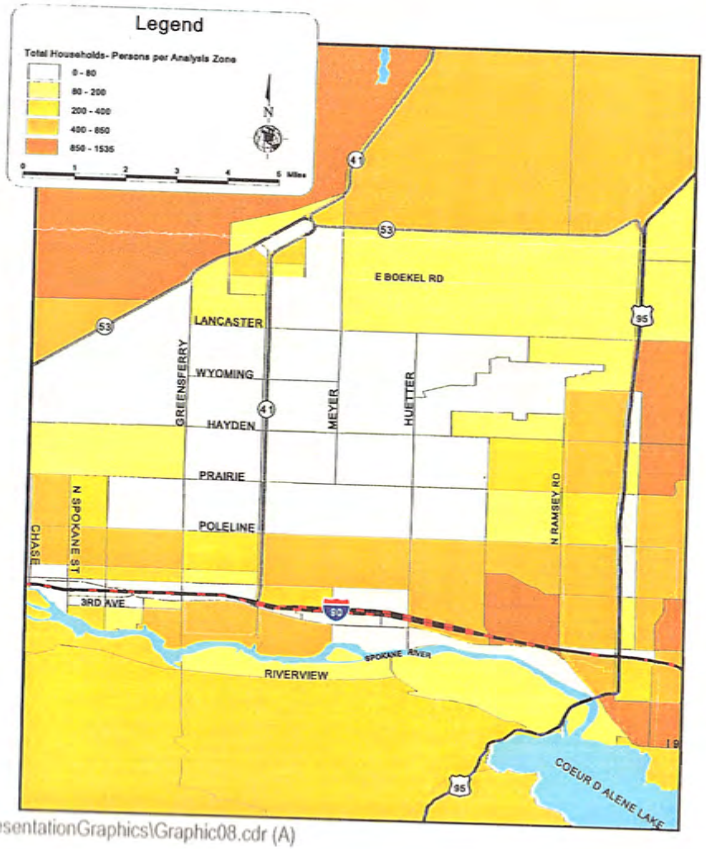
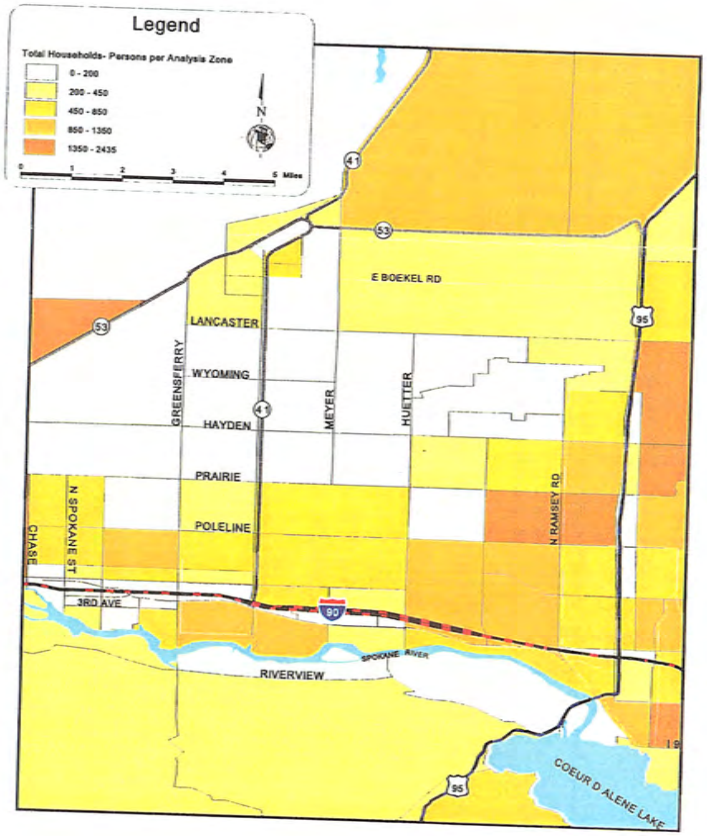




Total Households





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Opportunities for Multi-Modal Transportation

Current public transit service within the study area is limited to infrequent service by North Idaho Community Express (NICE), depending on service area demands and availability of funding. Casual car and van pooling occurs; however, neither have a large impact on commute traffic. Current service levels are expected to continue.

Preliminary discussions have occurred between the Spokane Regional Transportation Council and ITD regarding the extension of a light rail system planned for the Spokane Valley to the City of Post Falls. If light rail is available, east-west traffic flows across the Rathdrum Prairie may be reduced; however, north-south flows along Highway 41 may increase, as the highway would function as a main access route to the system.

As a result of the Highway 95 study from Mica Creek to Ohio Match Road, and information received through the Coeur d'Alene 2020 efforts, it was identified that the community supports enhanced mass transit throughout the region. Mass transit operations should be considered in development of the Highway 41 Corridor Master Plan design policies and should provide for future park and ride facilities, passenger amenities, and pullouts for bus stops.

A regional pedestrian and bikeway system plan would enhance the efficiency of Highway 41. The Kootenai County Area Transportation Plan is currently the clearinghouse for a regional bikeway plan. A further study of the existing railroad service within the Prairie and any subsequent abandonment or realignment of service could provide opportunities for "Rails to Trails" redevelopment of rail corridors.

Planned Improvements

A LID (Local Improvement District) for the extension of wastewater treatment systems to serve a recently annexed area adjacent to Highway 41 is underway in Post Falls. Upon the extension of these services, development of primarily commercial uses will likely occur along the highway. Other local improvements have included widening and turn lanes at the intersection of Mullan Avenue and Highway 41, due to the addition of major commercial developments in the area.

Improvements are planned to both Greensferry and Meyer Roads in 2003 and 2004 for surfacing and/or resurfacing. Reconstruction of the Seltice/Highway 41/I-90 interchange is planned for 2002 to provide a reconfiguration of the eastbound interchange ramps, and upgrade the interchange traffic signals. Discussions of a future Greensferry Road over/under pass of Interstate 90 are continuing, but were not included in this study. In addition, the State Transportation Board identifies Highway 41 as a "priority," meaning that improvements to the highway are expected to be part of a capital improvement program within the next ten years. Changes to Highway 41 and I-90 are under ITD's jurisdiction, while the Cities of Post Falls and Rathdrum and the Post Falls Highway District are responsible for all off-state system roadways.

Improvements Needed to the Corridor

The Kootenai County Area Transportation Plan designated the corridor for improvements to provide a four-lane divided highway with controlled access at intersections for left turning movements. Limiting access and widening of Highway 41 to Principal Arterial standards was outlined in the MOU between Post Falls and ITD between I-90 and Poleline Avenue as a five-lane facility. Kootenai County Area Transportation Team (KCATT)

supports the addition of pedestrian circulation (sidewalks), bicycle paths, streetscape aesthetics, and barriers/design techniques to reduce visual impairment caused by blowing snow should also be considered. Currently pedestrian and bicycle movement within the corridor is limited to an unimproved pathway within the highway ROW.

Infrastructure

Public wastewater treatment systems cannot be extended to unincorporated areas of the County as per local policy. This factor prohibits areas located within the corridor study area and outside the corporate boundaries of Post Falls and Rathdrum from being developed for commercial, industrial, and high-density residential purposes. Current public water supply is generally limited to the urban areas of Post Falls and Rathdrum. Areas within the County and portions of Post Falls are served by Ross Point Water District and Greenacres Irrigation District. Power and natural gas services are provided within the corridor. Stormwater management of impervious surfaces is currently through natural vegetative areas and is not controlled. Future use of stormwater management techniques, such as grass percolation (biofiltration) swales, should be included in all new developments.

Intergovernmental Coordination

Intergovernmental coordination occurs though various means including Kootenai County Area Transportation Team, Area of City Impact agreements, the Highway 41 Overlay Zone, the State Highway Access Control, and the Highway 41 Memorandum of Understanding. However, improvements in jurisdictional coordination are needed to address regional land use and transportation issues related to Highway 41. Providing the option of a pre-development meeting between a developer and all of the affected agencies would be beneficial for furthering intergovernmental coordination. These meetings would be scheduled at the time a proposal is submitted to an agency for review and provide a developer with access to police, fire, water, wastewater treatment, and public works staff, as well as ITD and the Department of Environmental Quality, or County staff, when appropriate. The meetings allow for information dissemination and participation by all attendees setting the stage for a clear understanding of development concerns and criteria. Further, continued maintenance of the regional Travel Demand model is needed to accurately reflect ongoing changes in development and traffic.

Plan Development

A regional transportation and land use plan for the Highway 41 corridor, extending north from I-90 to Lancaster Avenue provides an overall guide for development in the area. The major issues in creating a cohesive corridor plan include:

- Limiting access along the corridor
- Widening the highway to principal arterial design standards
- Enhancing east-west and north-south street connectivity
- Creating off corridor circulation roadways for local circulation
- Adopting comprehensive land use concepts
- Encouraging the preservation and creation of open space
- Buffering incompatible land uses
- Allowing for mixed land use development through performance zoning
- Providing for a pedestrian/bikeway system

- Establishing standards for aesthetics

Both the Project Team and the Project Advisory Committee identified land use alternatives. Several alternatives were discussed, with three alternatives selected based upon desired levels of development within the community. The alternatives were refined based on how they impact current development and properties presented with discussion of implementation strategies and how the plans impacted current development and properties.

The three general plan alternatives addressed transportation and land use issues along the corridor. These general approaches framed the basis for development of the land use alternatives and the resulting transportation plan. The following further explains these approaches.

The "No Further Action or Status Quo Plan"

Development within the corridor would continue to be governed individually by each of the jurisdictions, pursuant to existing land use and zoning regulations, and without further intergovernmental coordination. Post Falls would continue to implement the Memorandum of Understanding with ITD. Kootenai County and ITD would continue to implement Article 18, the Highway 41 Overlay Zone. ITD would ultimately be responsible for approval of all access to Highway 41. No further access restrictions or provisions for secondary access would be explored.

The "Transportation Improvement Program"

This regional plan would take into account transportation movements, improvements, and development standards only by encouraging the adoption and implementation of Post Falls/ITD's Memorandum of Understanding by Kootenai County and the City of Rathdrum. Access limitations and enhanced secondary access routes would be the primary goal of this plan. No change in existing land use designations or zoning regulations other than revisions to Kootenai County's Highway 41 Overlay Zone (Article 18) would occur. Planned improvements contained within the State Transportation Improvement Program would continue.

The "Optimized Land Use Plan"

This plan would establish regional goals, policies, regulations, and development concepts regarding transportation and highway improvements and set in place optimal land use patterns used to achieve adopted goals and policies. This plan would expand upon and enhance the existing Memorandum of Understanding as either an overlay zone or aesthetic corridor to be unilaterally adopted and implemented by Post Falls, Kootenai County, Rathdrum, and ITD. Not only would highway widening, access limitations, and secondary access routes be addressed in the plan, it would also consider optimal land use patterns along the corridor including mixed use development, pedestrian and bikeway systems, and an aesthetic overlay zone with specific requirements for signage, landscaping, the retention and provision of open space, and setback standards.

Selected Land Use Plans

Of the initial draft plans with varying levels of development and spatial arrangements, three land use plans were selected for further consideration within the corridor area. Land use categories were shown to be consistent throughout the corridor and were similar to existing land use category designations for the Cities of Post Falls, Rathdrum, and Kootenai County. The three land use plans are:

1. The *Prairie Preservation Plan* (Figure 5) was generated as a continuation of existing development patterns. This Plan assumes almost a "Do Nothing" alternative, since little is changed from current development patterns. Most notably, an Aesthetic Corridor overlay is proposed that would apply standards within ¼ mile of Highway 41 for signage, landscaping, site design, and the provision of open space. Mid-corridor uses were shown as agricultural; however, given the future of grass burning on the Rathdrum Prairie and the interest of some property owners to sell their land, it may be unlikely that intensive agricultural uses will continue on the Prairie. A further restriction to more intensive development would be the lack of public water and wastewater treatment within the unincorporated areas of the County. The Plan does provide for a separation of land uses with a 50-foot open space buffer on either side of the railroad tracks and around designated mining or gravel pit uses.

2. The *Compact Mixed Use Plan* (Figure 6) allows for a mixed-use overlay of the entire corridor for the provision of mixed uses within all zones. Performance zoning, whereby uses could be mixed within a zone, such as commercial with residential uses, would be allowed for developments that provide clustered developed areas and open space. Increased densities would be allowed in those areas that were offset by these provisions. The Aesthetic Corridor overlay also applies within ¼ mile of Highway 41 and includes requirements for signage, landscaping, the retention and provision of open space, and setback requirements. Overall, the Mixed Use Plan provides for open space areas for the separation of land uses and for land application of wastewater treatment. Specific open space areas are designated adjacent to railroad crossings and concentrated commercial areas. The open space areas adjacent to the railroads are also set aside as clear view areas for the crossings. The buffer areas serve to separate land uses and could serve as future transportation corridors should the railroads abandon the tracks or realign. In this event, track ROW may be available for potential pedestrian and bicycle uses, with the open space areas at the railroad crossing/ Highway 41 intersections as trailhead locations. The Mixed Use Plan also allows for the continuation of agricultural uses.

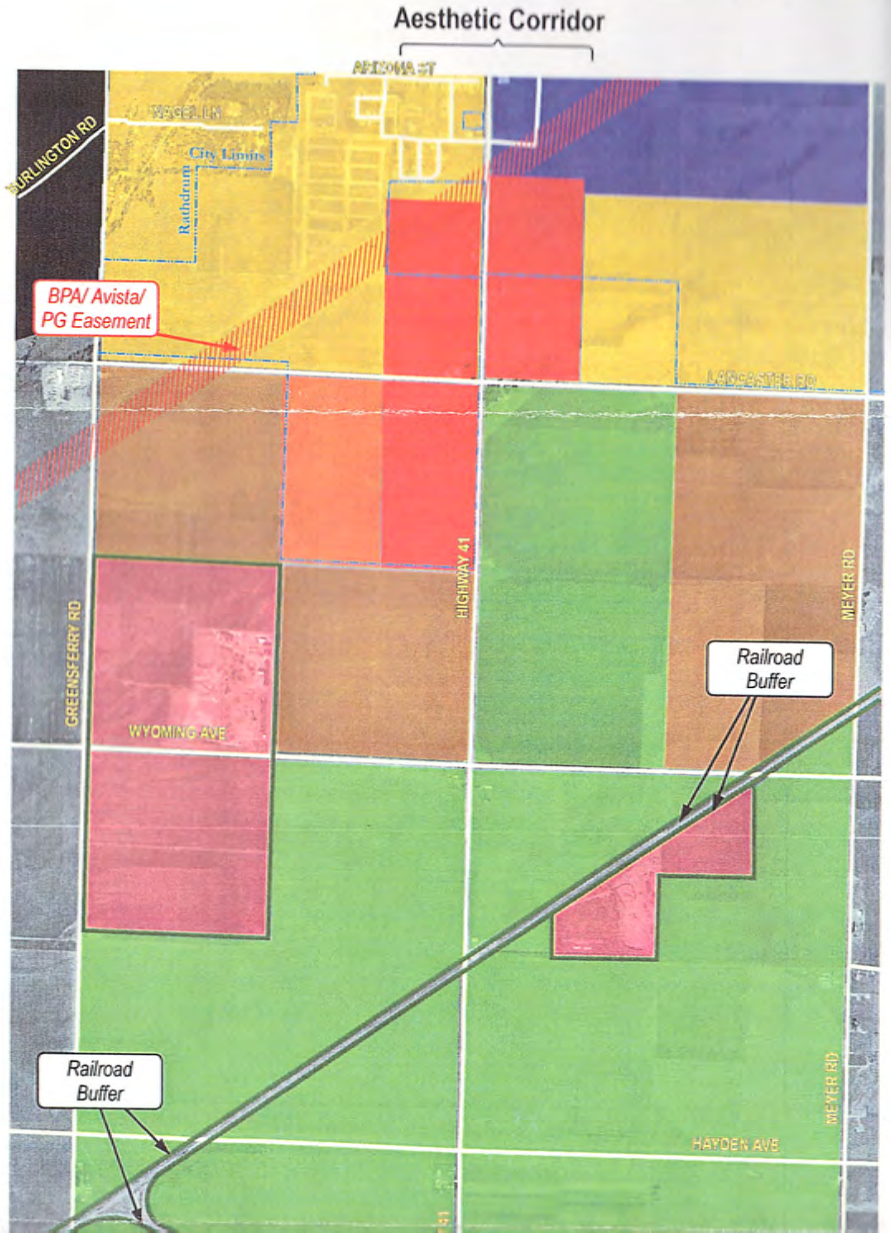
3. The *Commercial Corridor Plan* (Figure 7) allows for a more intense development of the corridor with notably more areas designated for commercial and Urban Residential development. Within the unincorporated areas of the plan, commercial areas are designated as Commercial Reserve until appropriate wastewater treatment is available. The Aesthetic Corridor overlay also applies within ¼ mile of Highway 41. The railroad buffer areas serve to separate land uses and could potentially be reserved for future transportation corridors, should the railroads abandon the tracks or realign services.

Highway 41 Corridor Plan

Figure 5

Land Use Scenarios
Prairie Preservation Plan

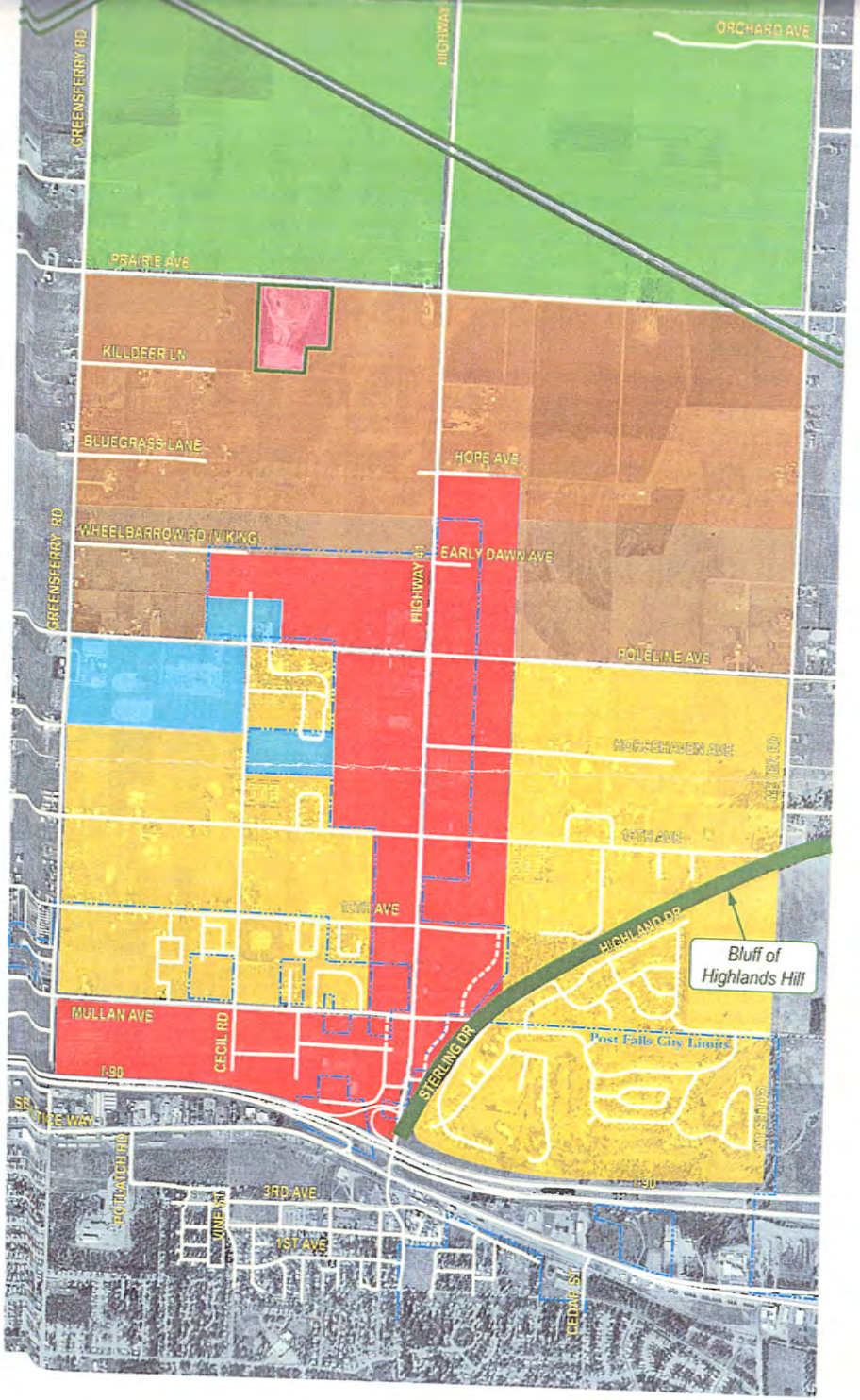
- Aesthetic Corridor Overlay- Standards apply within one-quarter mile on each side of Highway 41 for signage, landscaping, site design, and the provision of open space.
- Land Use Plan- Includes continuation of current Agricultural uses.
- Within Agricultural designations allow business use associated with agricultural land use only (nursery, farm equipment, feed store, etc.).
- Railroad Buffer- Provides separation of land uses and future reservation of right of way for transportation purposes.
- Land Use Plan incorporates current jurisdictional plans and trends.
- Provides for less dense development within the corridor without the extension of municipal wastewater treatment.



- Development densities similar to current uses.
- Land Use Buffer- 50 feet of open space around Mining uses

Land Use Summary

CLASSIFICATION	LAND USE (IN ACRES)	DENSITIES
SUBURBAN RESIDENTIAL	250	.5 - 1.5 - unit/acre
URBAN RESIDENTIAL (LOW)	1,175	2 - 6 - units/acre
URBAN RESIDENTIAL (HIGH)	175	7 -20 - units/acre
COMMERCIAL / RETAIL	370	95 - employees/acre
COMMERCIAL / OFFICE	200	132 - employees/acre
COMMERCIAL / LT MFG	160	86 - employees/acre
INDUSTRIAL / MINING	85	86 - employees/acre
AGRICULTURAL / OPEN SPACE	4,670	Varies- Seasonal use
TOTAL CORRIDOR	7,085	



LEGEND

LAND USE CLASSIFICATION

SUBURBAN RESIDENTIAL
URBAN RESIDENTIAL (LOW)
URBAN RESIDENTIAL (HIGH)
PUBLIC RESERVE
INDUSTRIAL
COMMERCIAL / LIGHT MANUFACTURING
AGRICULTURAL / LAND APPLICATION
OPEN / GREEN SPACE / LAND APPLICATION OF WASTE WATER
MINING

NOT TO SCALE

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Highway 41 Corridor Plan

Figure 6

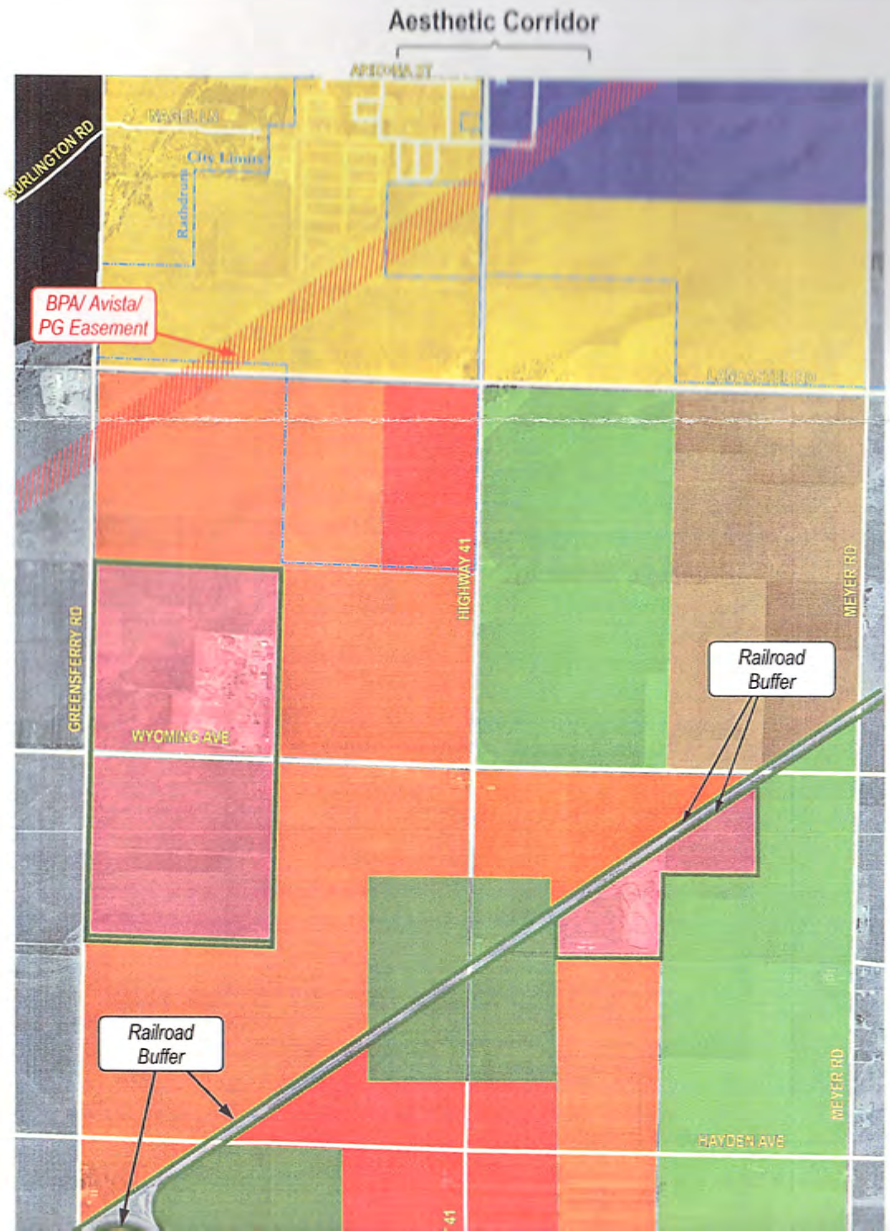
Land Use Scenarios
Compact Mixed Use Plan

- Aesthetic Corridor Overlay- Standards apply within one-quarter mile on each side of Highway 41 for signage, landscaping, site design, and the provision of open space.

- Open Space Areas -Designated adjacent to railroad crossings and commercial development to provide separation of land uses and areas for land application of wastewater treatment. Preservation of open space may also be used for agricultural or recreational purposes.

- Mixed Use Overlay- Applies to the entire corridor for the provision of mixed uses within all zones. Performance Zoning allows for development bonuses (increased density) for clustered development and use of open space within uses and separation of land uses.

- Overall densities of the Commercial Corridor and Compact Mixed Use Plans can be equivalent under Performance based Zoning; thereby, netting the same densities; however, the Mixed Use Plan provides for more open space.



- Railroad Buffer- Provides separation of land uses and future reservation of right of way for transportation purposes.

- Land Use Buffer- 50 feet of open space provided around Mining uses.

Land Use Summary

CLASSIFICATION	LAND USE (IN ACRES)	DENSITIES
SUBURBAN RESIDENTIAL	440	.5 - 1.5 - unit/acre
URBAN RESIDENTIAL (LOW)	1,560	2 - 6 - units/acre
URBAN RESIDENTIAL (HIGH)	265	7 -20 - units/acre
COMMERCIAL / RETAIL	765	95 - employees/acre
COMMERCIAL / OFFICE	425	132 - employees/acre
COMMERCIAL / LT MFG	335	86 - employees/acre
INDUSTRIAL / MINING	415	86 - employees/acre
AGRICULTURAL / OPEN SPACE	2,880	Varies- Seasonal use
TOTAL CORRIDOR	7,085	

LEGEND

LAND USE CLASSIFICATION

SUBURBAN RESIDENTIAL
URBAN RESIDENTIAL (LOW)
URBAN RESIDENTIAL (HIGH)
PUBLIC RESERVE
INDUSTRIAL
COMMERCIAL / LIGHT MANUFACTURING
AGRICULTURAL / LAND APPLICATION
OPEN / GREEN SPACE / LAND APPLICATION OF WASTE WATER
MINING

NOT TO SCALE

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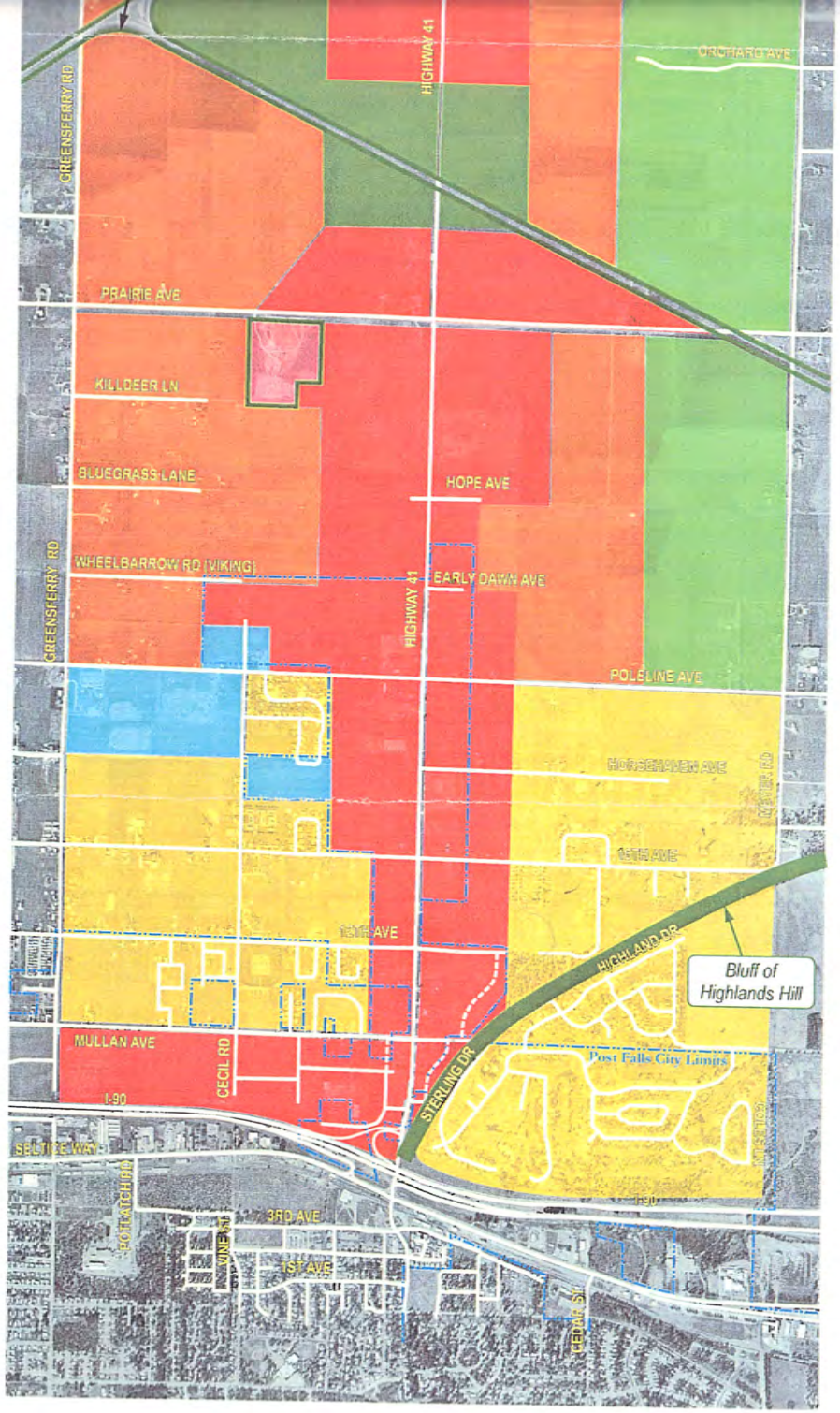
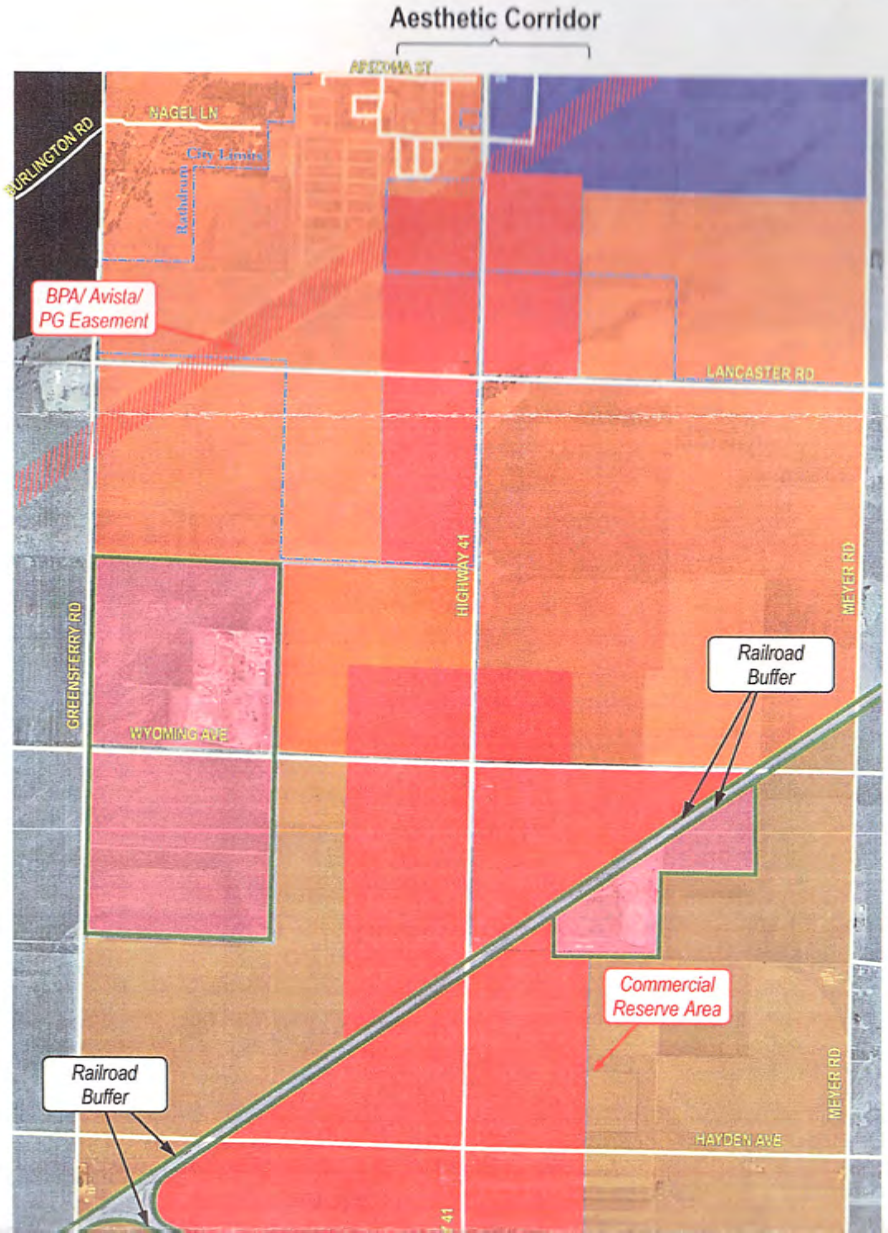


Highway 41 Corridor Plan

Figure 7

Land Use Scenarios
Commercial Corridor Plan

- Aesthetic Corridor Overlay- Standards apply within one-quarter mile on each side of Highway 41 for signage, landscaping, site design, and the provision of open space.
- Land Use Plan- Provides for more intensive development, concentrating Commercial uses along the Corridor.
- Commercial Reserve Area- Designated as a future commercial area; however, is not zoned as commercial until appropriate wastewater treatment and land use controls are in place.
- Railroad Buffer- Provides separation of land uses and future reservation of right of way for transportation purposes.
- Overall densities of the Commercial Corridor and Compact Mixed Use Plans can be equivalent under Performance based Zoning. Both plans would net the same densities;

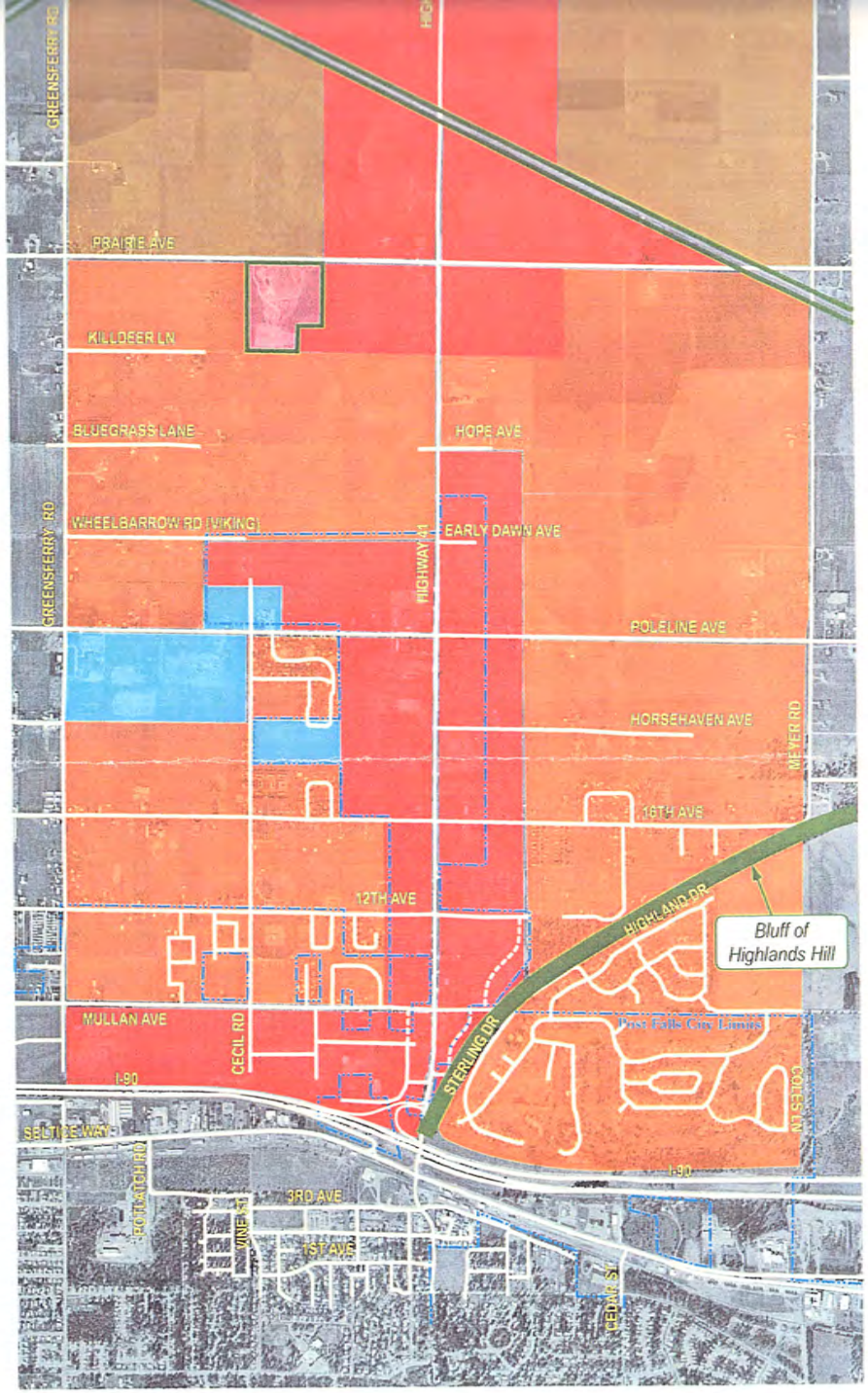


however, the Mixed Use Plan provides for more open space.

- Land Use Buffer- 50 feet of open space provided around mining uses.

Land Use Summary

CLASSIFICATION	LAND USE (IN ACRES)	DENSITIES
SUBURBAN RESIDENTIAL	730	.5 - 1.5 - unit/acre
URBAN RESIDENTIAL (LOW)	1,790	2 - 6 - units/acre
URBAN RESIDENTIAL (HIGH)	320	7 -20 - units/acre
COMMERCIAL / RETAIL	1,160	95 - employees/acre
COMMERCIAL / OFFICE	645	132 - employees/acre
COMMERCIAL / LT MFG	455	86 - employees/acre
INDUSTRIAL / MINING	415	86 - employees/acre
AGRICULTURAL / OPEN SPACE	1,570	Varies- Seasonal use
TOTAL CORRIDOR	7,085	



LEGEND

LAND USE CLASSIFICATION

SUBURBAN RESIDENTIAL
URBAN RESIDENTIAL (LOW)
URBAN RESIDENTIAL (HIGH)
PUBLIC RESERVE
INDUSTRIAL
COMMERCIAL / LIGHT MANUFACTURING
AGRICULTURAL / LAND APPLICATION
OPEN / GREEN SPACE / LAND APPLICATION OF WASTE WATER
MINING

NOT TO SCALE

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Land use densities (Table 1) within the corridor were set to reflect general current development densities similar to each jurisdiction's zoning ordinances and reflect higher densities within urban residential development.

The land use alternatives are composed of eight broad land use categories. These categories are not intended to represent specific land uses; rather, they represent a range of uses that will allow for flexibility in future development while maintaining the dominant land use characteristic. The primary use is indicated by the name of each category. The Highway 41 land use categories are:

- Suburban Residential
- Urban Residential (Low Density)
- Urban Residential (High Density)
- Commercial/Retail
- Commercial/Office
- Commercial/Light Manufacturing
- Industrial/Mining
- Agricultural/Open Space

Table 1

Average Land Use Densities

Land Use	Size
Suburban Residential	0.5 - 1.5 units/acre
Urban Residential (Low)	2 - 6 units/acre
Urban Residential (High)	7 -20 units/acre
Commercial / Retail	95 - employees/acre
Commercial / Office	132 - employees/acre
Commercial / Light Manufacturing	86 - employees/acre
Industrial / Mining	86 - employees/acre
Agricultural / Open Space	Varies- Seasonal use

The plans and study findings were presented to the public at open houses meetings for discussion and comment. Comments were generally supportive of the Compact Mixed Use Plan and included public support for the provision of open space and the continuation of agricultural uses. Individual parcel access and the timing of improvements were a concern.

Transportation

Field Documentation/Data Collection

An initial field visit was conducted in May 2001 to survey existing roadway and intersection conditions. Planning level information was collected for the transportation analysis and preliminary design level information was provided for the purpose of improvement recommendations. Roadway/intersection channelization data (number of lanes, turn bays, passing areas, etc.), intersection/driveway control types (stop controls versus signal controls), roadway/shoulder widths, posted speed limits, and railroad crossing locations were noted as part of the initial field review. Additional field visits were conducted throughout the project to supplement/verify the initial field review or assess the potential for capacity improvements at specific locations.

Data was collected primarily for Highway 41 and major intersecting roadways between Seltice Way in the City of Post Falls and Lancaster Avenue, south of the City of Rathdrum. Specifically, these roadways include Lancaster Avenue, Wyoming Avenue, Hayden Avenue, Prairie Avenue, Poleline Avenue, Horsehaven Avenue/20th Avenue, 16th Avenue, 12th Avenue, Mullan Avenue, Central Avenue/Neufeld Lane, the I-90 ramps, and Seltice Way.

Existing traffic counts data was collected for the Highway 41 Corridor Study by ITD. Average weekday traffic (ADT) counts and PM peak hour turn movement counts were collected at 13 intersections between the Cities of Post Falls and Rathdrum; including Highway 41 and all of the intersecting roadways mentioned above. This includes all signalized intersections, major unsignalized intersections, and the I-90/Highway 41 interchange ramps (including Seltice Way/eastbound I-90 Ramp). Traffic count data was used in the planning analysis to identify existing capacity deficiencies and to help calibrate the forecast travel demand model developed for the project in TModel 2.

Forecast Travel Model and Forecast Traffic Volumes

Traffic projections for Highway 41 and the primary study roadways were generated using the Kootenai County Area Transportation Team (KCATT) demand model developed in TModel 2 for most of Kootenai County and the incorporated communities. This model contains most State highways and major arterials and roadways within the County. Highway 41 and all of the Highway 41 study roadways are defined in this model.

Model Overview

A forecast travel demand model is a computerized representation of the transportation and land use infrastructure within a community. Existing or forecast land uses are aggregated into Traffic Analysis Zones (TAZs) that typically represent major trip generators such as a residential neighborhood, commercial/retail developments, or work centers. The trip generation characteristics of each TAZ are identified so that the model can distribute traffic between TAZs through a computerized representation of the highway and arterial system. Note that a TAZ can also represent an external connection outside of a model, such as a principal arterial or highway, and that manual counts are typically used to identify traffic conditions for these roadways.

A model is typically developed to simulate peak hour traffic conditions. As such, trip generation for land uses within each TAZ are developed for the peak hour (AM or PM)

based upon local data or nationally recognized trip generation sources, such as the Institution of Traffic Engineers (ITE) *Trip Generation Manual*. Trips are separated into peak hour origins and destinations for a varying array of trip types/purposes (home-work, work-home, home-other, other-home, etc.) and then are assigned to the computerized roadway network to represent traffic conditions.

The road infrastructure of a model typically consists of the highways, principal, minor, and collector arterials that define the primary travel routes within a community. Local streets are typically included to enhance circulation and distribution of traffic to/from and between TAZs. Arterials and intersections are assigned attributes that allow the model to estimate travel delays, which in turn allows the model to select the most appropriate and often quickest route between TAZs. The typical factors that a model uses to estimate intersection/roadway delays and overall travel delays, in general, include arterial length/location, travel speeds, numbers of lanes, intersection control, and arterial/intersection capacities. An adjustment to any or all of these factors can have an influence upon model travel patterns.

The traffic volumes generated by the model are assigned and then referred to as a "loaded link" network. Loaded link assignments are validated through a process known as "calibration." Existing model assignments are compared with traffic counts to verify that the model is assigning traffic within a relative percentage of error. Network and land use characteristics are adjusted iteratively until the model is "calibrated" with a reasonable percentage of error to real-time/existing traffic conditions, at which point forecast traffic/travel conditions can be developed. The remaining error between ground counts and model volumes is saved as an adjustment file to further calibrate forecast traffic volumes to real-time traffic conditions.

Future traffic volumes in a model are typically the function of the location and density of projected land uses within the community. Land use growth is identified through interviews with agencies and stakeholders and/or can also be estimated from historical growth resources, such as data maintained by the U.S. Census Bureau. Trip generation is estimated for each TAZ and forecast traffic is distributed through the roadway network for systems analysis.

Capacity additions or constraints are typically used to test the impact of improvement projects within the model. Each capacity change will alter the distribution of traffic and allows the user to compare and assess improvement alternatives. Many models have the capability to compare/assess measures of effectiveness (MOEs) through system measurements, such as vehicle hours of delay (VHD), vehicle hours of travel (VHT), average speeds, average delays, etc. Model MOEs are effective when comparing the impact of an improvement upon a large area, region, or for the entire model network. A model has the capability to generate volume output files and these are typically transferred into another traffic program for microscopic analyses, as the model capabilities to assess specific corridors or intersections is limited.

KCATT Model/Land Use Adaptation

TModel 2 is a mathematical software package that was used to develop the KCATT forecast travel demand model. The Bucher, Willis, and Ratliff Corporation developed the KCATT model in 1997 for the Kootenai County Area Transportation Plan. The model was revised and updated in 2000/2001 for the US 95 Corridor Study by the TModel Corporation. The revisions primarily focused upon the US 95 Corridor, with some land use/TAZ changes developed to enhance the model. The KCATT model has been used in this study to assess the traffic impact of the proposed land use alternatives and test capacity improvements

within a mile to the east and west of the Highway 41 Corridor. No revisions have been made to the KCATT model outside of this project study area.

TModel 2 allows the peak hour characteristics of a transportation infrastructure to be analyzed based upon land use or socioeconomic data. Trips are distributed between TAZs based upon "gravity" model equations that simulate driver characteristics by choosing route assignments that minimize travel times between zonal origins and destinations. Roadway/ intersection capacities, number of lanes on a roadway, intersection controls, travel speeds, and trip length, etc., are the components of the gravity model equations that control how the model will assign trips through an arterial/street infrastructure. Origins and destinations can be influenced by additional capacity provided by transportation improvements, and provides the basis for alternative assessment in TModel 2 through either integrated model MOEs or through other operations or simulation programs.

There are 175 internal and 16 external TAZs in the KCATT model that define the land use characteristics of Kootenai County. The residential and commercial characteristics of the County were summarized into ten specific land use categories that were used in TModel 2 to provide the basis for estimating existing and forecast trip generation. Trip generation for these uses were developed based upon the methodologies of the ITE *Trip Generation Manual* and upon special National Cooperative Highway Research Program (NCHRP) reports assembled by the Transportation Research Board (TRB). PM peak hour trips were separated into home-based, work-based, and non-home based origins and destinations that were assigned to the model TAZs and distributed through the roadway network based on relative arterial capacity, travel speed, and trip distances. A summary of the specific land uses used within the KCATT model are summarized as follows:

- Urban Single Family Residential
- Urban Multi-Family Residential
- Retail Trades
- Services and Office
- Industrial and Manufacturing
- Schools
- Hotel/Motel
- Campground
- Rural Single Family Residential
- College/Universities

As indicated previously by this report, three land use alternatives were developed for the Highway 41 Corridor Master Plan. The Prairie Preservation Plan alternative represents the least growth within the corridor and can roughly be considered as the 2020 "No-Build or Do Nothing" alternative. The Commercial Corridor Plan alternative represents the highest amount of development growth within the corridor and would most likely simulate what is continuing along the US 95 corridor (commercial growth with less residential areas). The Compact Mixed Use alternative is a balance between the Prairie and Commercial alternatives, which allows for both commercial and residential growth, while reserving significant open spaces and common areas.

Table 2 provides a summary of the forecast area designations for land use categories that make up each of the proposed Highway 41 corridor alternatives. These areas represent the total build-out of the highway corridor, which, as indicated later in the Transportation Section, will likely occur some time after the 20-year horizon/analysis year (2020).

Table 2

Summary of Land Use Designations (in Acres) for Proposed Highway 41 Alternatives

Land Use Category	Prairie Preservation	Compact Mixed-Use	Commerical Corridor
Suburban Residential	250	440	730
Urban Residential (Low Density)	1,175	1,560	1,790
Urban Residential (High Density)	175	265	320
Commerical/Retail	370	765	1,160
Commerical/Office	200	425	645
Commerical/Light Manufacturing	160	335	455
Industrial/Mining	85	415	415
Agricultural/Open Space	4,670	2,880	1,570
Total Land Use Area in Corridor	**7,085**	**7,085**	**7,085**

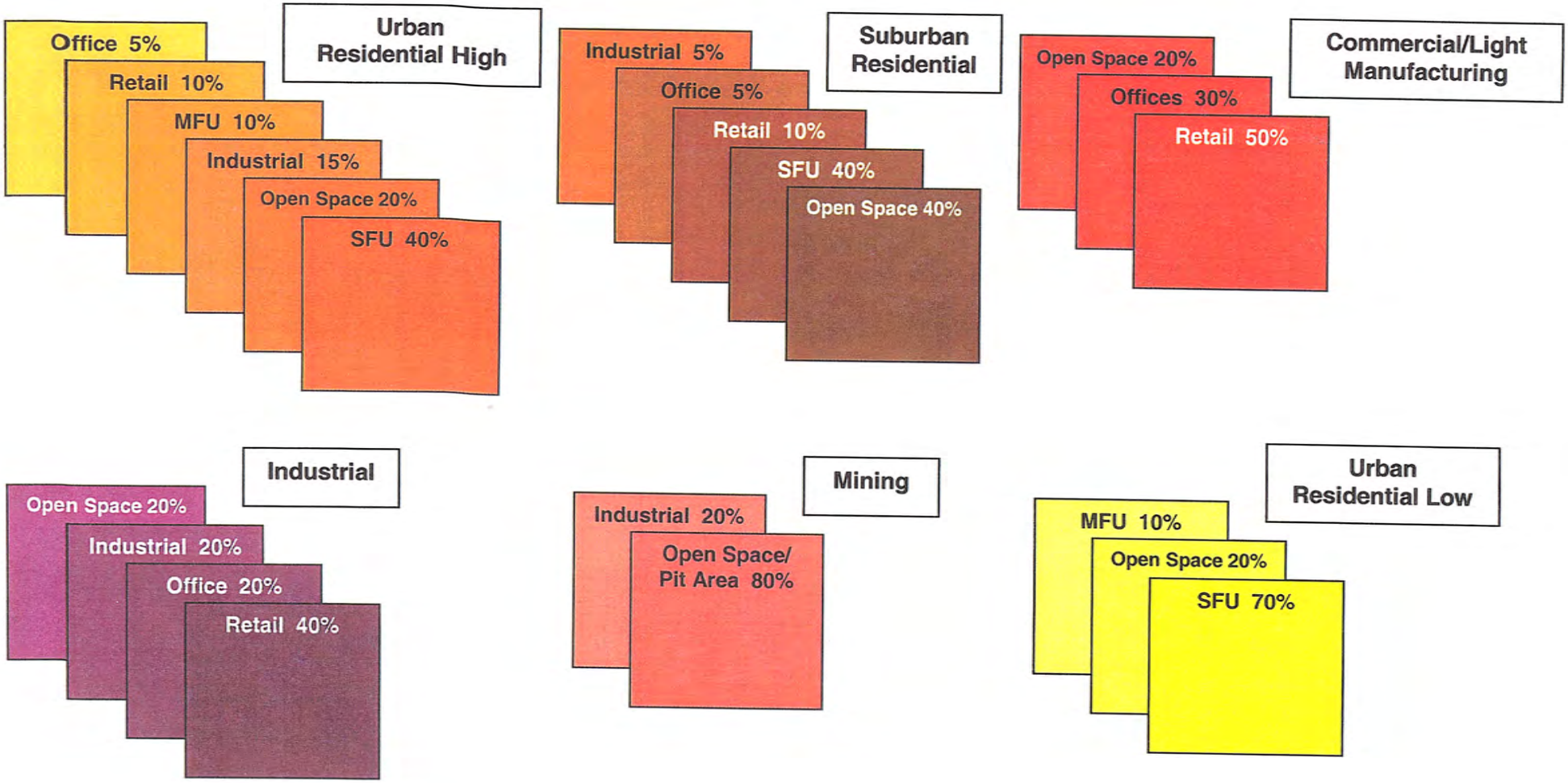
The Plan will allow for some flexibility in development, but is also intended to direct the composition (mix) and density of specific land uses so the intended character of the area designations (land use categories) can be maintained. Most of the land use category designations contain at least two or more land use types that can be represented in terms of the specific uses highlighted in the KCATT model. This designation allowed for the traffic impacts of each future land use alternative to be evaluated in TModel 2. Figure 8 highlights the composition of specific uses utilized in the KCATT model for each of the land use categories developed for the Highway 41 Plan.

Trip generation for developments associated with each of the land use alternatives were estimated based upon the same methodologies utilized for the KCATT model (application of ITE *Trip Generation Manual* and NCHRP report methodologies to derive trips and trip types). TAZs located within the corridor study area were then isolated so that overall trip generation and trip assignments (traffic growth) for the corridor could be examined and compared. Initially, the number of trips generated within the corridor for each alternative was significantly higher than historical development trends for the Highway 41 corridor and adjacent communities, such as the City of Post Falls (as identified through U.S. census data). The forecast traffic volumes generated for Highway 41 and the study arterials (by these land use alternatives) also exceeded historical growth patterns by a significant percentage (based upon historical ITD traffic counts). It was concluded that the initial numbers were more representative of full build-out conditions for each of the proposed alternatives, and that forecasts needed to be reduced to more accurately portray forecast 2020 land use and traffic conditions. Full build-out conditions cannot be specified at this time and will vary depending upon the rate of property absorption.

HIGHWAY 41 CORRIDOR PLAN

Figure 8

LAND USE CATEGORIES AND SUBCATEGORIES USED FOR TRAFFIC PROJECTIONS



Notes: SFU—Single Family Residential
MFU—Multiple Family Residential

U.S. Census data indicate that population for the City of Post Falls has increased by approximately 9 percent per year during the last ten years. Staff from the City, County, and State anticipates that land use growth within the Highway 41 corridor could progress at a similar rate, if utilities and the transportation infrastructure can be constructed to support development. As such, the forecast land use alternatives were adjusted to be consistent with the growth rates identified through the U.S. Census for the City of Post Falls. The resulting trip totals and traffic assignments (volumes on Highway 41) were much more appropriate for a 20-year plan and were reasonable when compared with historical traffic data. Table 3 highlights the 20-year horizon and full build out trip totals for each of the proposed alternatives.

Table 3

Summary of Land Use Trip Totals for Highway 41 Corridor Alternatives (PM Peak Hour)

Alternative	Existing	Year 2020	Build-Out
Prairie Preservation	1,550	4,400	13,650
Compact Mixed-Use	1,550	6,250	22,050
Commerical Corridor	1,550	8,100	30,900

Forecast Traffic Volumes

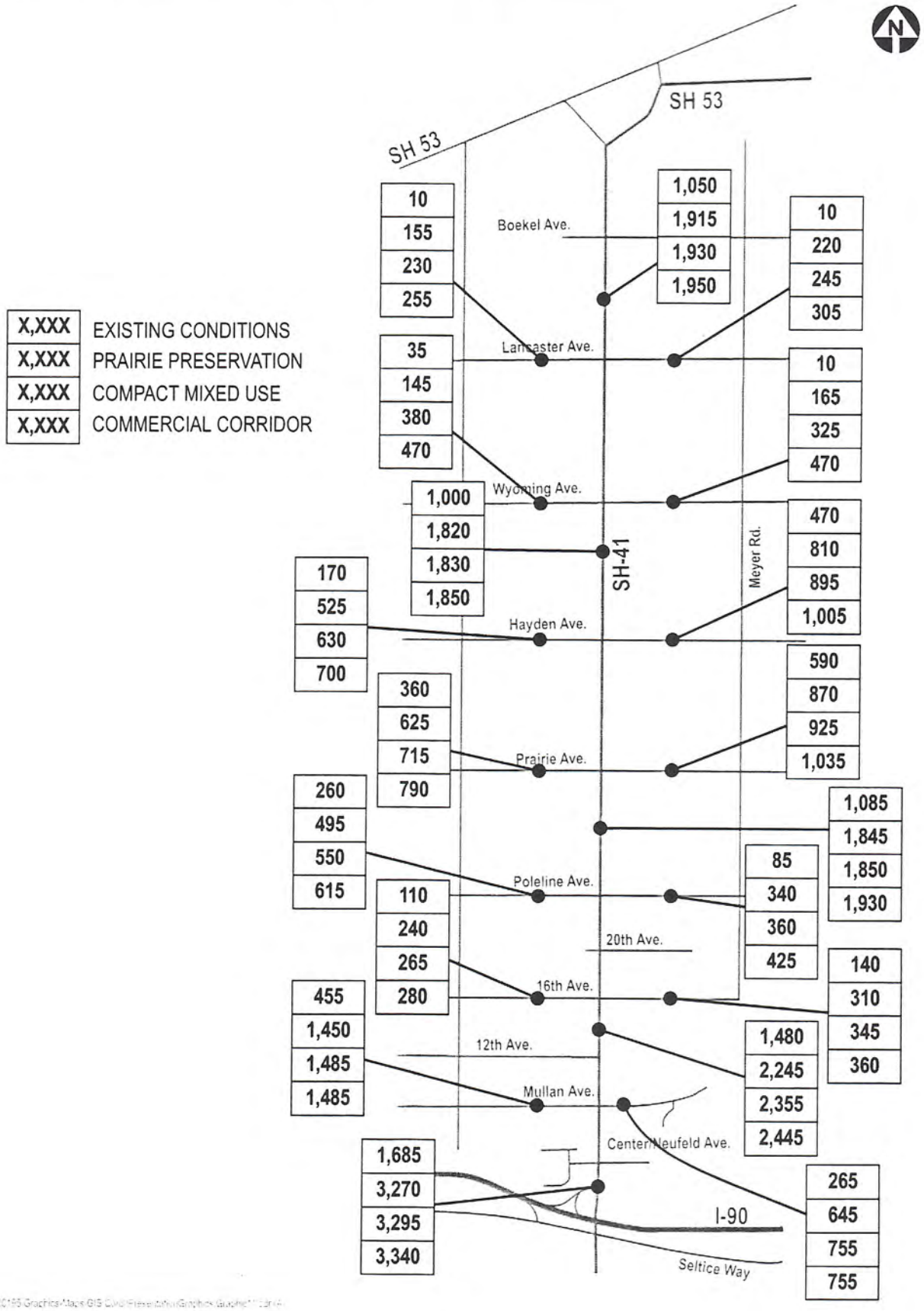
Forecast traffic volumes were developed from the KCATT model for each of the future land use alternatives. As indicated, the trips generated by TAZs (internal and external) are assigned to a computerized representation of the highway and roadway system within the model. The volumes are calibrated and then used in system alternative comparisons. Forecast traffic volumes for the PM peak hour for each of the proposed alternatives is summarized on Figure 9.

Depending upon location, forecast traffic volumes on Highway 41 in 2020 will be 70 to 100 percent higher than existing traffic volumes. This results in a 2.5 to 3.5 percent per year growth rate, which is consistent with historical growth on Highway 41. Traffic is shown to increase slightly between the reduced density alternative (Prairie Preservation) and the more intense alternative (Commercial Corridor), but the changes are not initially shown to be significant.

The differences are due primarily to two reasons. The first is the distinction in development traffic is more apparent with the build out conditions versus the 2020 conditions. As indicated by Table 3, there is a 17,000-trip difference between the low and high development scenarios with full build-out conditions (the difference for the Compact Mixed Use alternative falls roughly between the other alternatives). Conversely, there is only a difference of just less than 4,000 trips between the low- and high-density alternatives in 2020 (partial build out), representing a much less significant change in traffic on Highway 41 than what would occur with build out.

Figure 9

PM Peak Hour Traffic Volumes - 2020



Secondly, Highway 41 provides a primary route of travel between the City of Post Falls and I-90 to the City of Rathdrum and State Highway 53 (SH 53). Origin and Destination surveys conducted for the US 95 project indicate that between 40 and 50 percent of the traffic on Highway 41 occurs between Post Falls/I-90 and Rathdrum and an additional 15 to 20 percent occurs between Post Falls/I-90 and SH 53 (see Figure 10 for southbound traffic and Figure 11 for northbound traffic). The Prairie Preservation Plan alternative produces less traffic than that of the other plans. As such, more capacity will be available for "through trips" between Post Falls/I-90 and Rathdrum/SH 53, with the model indicating that this capacity will be utilized in the future. The more intensive land-use plans generate more trips that require more capacity from Highway 41. This means that less "through trips" can occur and will have to find other, less congested routes of travel.

Traffic on adjacent arterials, however, will increase significantly between the lesser and more intense alternatives as they are more directly the function of development trip generation and experience less "through trips." Forecast traffic volumes are projected to increase from 2 to 40 times depending upon the alternative and specific arterial roadway. Roadways to the south of Poleline Avenue will experience similar increases between scenarios, as the land use designations and growth rates are comparable. Traffic on and to the north of Poleline Avenue will increase to a varying degree (depending upon the alternative) as these roads are less developed. All of these arterials will have a significant total increase in traffic, although roads to the south of Poleline Avenue, will appear to have less growth, proportionately, as they already experience a significant amount of PM peak hour trips. A more detailed comparison of traffic changes is found on Figure 12.

Traffic Operations/Measures of Effectiveness (MOEs)

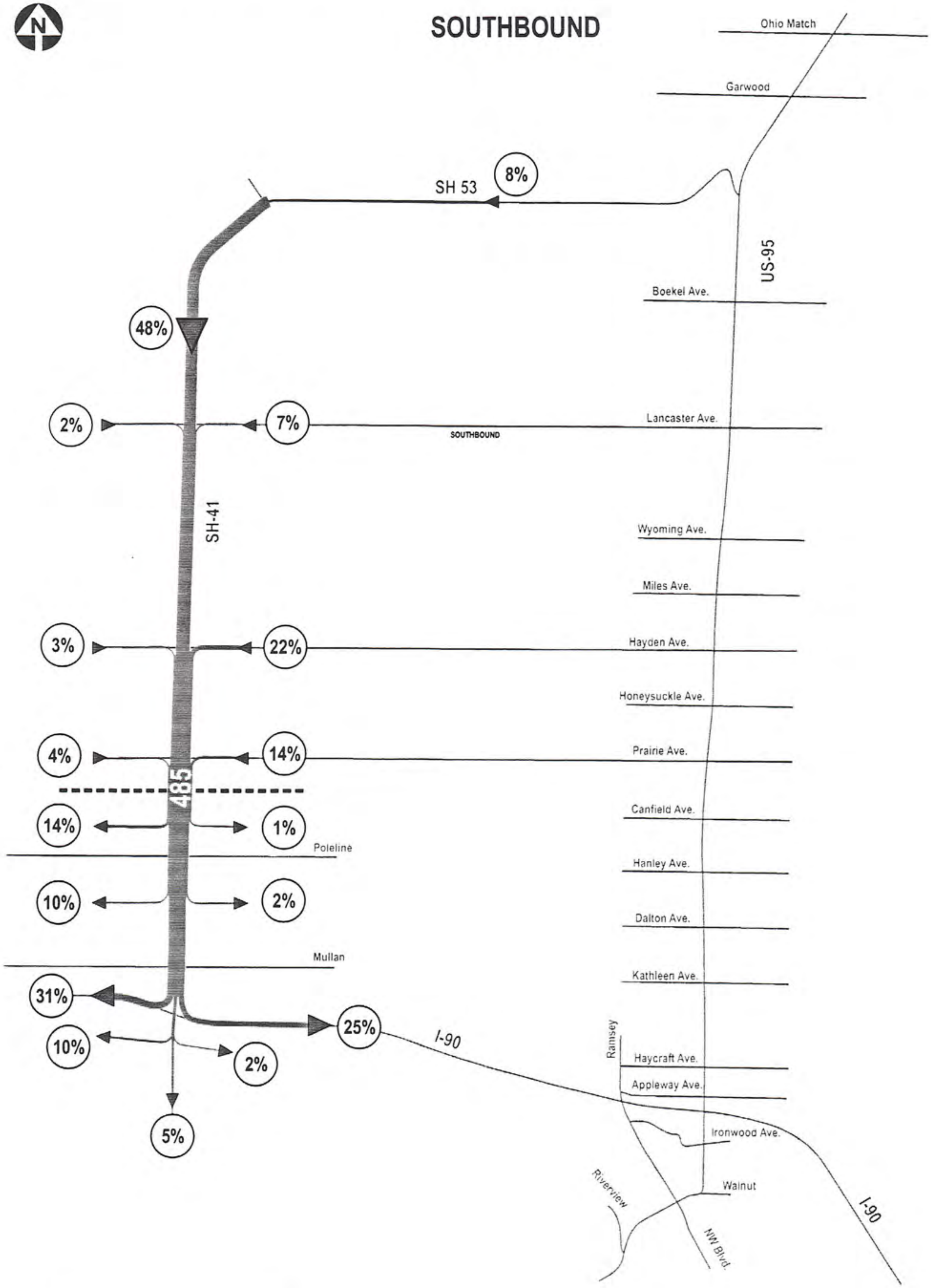
This section discusses the methodologies used to evaluate the traffic impacts of the proposed land use alternatives and provides a summary of results/conclusions.

Roadway Improvements

A preliminary analysis of existing and future traffic conditions indicates that significant capacity improvements would have to be provided to accommodate traffic volumes generated by the proposed alternatives. A Project Team consisting of ITD, the Cities of Post Falls and Rathdrum, Kootenai County, and the Post Falls Highway District was assembled to discuss the most reasonable and financially feasible capacity projects for the Highway 41 corridor. An improvement plan/approach was developed to improve the corridor and is discussed in detail later in this report.

Generally, capacity improvements would involve the widening of Highway 41 to a five-lane facility, the installation of additional/upgraded traffic signals at major intersections, access restrictions, construction of new off-corridor roadways, and the widening of several adjacent arterials. The Project Team agreed that these improvements would be implemented with any of the proposed land use alternatives and have been included into the updated KCATT model and reflected by the MOEs. It is important to note that traffic operations at intersections or within the corridor will be reduced from what has been highlighted by this report, if any of the proposed improvements were not constructed. Also note that the only improvement not considered by this plan, involved the improvement of the Highway 41 and I-90 interchange. ITD will analyze the entire Interstate 90 route, including this interchange, between the Washington State line and the eastern city limits of Coeur d' Alene in a forthcoming corridor study. Interchange improvement needs will be addressed as part of the study.

Origin-Destinations (2000 PM Peak Hour) South of Prairie



Highway 41 Corridor Plan

Figure 11

Origin-Destinations (2000 PM Peak Hour) South of Prairie

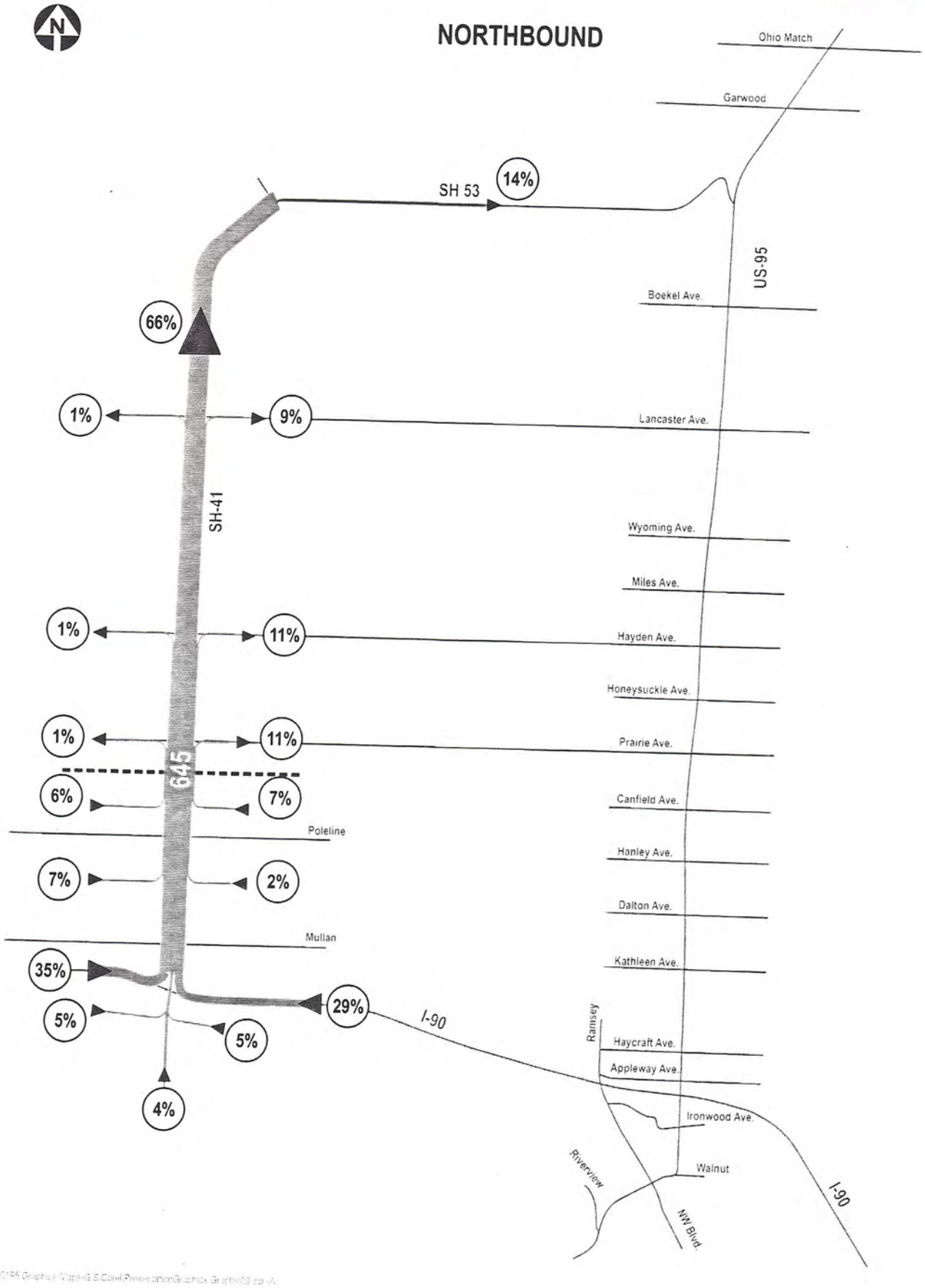
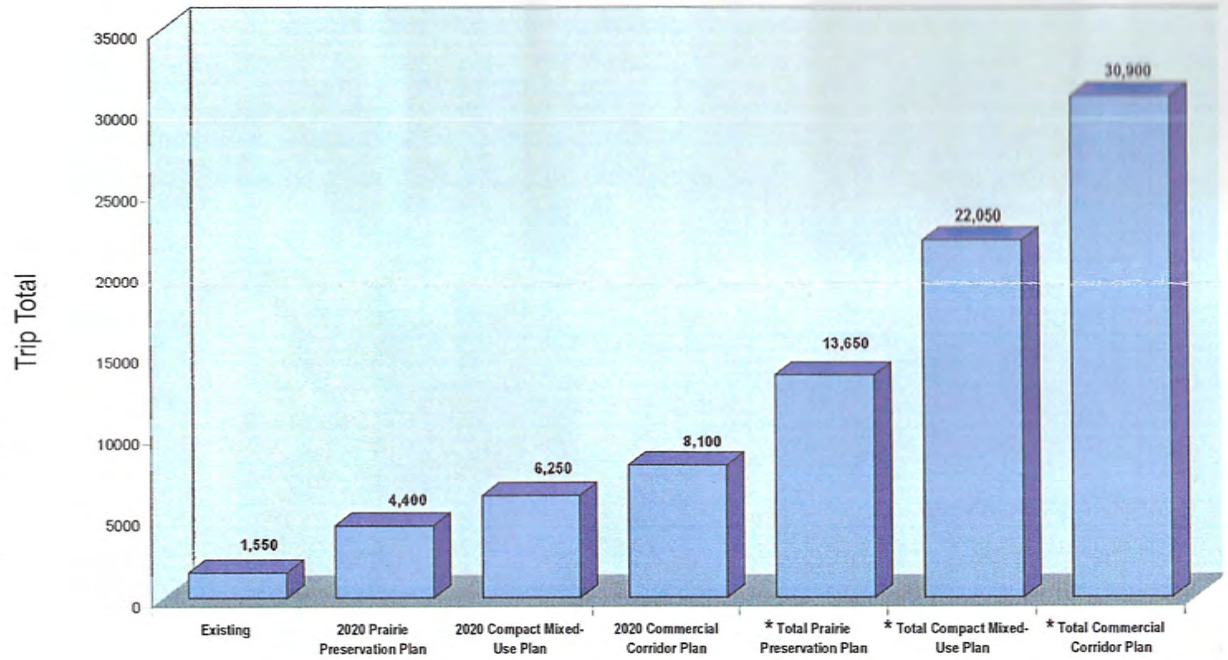


Figure 12

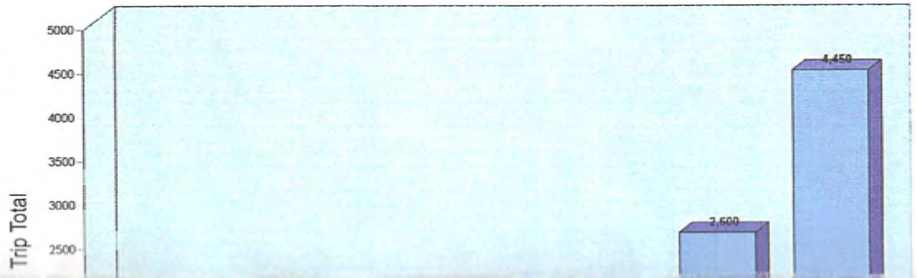
Alternative Trip Generation Comparison

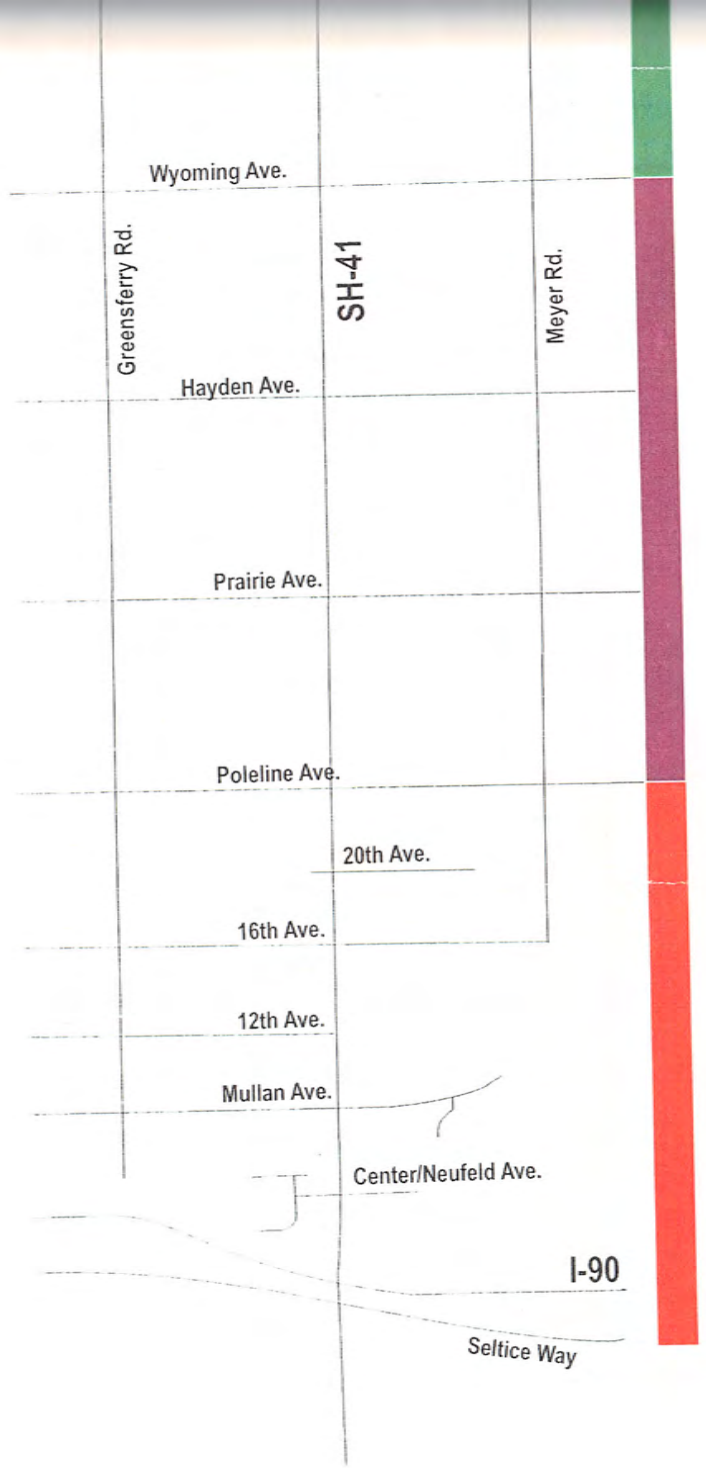
***TOTAL TRIP GENERATION IS EACH LAND USE PLAN AT FULL BUILD-OUT.**

Total Corridor between Seltice Way to Rathdrum City Limits



Corridor between Wyoming Avenue and Rathdrum City Limits





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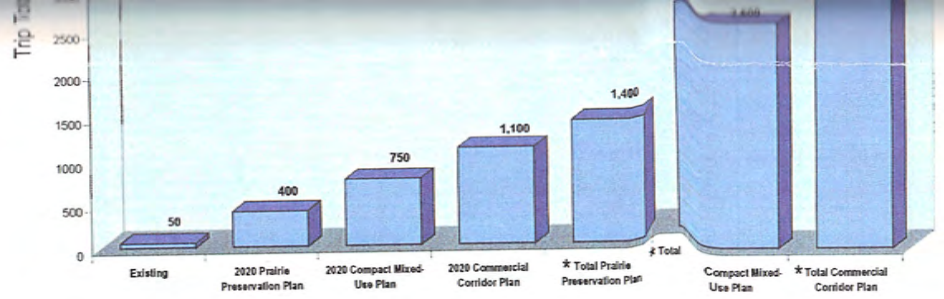

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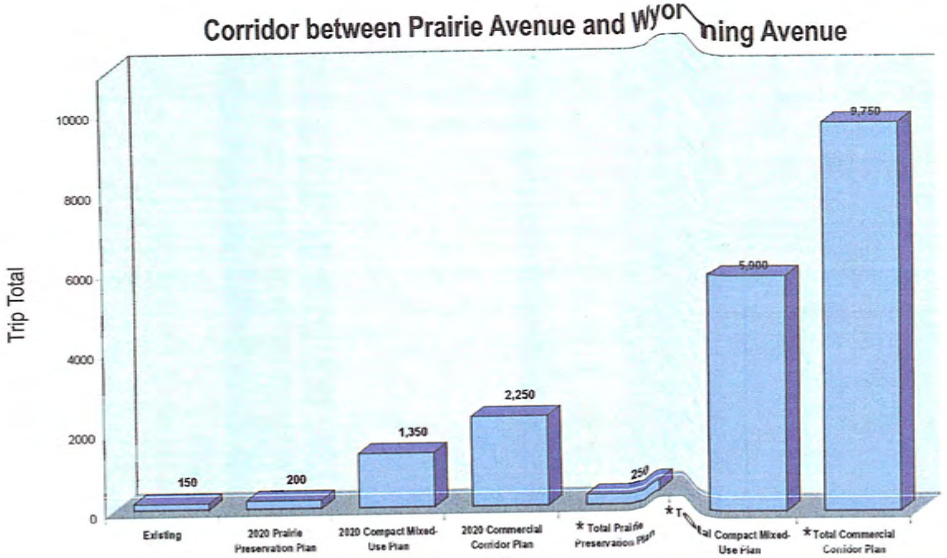

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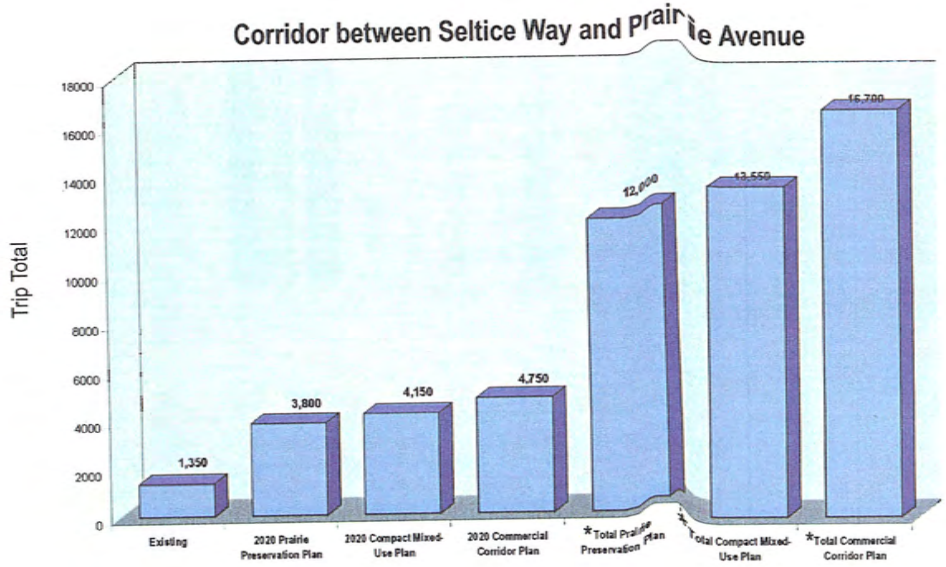

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Intersection Level of Service

Intersection operations were gauged according to levels of service (LOS) methodologies and procedures identified by the *Highway Capacity Manual* (TRB Special Report 209, 2000). Levels of service are a qualitative measure of traffic flow and congestion at intersections and on roadway sections. Levels of service are separated into six grades that range from LOS A, indicating free-flow traffic, to LOS F, indicating extreme congestion and long vehicle delays.

Intersections that operate better than LOS C are anticipated to have adequate mobility and have capacity for additional traffic growth. Intersections that operate at LOS D have adequate mobility, but have limited growth potential. Capacity and mobility deficiencies begin to occur at LOS E, and as an intersection ceases to function appropriately at LOS F. ITD indicates LOS D as the lowest acceptable operation for intersections in a planning level study. *Synchro, Version* 5.321 by Trafficware was used to analyze peak hour LOS. This application is based upon the methodologies described by the *Highway Capacity Manual.*

Table 4 provides a summary of LOS for the 13 primary study intersections located along State Highway 41 (this includes the intersection of eastbound Seltice Way/I-90 Interchange ramp) based upon existing and forecast calibrated traffic volumes generated from the model for each of the proposed alternatives. The results indicate that most intersections currently operate between LOS B and C during the PM peak hour. This implies that there is available capacity for traffic growth at these intersections/areas beyond what is being used today. Two intersections operate at LOS D, which indicates acceptable operations with limited capacity for growth. Three intersections operate below LOS D and this indicates poor traffic operations with no capacity for growth.

The capacity offered by the planned improvements should enhance LOS, even with the increase of traffic associated with the proposed land use alternatives. Only one intersection would operate at LOS D and two intersections at LOS E/F during the forecast PM peak hour, indicating that Highway 41 can accommodate traffic growth with improvement. The I-90 eastbound off-ramp/Seltice Way and Highway 41/Seltice Way intersections would operate at unacceptable LOS in the future. As indicated, these intersections cannot be improved for sometime due to interchange realignment issues and financial constraints.

Table 4

Intersection LOS Summary for Highway 41 Corridor

Land Use Alternative	LOS A to C	LOS D	LOS E and F
Existing	8	2	3
Prairie Preservation[1]	10	1	2
Compact Mixed-Use[1]	10	1	2
Commercial Corridor[1]	9	1	3

[1] Plan Development at the year 2020.

Detailed LOS summary results are highlighted on Figure 13. This figure shows both the total and approach LOS for intersections under the existing and proposed alternatives. Note that total intersection LOS is the appropriate gauge for planning level traffic operations and that approach LOS have been shown only for the purpose of comparison.

Existing & Forecast Levels of Service - 2020

Key

EX - Existing LOS

Forecast LOS

PP - Prairie Preservation
MU - Mixed Use
CC- Commercial Corridor

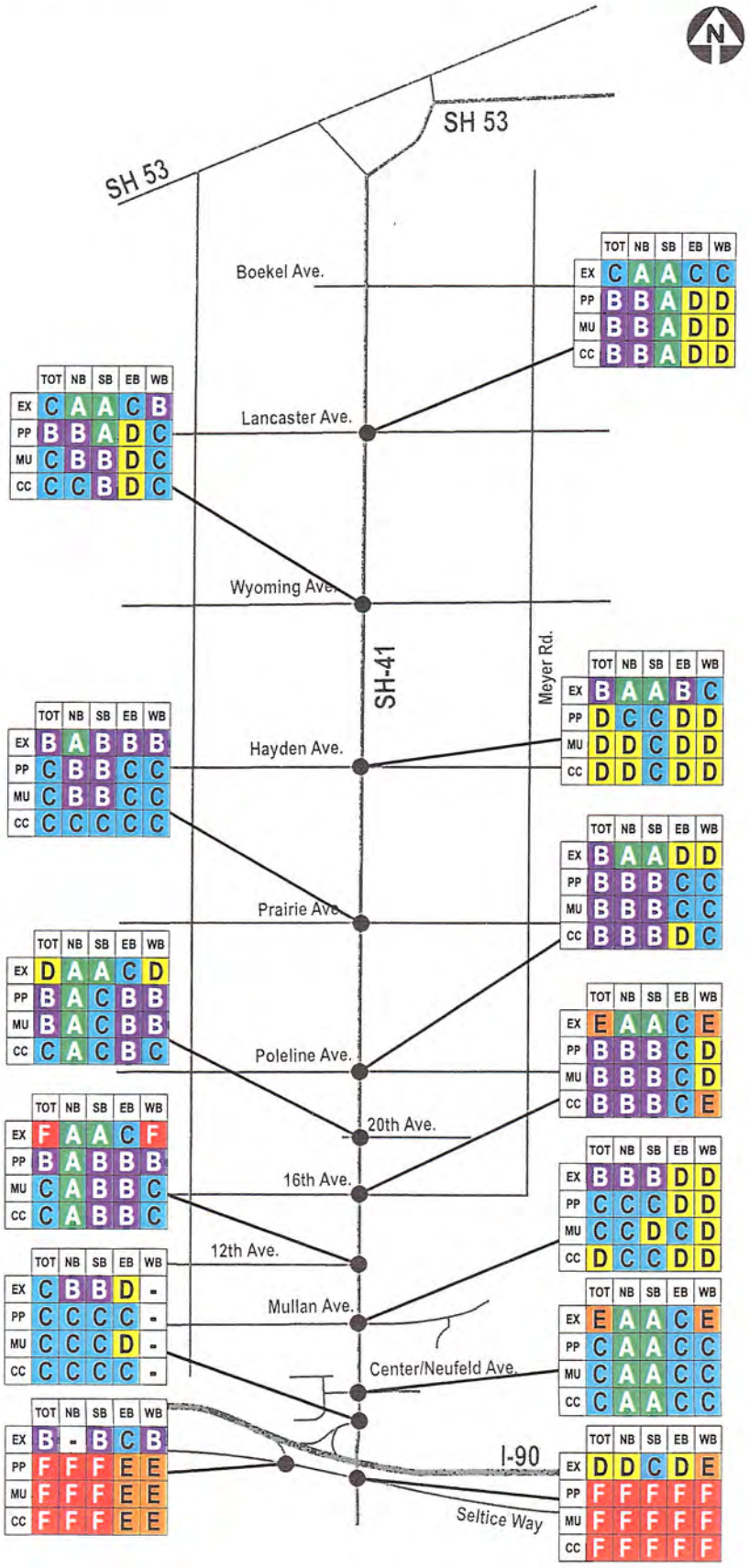
LOS Criteria

LOS A - Free Flow
LOS B - Stable Flow, slight delays
LOS C - Stable Flow, normal delays
LOS D - Stable Flow, long delays
LOS E - Unstable Flow, intolerable delays
LOS F - Forced Flow, failures

Intersection Travel

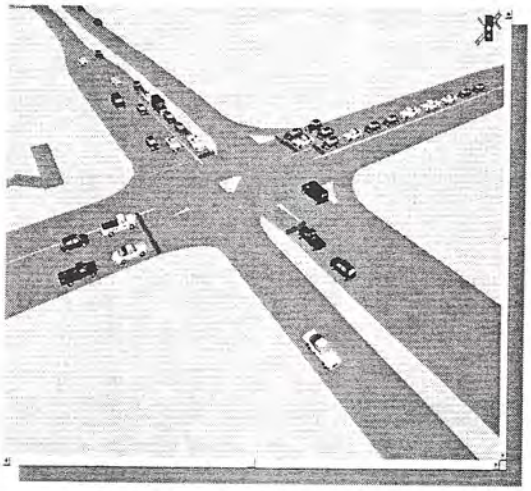
TOT - Total
NB - Northbound
SB - Southbound
EB - Eastbound
WB - Westbound

NOTE: Forecast LOS for the three Land Use Alternatives were developed based on 2020 conditions with traffic improvements/ controls as specified on Tables 8 and 10



Corridor Operations

Synchro, Version 5.321 by Trafficware also has the ability to provide corridor MOEs based upon existing and forecast traffic volumes and conditions (intersection controls, road capacities, etc.). Average vehicle speeds, travel times, and corridor LOS are used to judge the overall operation of a corridor because it accounts for impacts that do not occur at intersections, such as delays that result from traffic accessing a roadway at driveways, etc.



Future traffic operations of the Highway 41/Mullan Avenue Intersection

This analysis was generated for the entire Highway 41 corridor between Lancaster Avenue and Seltice Way based upon existing traffic conditions and each of the forecast alternatives. Summary results (average travel speeds, total travel times, and arterial LOS) are provided for comparison on Table 5. Note that this type of information is primarily used for the purposes of comparison of speed, as travel times will have a certain degree of error when compared with actual measurements.

Table 5

Corridor Measures of Effectiveness Summary

Measure of Effectiveness	Existing		Prairie Preservation		Compact Mixed-Use		Commerical Corridor	
	NB	SB	NB	SB	NB	SB	NB	SB
Average Travel Speed	45.7	48.5	37.1	44.4	37.1	43.4	36.8	43.3
Total Travel Time (min.)	10.2	9.6	12.3	10.0	12.3	10.3	12.4	10.4
Arterial LOS	B	B	C	B	C	C	C	C

As shown in Table 5, the addition of a controlled access point onto Highway 41 will have the impact of reducing overall corridor operations even though intersection operations/LOS are shown as improved. A 5- to 10-mph reduction in speed and up to a two-minute increase in travel time can be expected on Highway 41 with the construction/ implementation of the proposed alternatives.

The Commercial Corridor Plan alternative appears to have the greatest impact to Highway 41 because more traffic is being generated and assigned to the roadway at the proposed access locations.

Accident Summary

Safety conditions were identified in the Highway 41 corridor through an examination of vehicular accident data. Accident data was obtained from ITD and examined to summarize the frequency of occurrences, severity, and type of accidents.

Table 6 provides a three-year summary of accidents on the Highway 41 from Seltice Way to Lancaster Avenue between January 1, 1997 and December 31, 2000. Total accidents over the three-year period, including average yearly accidents and accident severities, are summarized between primary arterials and for the length of the corridor. Also shown is a calculated accident rate that quantifies accident frequencies based upon corridor section length, average annual accidents, and typical weekday traffic volumes. The accident rate can help identify which sections of Highway 41 have high accident trends and can help determine if Highway 41 is a high accident corridor (HAC). The utilization of accident rate methodologies to identify HACs was coordinated and confirmed with ITD.

Table 6

Highway 41 Accident Summary - 1997 through 2000

Section	Section Length	Daily Traffic	1997		1998		1999		Total			Avg	Rate[3]
			Pdo[1]	Inj[2]	pdo	Inj	pdo	Inj	pdo	Inj	Tot		
Seltice to Mullan	0.45 mi	15,000	7	6	11	8	4	5	22	19	44	13.7	5.61
Mullan to 12th	0.24 mi	14,500	2	1	3	1	3	4	8	6	14	4.7	3.64
12th to 16th	0.26 mi	14,200	1	1	2	2	0	3	3	6	9	3.0	2.27
16th to Poleline	0.50 mi	12,700	1	5	0	2	2	0	3	7	10	3.3	1.45
Poleline to Prairie	1.00 mi	12,000	5	7	1	1	1	1	7	9	16	5.3	1.21
Prairie to Hayden	1.00 mi	11,800	4	8	4	5	2	1	10	14	24	8.0	1.85
Hayden to Wyoming	1.00 mi	11,500	1	3	1	3	2	5	4	11	15	5.0	1.19
Wyoming to Lancaster	1.00 mi	11,100	2	0	1	2	4	0	7	2	9	3.0	0.74
Highway 41 Corridor	**5.46 mi**	**11,000 to 15,000**	—	—	—	—	—	—	**64**	**74**	**138**	**46.0**	**1.54 to 2.08**

1. *pdo = Property Damage Only*
2. *inj = Injury Accident*
3. *Rate = Accident Rate (accidents per million vehicle miles)*

Accident rates below two accidents per million vehicle miles are nominal and are not normally classified as HACs. Accident rates of between 2.0 and 3.0 should be further evaluated and may be classified as a HAC, depending upon location. Accident rates that exceed three accidents per million vehicle miles should be identified as areas of concern and can qualify as a HAC.

The analysis indicates that there are an average of 46 accidents per year on Highway 41 between Seltice Way and Lancaster Avenue. On average, accidents occur at a rate of between 1.54 and 2.08 accidents per million vehicle miles, which suggests that the corridor currently is not a HAC.

Accident rates are high between 12th Avenue and Seltice Way. Highway 41 intersects with I-90 and several other highly utilized arterials. As a result, the potential for vehicle conflicts are high and has resulted in a higher occurrence of accidents. This section of Highway 41 should be the focus of concern and further examination.

Table 7 provides a summary of accidents and accident types at intersections along Highway 41. Reoccurring accidents can indicate a pattern that is being caused by factors,

such as lack of controls or intersection design flaws. Intersection type data can be used to identify these patterns.

Table 7

Intersection Accident Summary - 1997 through 1999

Study Area Intersection	Pdo[1]	Inj[2]	Total	% of Corridor	Rear End	Side Swipe	Head On	Turn-Angle	Other
Seltice	4	2	6	4%	5	1			
EB I-90 Ramp	3	1	4	3%	1		2	1	
WB I-90 Ramp	5	5	10	7%	1		6	2	1
Mullan	6	3	9	7%	7	1		1	
12th	5	5	10	7%	8			1	1
16th	3	2	5	4%				5	
Poleline	2	3	5	4%			1	3	1
Prairie	6	6	12	9%	3		5	1	3
Hayden	2	8	10	7%	4		3	3	
Wyoming	1	0	1	1%		1			
Lancaster	1	1	2	1%	2				
Total	**38**	**36**	**74**	**54%**	**31 (40%)**	**3 (4%)**	**17 (23%)**	**17 (23%)**	**6 (8%)**

1. *pdo = Property Damage Only*
2. *inj = Injury Accident*

As shown in Table 7, 54 percent of accidents within the corridor occur at intersections. Accidents typically occur with more frequency at intersections, so this is a normal statistic. Approximately 40 percent of accidents at these intersections are rear-end accidents and close to 30 percent are sideswipe or head-on accidents. These accidents are typical of two-lane, high-speed highways without barrier separation and the data does not necessarily suggest a design error. Most of the remaining accidents are turn-angle or "T-Bone" accidents that occur with turning vehicles at intersections. This again is normal of high-speed facilities, as drivers misjudge the time available to safely turn from Highway 41 onto the side streets, or vise-versa.

There are available ways to promote safety throughout the Highway 41 corridor. The improvements planned for the corridor (signalization, access control, and median barriers) should help minimize the potential for accidents within the corridor, although it is hard to predict what will occur in a 20-year timeframe with a large increase of traffic. However, no additional improvements or recommendations are offered on the basis of the accident summaries at this juncture.

Capacity Improvements

Several capacity improvements and refinements are proposed as a function of this plan for Highway 41 and the primary intersecting roadways. The improvements were developed based upon Project Team meetings with ITD, the Cities of Post Falls and Rathdrum, Kootenai County, and the Post Falls Highway District. The improvements/refinements were determined to be reasonable and may be implemented based upon a variety of public and private funding sources.

The improvements are proposed to accommodate the growth in traffic that is likely to occur as the result of the land use alternatives; although, it should be noted that the Prairie Preservation Plan alternative would be similar to a "no/reduced-build" condition. Capacity improvements would still be required with this alternative, due to the normal increase of traffic on Highway 41 and because of the development growth that will occur within the Cities of Post Falls and Rathdrum, regardless of the implementation of this plan.

The improvements are the result of preliminary forecast analyses of future capacity restraints and Project Team discussions concerning local and regional needs. Not all of the proposed improvements would be the function of this plan, as there are projects that are likely to occur separately, or in conjunction, with other planning/improvement efforts such as those that will occur with the US 95 project. Figure 14 provides a summary of improvements for the proposed Highway 41 corridor and adjacent primary roadways and can be used in conjunction with the following discussion of improvements.

State Highway 41

State Highway 41 is currently a two- to four-lane roadway with generally 100-foot ROW (ROW) between Seltice Way and Poleline Avenue. North of Poleline Avenue, the highway reduces to two lanes with varying ROW to the City of Rathdrum. Left turn lanes are provided at both Prairie and Hayden Avenues. This Plan proposes to improve Highway 41 to four lanes from Seltice Way to Rathdrum with a 130 to 200-foot ROW. The newly constructed section would have 12-foot-wide lanes with a 16-foot median restriction that will only allow left turns at principal roadways and selected ½-mile access locations (at Hope and 16th Avenues). Left turns from Highway 41 would also be allowed at 12th and Horsehaven/20th Avenues, but not from the local cross streets. Right turns will be allowed at east/west access roads along the highway. Improvements would also include 10-foot swales for stormwater runoff and a 10-foot paved bicycle/pedestrian pathway on both sides of the roadway.

Traffic Signals

Traffic signals are currently located on Highway 41 at Seltice Way, the westbound I-90 ramp, and Mullan, Poleline, Prairie, and Hayden Avenues. Traffic signals are proposed at 16th, Hope, Wyoming, and Lancaster Avenues. The signals would allow for protected/exclusive left turns, which means that designated left turn lanes would be provided/constructed on all intersection approaches. Designated right turn lanes would be provided at arterial intersections on both Highway 41 and the cross collector/arterial streets.

Road Widening Projects

Both approaches to Highway 41 on Lancaster (possible future 5-lane), Wyoming, Hope, Poleline (east-leg only), and 16th Avenues would be widened to three lanes from the Highway 41 intersection to the proposed north/ south ½-mile access road. Both approaches to Highway 41 on Hayden Avenue (from the intersection for ¼ mile), Prairie Avenue, Poleline Avenue (west leg only), and Mullan Avenue would be widened to five lanes. These roadways would allow for designated left turns at Highway 41 and the secondary access road intersections. All other east/west roadways are proposed to have only two lanes without designated left turn movements. Both Greensferry and Meyer Roads would be improved to three lanes. All road improvements would include ten feet swales for stormwater runoff and a 10-foot paved bicycle/pedestrian pathway on both sides of the roadways. A 16-foot landscaped median strip would be provided on all north/south and east/west roadways for 300 feet from the intersecting major arterials. A summary of proposed road improvements is contained in Table 8.

Table 8

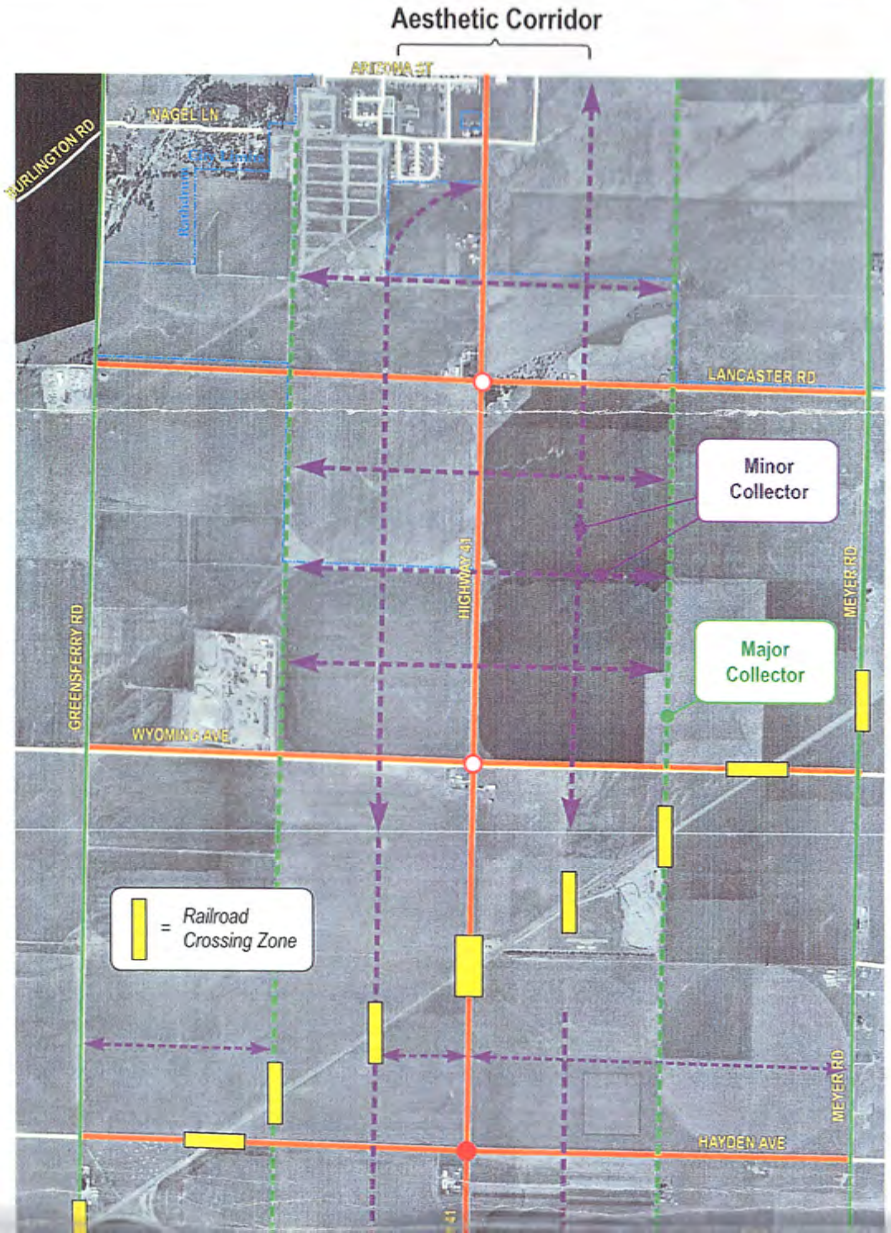
Proposed Road Improvements

Roadway:	Designation:	Width in Feet:	Proposed Improvements:
Prairie Avenue	Arterial	68	5 Lanes
Poleline Avenue	Arterial	68 - 40	5 lanes at the intersection (5 lanes west, 3 lanes east)
Mullan Avenue	Arterial	68	5 lanes at the intersection
Lancaster Avenue	Minor Arterial	40	3 Lanes
Wyoming Avenue	Minor Arterial	40	3 Lanes
Hayden Avenue	Minor Arterial	68 - 40	5 lanes at the intersection, then 3 lanes west, 3 lanes east
Hope Avenue	Collector	40	3 Lanes
Greensferry Road	Arterial to Prairie, Collector- North of Prairie	40	3 Lanes
Meyer Road	Collector	40	3 Lanes
12th Avenue	Collector	40	2 Lanes
16th Avenue	Collector	40	3 Lanes
20th/Horsehaven	Local	40	2 Lanes
Early Dawn	Local	40	2 Lanes
Cecil Road	Collector/ Minor Arterial	40	2 Lanes

Figure 14

Transportation and Implementation Plan

- Aesthetic Corridor Overlay- Standards apply within one-quarter mile on each side of Highway 41 for signage, landscaping, site design, and the provision of open space.
- East/West Access Roads (North of Poleline Avenue)- Minor Collector access to Highway 41 is provided at quarter mile increments. Access to the Highway is limited to right in/right out turning movements. Local road right of way is proposed at two 13' travel lanes, a 14' center turn lane, grass drainage swales, utility corridors, and pedestrian/bicycle path as a local access road with 40'-44' of developed roadway (minimum r/w width 80-100 feet).
- North/South Access Roads (North of 12 th Avenue)- Access roads are provided at one quarter mile from the corridor as a Minor Collector and one half mile as a Major Collector roadway. Collector roadway is limited to left turning movements at intersecting roadways. Collector improvements include a landscaped median strip for 300' from intersecting arterials and pedestrian/bicycle pathway (total r/w width 80-100 feet).
- Rail Crossing Zones- Access roads terminate at the rail crossings until rail use is abandoned. Rail right of way could be reserved for other transportation uses, such as Rails to Trails or future transportation options. Existing Rail Crossings on Greensferry and Meyer roads to remain until use is abandoned.
- Secondary "Backage" Roads- Are intended to provide off corridor north/south circulation and access to properties fronting on Highway 41.
- Private Drives- Are intended to provide access to properties in those areas not served by "Backage" roads.
- Future construction of roads should include continuous road naming for



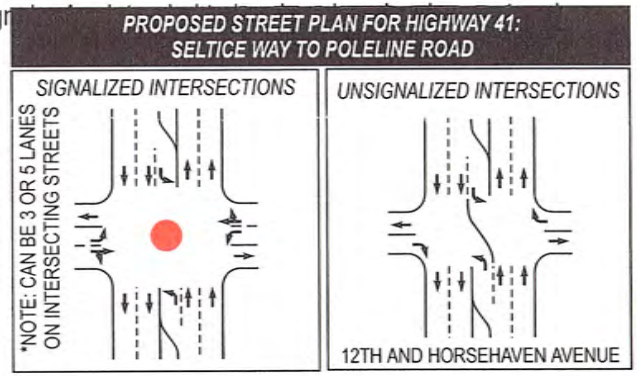
not served by "Backage" roads.

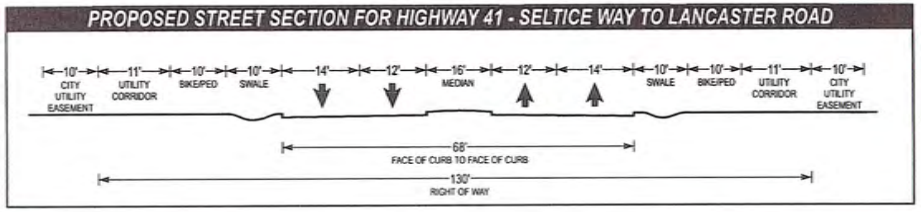
- Future construction of roads should include continuous road naming for consistency in accordance with Kootenai County guidelines.

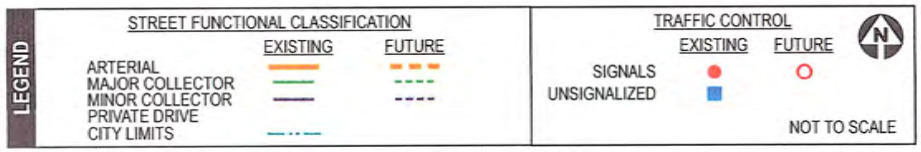
- Highway Access and Control (South of Poleline Avenue)- in conformance with the adopted Memorandum of Understanding between the City of Post Falls and the Idaho Transportation Department (total right of way width 130 feet). North of Poleline Avenue is proposed as four travel lanes with left turning movements at major intersections only. Right of Way width north of Poleline is proposed at 150-200 feet with a possible future R/W reservation of 300'.

- Major intersecting roadways- Are proposed as 3 lanes at the intersection with left turning movements (Lancaster- possible future 5-lanes, Wyoming, Hope, Poleline-east of Highway 41, and 16th Avenue) and 5 lane roadways at the intersection with left turning movements (Prairie, Hayden, Poleline-west of Highway 41 and Mullan Avenues). All other minor intersecting roadways are proposed as two lanes without left turning movements. Greensferry and Meyer Roads proposed at 3 lanes with left turning movements at intersecting roads.

- Future Traffic Sig
traffic warrants.







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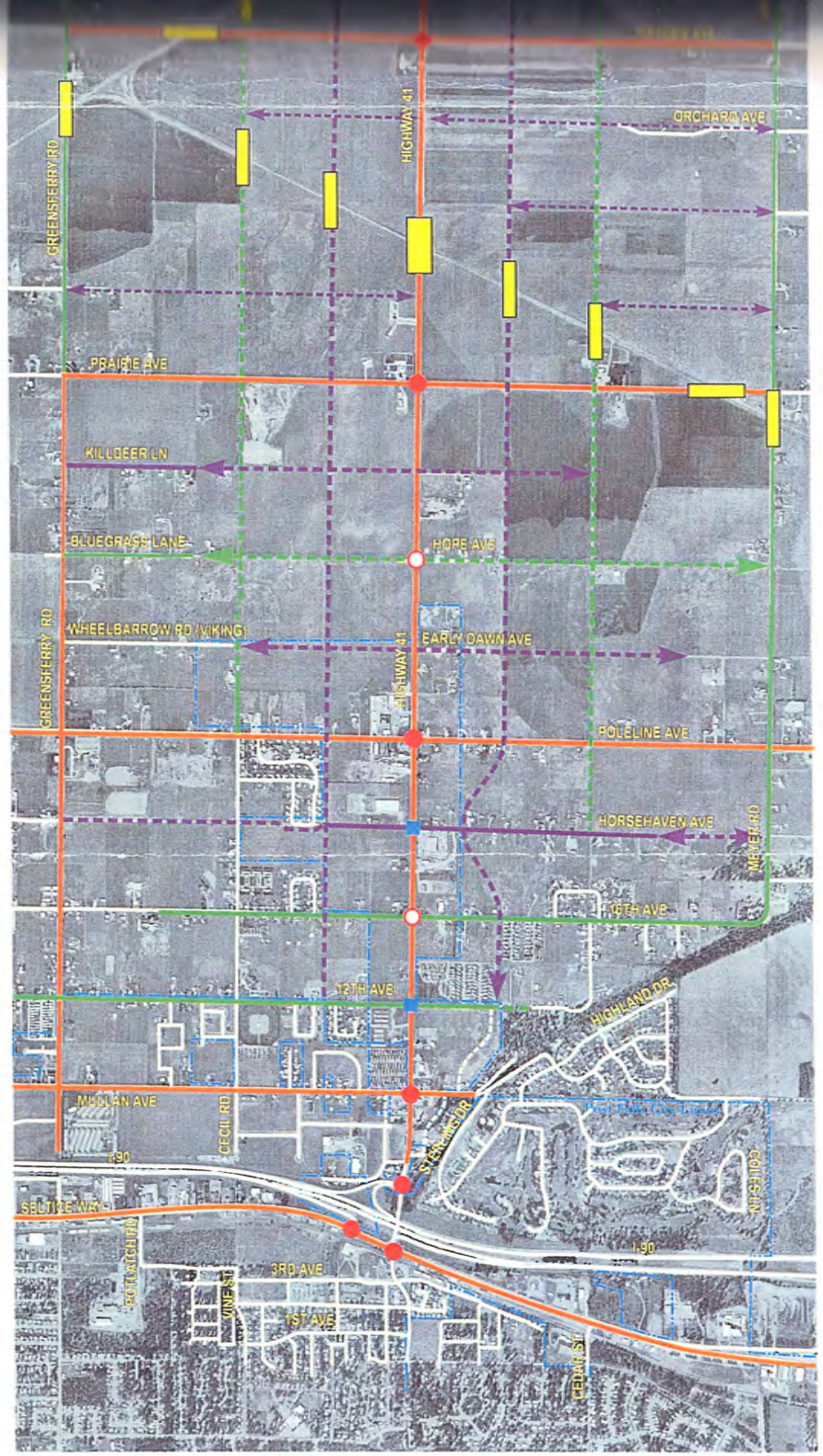


Secondary "Backage"/Access Roads

A network of secondary access roads is proposed with the plan to provide access to future development projects. "Backage" roads would be located approximately ¼ mile from the east and west of Highway 41 and will run parallel to the highway. The quarter-mile roads would be designated as a Minor Collector road and would extend from 12th Avenue on the east side of the highway north to Rathdrum and on the west side of the highway from 12th Avenue within the City of Post Falls past Lancaster Avenue into the City of Rathdrum. The quarter-mile roads will serve as local access to properties fronting on Highway 41 and will provide access to intersecting arterials for access to Highway 41 for left turn movements. The half-mile road would serve as a Major Collector and run from Horsehaven/20th Avenue on the east side of the highway and from Mullan Avenue on the west side to Rathdrum. The east/west access roads will connect the "Backage" roads with Highway 41 and will be located approximately every ¼ mile between Poleline and Lancaster Avenues. Access to Highway 41 will be restricted, and is discussed in detail in the next section. Connectivity of the proposed roadways will be limited in the vicinity of the railroad tracks to limit uncontrolled crossings of the rail lines. Future realignment or abandonment of the rail would allow for the completion of the roadways for cross-prairie access.

Private Drives

Private drives are proposed in those areas that do not have access to "Backage" roads. Some areas have been specifically identified for private drives, while other areas may emerge as development occurs. Private drives are proposed on the east side of the highway to access 12th and Mullan Avenues. South of Mullan, a private drive, as a continuation of Neufeld Lane, will provide access to the highway and left turn capabilities via Mullan Avenue. A private drive is proposed as a continuation of Central Avenue to provide access to Mullan Avenue.

Pedestrian and Bicycle Improvements

Within the proposed transportation improvements, shared pedestrian/bicycle facilities are recommended for development with each new or reconstructed roadway. Currently, designated facilities are not provided on most roadways; however, are casually used as a portion of the shoulder or within an undeveloped area of the right of way.

Development Standards

The "Backage" and access roads will be constructed with a minimum of two 12-foot travel lanes and a 12-16 feet center median, with an 80 to 100-foot ROW. The ROW will also support drainage swales, utilities, and a 10-foot pedestrian/bikeway path on both sides of the roadway. The pedestrian path should be located at a sufficient distance from the roadway so that future widening of the road will not effect perpendicular alignments.

The funding for the construction of these roads is discussed in detail in the subsequent Financial Section of the Plan. It will be noted here that construction of these roads will primarily be motivated and funded by development. Development will be responsible for frontage improvements that require the construction of adjacent "Backage"/access roads. If a "Backage"/access road or access connection to a major roadway is not provided at a desired site, then the development will have to be responsible for these improvements or select a location with adequate infrastructure, at which point they may be required to contribute to preexisting development agreements.

Access Control/Management

ITD has developed new access controls for the State highway system. The Highway 41 Corridor Master Plan is based upon these guidelines, but has been modified/revised to incorporate the recommendations of the Project Team, which includes representatives from ITD.

There are five access types than can be identified/determined, based upon the functional classification of a highway, arterial, or roadway, as shown in Table 9. ITD has the authority to issue and control new and existing access permits for Highway 41, while local jurisdictions and the Post Falls Highway District control roadways within their jurisdiction. Approval of the Federal Highway Administration is required before access can be allowed on Interstates or Highways of National Significance. All attempts will be made to reduce/adjust existing access to conform to access control standards, but it is anticipated at this juncture that this will only be enforced with roadway improvements (reconstruction, realignment, widening, etc.). Control of all future access points and regulatory control standards on Highway 41 will be implemented through the adoption of this Plan by the Idaho Transportation Board.

Table 9

Access Types and Roadway Functional Classification

Access Type	Rural Functional Classification	Urban Functional Classification
I	Minor Collector, Major Collector	Minor Collector, Major
II	Minor Arterial	Collector, Minor Arterial
III	Principal Arterial	Principal Arterial
IV	Principal Arterial (multiple-lane)	Principal Arterial (multiple-lane)
V	Interstate	Interstate

The allowable distance between intersecting roadways, signals, access intersections, and driveways is dependant upon the access type (again, this is based upon the functional classification of the roadway) and the urban or rural location of the access. Detailed spacing criteria can be viewed in ITD's Administrative Policy A-12-01, dated August 22, 2001. Highway 41 will be requested to be classified by the Idaho Transportation Board as a modified Access Type IV, a multi-lane urban and rural (depending upon location) principal arterial/highway governing all existing or proposed accesses (intersections, access intersections, and driveways) on Highway 41.

Type IV-access control criteria dictates that intersections (with or without signals) will be allowed every ½ mile within urban areas and every 1-mile within rural areas. As such, signals are only allowed every ½ mile on Highway 41 from Mullan Avenue to Prairie Avenue (urban section), and every 1-mile from Prairie Avenue to Lancaster Avenue (rural section). A special allowance by the IT Board is requested to allow unsignalized right in/right out only access intersections every ¼ mile on Highway 41 along the entire highway between Poleline Avenue and Lancaster Road. Proposed signal spacing and access intersection locations have been developed based upon future consideration by the IT Board.

As indicated, a 12-foot concrete median (with an additional 2 feet on both sides of the median) will be constructed with the proposed widening of Highway 41. This would restrict full movement access at existing or proposed access roads. The Project Team has developed

an access plan that will conform to ITD standards and roadway improvements, yet provide sufficient access to existing and proposed developments within the corridor.

A system of "Backage" roads will be constructed with the development of the corridor. These roads will primarily access arterials that intersect with Highway 41, with east/west access roads provided approximately every ¼ mile between major intersecting roadways.

Turn restrictions will be enforced at the access intersections on Highway 41. Right-in/right-out movements will only be allowed at the ¼-mile east/west access road intersections with Highway 41, both north and south of primary arterials (north of Poleline, Prairie, Hayden, and Wyoming, and Lancaster Avenues). Right-in/right-out, and left in movements will be allowed on Highway 41 at the signalized intersections. Left turn movements are allowed from Highway 41 to both 12th and 20th/Horsehaven Avenues, but are not allowed from these roads onto Highway 41. This would require a break in the concrete median with designated north and south left turn lanes. All access intersections will be stop-controlled on the minor eastbound and westbound approaches. As indicated, eastbound and westbound left turns onto Highway 41 will only be allowed at signalized arterial intersections. A summary of proposed intersection controls and access restrictions for the Highway 41 Corridor is summarized in Table 10 and can be reviewed in conjunction with Figure 14, on page 36. Note that both the proposed north/south and east/west roadways would not extend through the rail lines until such time as termination of rail use.

Table 10

Summary of Proposed Intersection Controls and Access Restrictions on Highway 41

Intersection, Highway 41 @	Control	Restrictions
Seltice Way	Signal	Unrestricted movements
Westbound I-90 Ramp	Signal	Unrestricted movements
Mullan Avenue	Signal	Unrestricted movements
12th Avenue	East-west stop-control	Restricted east-west left turns
16th Avenue	Signal	Unrestricted movements
20th/Horsehaven Avenue	East-west stop-control	Restricted east-west left turns
Poleline Avenue	Signal	Unrestricted movements
Early Dawn	East-west stop-control	Allow right-in/right-out only
Hope Lane	East-west stop-control	Unrestricted movements
Killdeer Lane	East-west stop-control	Allow right-in/right-out only
Prairie Avenue	Signal	Unrestricted movements
East/West Access Road(¼ mile north of Prairie)	Eastbound stop control (WB limited by rail line proximity)	Allow right-in/right-out only
East/West Access Road (¼ mile south of Hayden)	East-west stop-control	Allow right-in/right-out only
Hayden Avenue	Signal	Unrestricted movements
East/West Access Road (¼ mile north of Hayden)	East-west stop-control	Allow right-in/right-out only
Wyoming Avenue	Signal	Unrestricted movements
East/West Access Road (¼ mile north of Wyoming)	East-west stop-control	Allow right-in/right-out only
East/West Access Road (½ mile north of Wyoming)	East-west stop-control	Allow right-in/right-out only
East/West Access Road ¼ mile south of Lancaster)	East-west stop-control	Allow right-in/right-out only
Lancaster Avenue	Signal	Unrestricted movements
East/West Access Road (¼ mile north of Lancaster)	East-west stop-control	Allow right-in/right-out only

No development of private property driveways will be allowed on Highway 41. Zoning Ordinances of the underlying jurisdiction govern the minimum setback for a development or private property driveway on an access or a "Backage" road. Setbacks for structures from Highway 41 are 150 feet from centerline, regardless of the underlying zone setback requirements. No property (which may consist of several contiguous lots or parcels) will have more than two driveway locations unless additional driveways are proven necessary on the basis of an engineering traffic study.

One developed access will be allowed from Highway 41 for agricultural use or as a secondary access for emergency services (not open for non-emergency uses). The access can be closed when the property is developed for residential or commercial use and can be closed at any time at the discretion of the agencies and ITD. All variance requests will be supported by an engineering traffic study. Projects generating more than 25 trips during the AM or PM peak hours will also be required to provide an analysis of traffic impacts for the "Backage"/access roads and the primary points of access to the development site from Highway 41 and/or the study roadways. The scope for all traffic studies will be coordinated with the lead agency (Cities, County, and/or Highway District) and ITD, and will be reviewed by the same agencies.

Transportation System/ Demand Management

Traffic operations can be improved and sometimes capacity can be recovered through Transportation System Management (TSM) strategies. TSM strategies are intended to increase system efficiencies and/or reduce vehicle traffic through intelligent engineering and planning rather than constructing/providing physical capacity improvements (road construction, road widening, etc). Typical examples of TSM include:

- Traffic signal coordination
- Access management
- Commercial vehicle planning/management (early morning or late evening operations)
- Incident management programs (video monitoring, quick emergency responses, etc.)

As determined within the Plan, physical roadway improvements (road widening and signals) would be most relevant for Highway 41 given the projected increase in traffic by year 2020. Signal coordination and access management TSM strategies were incorporated, since these measures promote the mobility goals of ITD and are consistent with the capacity improvements proposed for Highway 41.

ITD is currently planning and implementing incident management programs for State roadways. The timing for these measures (in reference to implementation for Highway 41) is currently not known and was not included into the analysis. Similarly, HOV measures were not reflected in the analysis, as it will depend upon future land use densities and the willingness of local agencies to operate and maintain transit within the area.

Commute trip reduction/management strategies, known as Transportation Demand Management, can encourage vehicle trip reduction through utilization of high-occupancy vehicles (transit, vanpool), staggered work hours, ride-sharing, or other TDM strategies. Commute trip reduction strategies and commercial vehicle management are two other TDM measures that would be appropriate for future implementation within the Highway 41 corridor given the commercial and retail business emphasis of the land use plan. These measures are hard to enforce because they rely upon the willingness of future land owners/tenants/employers to coordinate and comply with appropriate management strategies. Given these difficulties, the measures were not included in the plan because they do not represent concrete TDM strategies at this juncture; although they would likely be beneficial to the corridor overall as land use densities are achieved.

Environmental Review

Study Area

The study area for the Highway 41 Corridor Plan is located in central Kootenai County, Idaho and includes land located one mile on either side of Highway 41, extending north from I-90 in Post Falls to Lancaster Avenue in the City of Rathdrum.

Highway 41 provides the only direct improved transportation route connecting Post Falls and Rathdrum, which are two of the fastest growing cities in the state of Idaho. Because of the region's rapid population and employment growth, the area has witnessed increased traffic volumes and development pressures along Highway 41. Current trends in development emphasize a continuing concentration of auto-oriented land use along the corridor, as well as at the Interstate 90 interchange and within the City of Post Falls. This pattern has resulted in concern about adequate traffic flow, street connectivity, pedestrian/bicycle circulation, and access to Highway 41 from commercial sites. The need to maintain and enhance transportation capacity north-to-south and east-to-west throughout the study area is crucial.

The purpose of this environmental review is to conduct an inventory of land use, public utilities, hydrology, geology, cultural and historical features, and other factors to identify key elements that are critical to transportation planning in the study area. This document summarizes the most critical environmental planning factors that could affect the analysis and development of improvement options for the corridor including land use, and the natural and physical environment. The environmental review is organized into three major study elements: the built environment, the natural environment, and critical land use and environmental factors.

Built Environment

Existing Land Use and Zoning

Official zoning maps, together with aerial photographs and a windshield survey were used to determine existing land use. Zoning in the study area varies greatly, ranging from rural-agricultural (which accounts for the majority of the northern two-thirds of the study area) to areas planned for higher-density residential and commercial development (primarily south within Post Falls' city limits).

Various retail, service, and industrial facilities concentrated along Highway 41 just north of Interstate 90 can be characterized as strip commercial development. Urban density residential development extends outward, both east and west, from commercial areas that border Highway 41. The recent annexation of approximately 300 acres into the City of Post Falls will further intensify these types of land uses. Major east-west roads connecting with the Highway include Mullan Road and 16th, Poleline, Prairie, and Hayden Avenues. These intersections are controlled with traffic signals. Limited commercial/industrial development is within the corridor including convenience stores, mini-storage, hardware and lumber stores, small businesses, churches, and a nursery/greenhouse. Little commercial and industrial land use exists off the corridor. West of Highway 41 on Mullan Avenue, development of a Wal Mart has impacted traffic at the Highway 41/Mullan Avenue intersection. Location of large retail establishments generally act as catalysts for future commercial developments in the vicinity.

Land located along Highway 41 may be considered prime commercial property. Most commercial development has occurred primarily between Mullan and Poleline Avenues. Some of the existing commercial land uses are non-compliant with Kootenai County land use regulations. Very little commercial activity has occurred north of Prairie Avenue due to policies, which prohibit the extension of public wastewater treatment service into unincorporated areas of Kootenai County.

Most agriculturally zoned land is used for farming and production of small grain and grass seed. Large acreage residential development and vacant land also exist in the study area, a majority of which is planned for residential development at much higher densities.

Within Kootenai County, subdivision of land that is zoned agriculturally is prohibited. However, there are numerous existing parcels located on the Prairie that are less than five acres in size that do not have urban services. Presumably, these parcels were created prior to 1978, when the Panhandle Health District adopted regulations requiring individual parcels located over the aquifer (if served by an on-site septic system) to be no less than five acres in size. The size limitation acts to disperse the number of septic systems and seeks to protect the Rathdrum Prairie/Spokane Valley Aquifer.

Based on planned land use patterns and current development trends that have concentrated future commercial uses in the southern third of the study area, it is expected that area residents will continue to rely heavily on vehicular use to access area services. Kootenai County's population is projected to nearly double during the next 20 years. Continued residential development in this area will result in greater reliance on conveniently located shopping and services.

Major Utilities

Avista Utilities and the Kootenai Electric Cooperative provide electricity via several overhead distribution lines within the study area. Avista also supplies natural gas to the area. Crossing the northwest corner of the study area are two power transmission easements owned by Bonneville Power Administration (BPA) and Avista Utilities, respectively. A third easement is for Pacific Gas and Transmission/Northwest pipeline is adjacent to the power easements. Yellowstone Pipeline also has a gas line easement in the vicinity of Poleline Avenue.

Water service within the study area is provided by the Cities of Rathdrum and Post Falls, Ross Point Water District, and several other special service districts within Kootenai County. Many properties are served by individual private systems (wells). The primary source of water is the Rathdrum Prairie-Spokane Valley Aquifer.

Within the City of Post Falls, a water main is located within Highway 41. Water mains are also located within arterials and local access streets that branch off from the highway. A majority of Post Falls in the corridor study area and respective Area of City Impact is served by Ross Point Water District, which serves development located north of Mullan Avenue.

In Rathdrum, a water main within the highway extends as far south as the Highway 41/ Nagel Road intersection, where the main turns west along Nagel Road to serve residential development located north, south, and adjacent to the ROW.

Public wastewater treatment service is limited within the study area due to the limitation of extending public systems to unincorporated areas of the county. Within the City of Post Falls, service is available along the Mullan Avenue corridor, both east and west of Highway 41. The City is currently forming a Local Improvement district (LID) to extend

wastewater treatment facilities, north along Highway 41 from Mullan Avenue to beyond Poleline Avenue. Rathdrum's public system is not within that portion of Highway 41 located in the study area. However, mains are located in local access streets that serve existing residential development to the west of Highway 41 and within the study area. Currently, wastewater treatment for both Post Falls and Rathdrum is handled through the Post Falls treatment plant.

Qwest Communications is the primary telecommunications provider in the corridor.

Rail Transportation

Two at-grade Union Pacific railroad lines traverse the corridor near the midpoint of the study area. Both of these rail line intersections are controlled. Current efforts are under consideration to potentially realign, combine, or abandon Union Pacific rail operations within Rathdrum Prairie. Realignment would be to the Burlington Northern alignment. Discussions have included conversion of the railroad tracks into a trail system to allow pedestrians and bicycles access across this portion of the Prairie or to serve as a future transportation corridor. Railroads on the Rathdrum Prairie may have historic significance under Section 106 of the National Historic Preservation Act. If determined eligible for the National Register of Historic Places, the railroads could potentially constitute 4(f) properties.

Section 4(f) resources consist of publicly owned public parks, recreation areas, or wildlife and waterfowl refuges or significant historic sites. Under the regulations, an analysis is required of properties and FHWA cannot approve a project that uses land from a Section 4(f) resource, unless it determines that there is no feasible and prudent alternative to the use of the resource and that all possible planning to minimize harm has been addressed. Historic resources are protected unless incorporated into a transportation project which does not change its' Section 4(f) designation. The regulations do not apply to restoration, rehabilitation, or maintenance of historic transportation facilities, if the proposed work will not adversely affect the historic qualities. The State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) must agree with this determination of "no adverse effect".

Natural Environment

Water Resources

There are no surface water bodies within the corridor study area. The Rathdrum Prairie/ Spokane Valley Aquifer is the only water resource examined in this report.

Groundwater

Protection of the Rathdrum Prairie/Spokane Valley Aquifer, the region's sole source domestic water supply, is one of the most critical planning factors for the study area. The Rathdrum Prairie/Spokane Valley Aquifer underlies the entire study area. The aquifer was formed during the last ice age more than 12,000 years ago and is composed of sand, gravel, cobble, and other glacial outwash. The aquifer begins in Idaho between Spirit Lake and the south end of Pend Oreille Lake and flows south until it reaches the middle of the Rathdrum Prairie, where it turns west and flows into Washington State under the Spokane Valley. The aquifer turns and flows north, from Spokane's Central Business District, eventually discharging into the Spokane and Little Spokane Rivers.

Velocities of the groundwater within the aquifer ranges anywhere from 1 to 50 feet per day with a westward flow from Idaho to Washington. The depth of the water table varies between 100 and 400 feet below grade in Idaho. The volume of the aquifer is about 10

trillion gallons, making it one of the most productive aquifers in the United States. Because of the aquifer's high permeability and groundwater velocity, it is extremely susceptible to contamination. Contaminant levels in the aquifer increase as the water flows westerly. Generally, contaminant levels show a direct relationship to human activity and have increased since 1977, when water quality of the aquifer was first tested. However, in most levels the contaminants are still below the standards. Primary contaminates found in the aquifer are inorganic chemicals generated by everyday activities; nitrates, chlorides, sulfates, and other chemicals associated with human activity readily mix with the groundwater. Additional contaminates such as industrial chemicals from poor past disposal practices and landfill leachate can be found in the aquifer. These pollutant sources continue to degrade water quality within the aquifer as most substances simply wash through the sand and gravel directly into the aquifer. Even though some contamination has reached the aquifer, the water quality remains very good.

Aquifer Management

In 1978, the Rathdrum Prairie-Spokane Valley Aquifer was declared a "sole source" drinking water supply pursuant to Section 1424(e) of the Federal Safe Drinking Act (O.L. 93-523). This designation requires all federally assisted projects to use aquifer protection measures. In addition, it proclaims the significance of this groundwater resource to the region and support for local protection efforts. In 1980, the Rathdrum Prairie/Spokane Valley Aquifer was designated a Special Resource Water in the Idaho Water Quality Standards and Wastewater Treatment Requirements. This resulted in increased protection for this resource.

Another measure of aquifer management is the Panhandle Health District regulation requiring properties located over the aquifer to be no less than five acres in size if they are to be served by an on-site septic system. Parcels less than five acres are not allowed to utilize on-site septic systems.

Hazardous and Waste Materials Considerations

The location of the aquifer directly below the study area should be a primary concern when establishing land use and transportation plans. The aquifer is not an indefinite resource and protection of the groundwater resource will help maintain a useable supply of water. According to a report published by the Department of Environmental Quality in 1991, potential sources for groundwater contamination are activities that use agricultural chemicals, petroleum handling and storage, landfills, hazardous materials and transportation/ spills, and subsurface wastewater disposal systems such as septic tanks and drainfields. Prevention of water quality degradation through careful planning and consultation with water quality officials is a top priority for Kootenai County and the entire study area.

Topography and Geological Hazards

The terrain within the study area is relatively flat, gently declining in slope from north to south, and supports all types of development including residential, commercial, and industrial uses. Soils in this area are adequate for sustaining development and disposing of stormwater/wastewater. They are also found to be a useful building material. However, the extreme permeability of the soils and the presence of the aquifer greatly diminish the opportunity for effective subsurface wastewater treatment on-site.

- *Prime Agricultural Farmland*: If irrigated, the Natural Resource Conservation Service classifies the majority of the study area as prime farmland. The prime farmland soils in this area are Avonville fine gravelly silt loam and Garrison gravelly silt loam.

- *Frost Action:* The soils on the Prairie demonstrate unique hydrological characteristics. Due to high permeability and large pore spaces, the material does not allow for capillary action in the soil and is generally not vulnerable to frost action or heave.
- *Stormwater Disposal:* Disposal of stormwater through dry wells and biofiltration swales is acceptable due to the permeability of the soils.
- *Wastewater Disposal:* The level of treatment of wastewater is not as high as in other soils types. The nitrates in the effluent are unaffected and are passed to the groundwater table quickly with little treatment.
- *Building Foundations:* The soils are high in strength with low potential for differential settlement. Foundations can be constructed on existing material without extensive site preparation. The bearing capacity is generally very high.
- *Road Building Materials:* Road construction in the general vicinity takes place using existing soils or ballast material, and then topped with a course of crushed aggregate prior to application of a hard asphalt, or asphalt concrete surface.

Climate

The region is identified as having four seasons with typified weather patterns. During winter months, snow pack can range from several inches to several feet on the Prairie. The flat terrain of the study area and surrounding land is characterized by mild to intense winds. It is common for blowing snow to create drifts and blizzard like conditions along Highway 41, severely impeding vehicular and pedestrian safety.

Air Quality

Air quality within the Rathdrum is regulated through the U.S. Environmental Protection Agency and the Idaho Department of Environmental Quality. Kootenai County is currently an unclassified area under the National Ambient Air Quality Standards for pollutants such as carbon dioxide, particulate matter (PM_{10}), sulfur dioxide, nitrogen dioxide, lead, and ozone. With the projected increase in population and employment within the study area, and the resultant traffic increases, particular concern should be given to traffic flow improvements and point emission controls as it relates to businesses to mitigate further degradation of regional air quality. Particulate matter as it relates to agricultural practices should lessen as development occurs on the Prairie. Ultimately, the development would produce a shift in carbon monoxide from increased traffic and may increase concerns as it relates to potential new business in the area.

Critical Land Use and Environmental Factors

The following critical factors will play a significant role in the development and refinement of alternative developments and access: existing land use and zoning; existing facilities, such as roadways, utilities, and railroads; groundwater and water quality protections; topography; and geologic hazards.

Built Environment

- The planned concentration of commercial development along the Highway, primarily in that portion of the corridor lying within the city limits of Post Falls, will result in continued and increased reliance on auto-oriented services and shopping. Additional commercial developments within the corridor would attract area residents as well as serve as employment centers.

- Coordination of land use plans and the supporting zoning ordinances should be consistent throughout the corridor with the implementing jurisdictions.
- Realignment or abandonment of the railroad tracks in the study area could allow for conversion of these ROWs to other transportation uses.
- Subdivision of agriculturally zoned land located within Kootenai County that is zoned agricultural is prohibited. Retention of agricultural uses and the provision of open space on the Rathdrum Prairie should be included in local planning efforts.
- Connectivity of current street patterns should continue and be enhanced through the provision of additional facilities, as development occurs.
- Regional improvements should include opportunities for multimodal transportation choices, such as bicycle and pedestrian facilities and future public transportation.
- Places of historic value that could influence project planning include the potential of historic rail line on the Prairie.
- Sub-surface wastewater disposal systems and on-site sewage disposal systems should be prohibited for development in the study area due to the location over the Rathdrum Prairie-Spokane Valley sole source aquifer.
- Public wastewater and water systems are required to serve new commercial, industrial and high-density residential development.
- Other methods of wastewater treatment, such as ground application should be encouraged and could be incorporated in open space, recreational opportunities, agri-businesses, or other developments.
- Development should consider the impacts on the aquifer and the potential for groundwater contamination.

Natural Environment

- The Rathdrum Prairie-Spokane Valley Aquifer is a sole source aquifer for the region and should be protected through careful development on the Prairie.
- New large areas of impervious surfaces (such as paved parking lots), with resultant stormwater treatment, may impact the water quality of the recharge of the aquifer.
- The unique and natural beauty of the Prairie should be preserved through retention of open space, agricultural uses, view corridors, and conservation districts, areas, or easements.
- Continued development and use of septic/drain field systems may degrade the Rathdrum Prairie/Spokane Valley Aquifer and should continue to be monitored for quality standards.
- Prime agricultural soils should be preserved for agricultural purposes.
- Blowing snow and drifting create hazardous conditions that can occur seasonally along the corridor.
- Future development of the region should include the provision of open space.

Through coordinated efforts and public support, development of the Prairie should enhance the environment and seek to minimize impacts. Public desires to maintain a high quality of life in the region, while increasing opportunities for development, should serve as a guide for balanced and coordinated regional growth, which meets development standards, minimizes costs of public service delivery, and enhances the economic vitality of the area.

Funding Plan For The Highway 41 Corridor Improvements

Cost Estimates

The Highway 41 Corridor Plan identifies *planning level* cost estimates for each of the improvements identified and examined. The planning level cost estimates were based on 2002 dollars and included preliminary costs of any necessary highway, connecting roadways, bicycle/pedestrian system improvements, and traffic control devices.

The cost to improve Highway 41 in the study area is estimated at $23.5 million (see Appendix D for a full copy of the Planning Level – Planning Level Cost Estimates). Local roadway improvements in the study area are estimated to cost over $52 million, and the cost to extend and upgrade the planned arterial/collector street network in the study area is estimated at $69 million.

Costs are defined separately for "local," (City/Highway District), "state" (ITD) and private (private development).

Recommended Funding Implementation

Table 11 summarizes the recommended funding implementation plan for the public transportation system within the Highway 41 corridor study area. In anticipation of continued growth in the study area the plan estimates the timing of needed improvements along Highway 41 by splitting the cost of Highway 41 improvements into three separate projects: (1) I-90 to Poleline (within the next 10 years); (2) Poleline to Hayden (years 11-20; and (3) Hayden to Lancaster (beyond the 20-year planning horizon). It was further assumed that private development would need to participate in funding approximately ten percent of planned Highway 41 improvements, mainly in the form of intersection traffic control devices to accommodate local traffic demand.

The Highway 41 Plan includes a number of new or improved local roadways totaling over $52 million. These include a number of north-south and east-west roads at ¼- and ½-mile spacing, generally on a grid system. The recommended funding implementation plan assumes that private development will fund 100 percent of these local system transportation improvements as development occurs, not necessarily on a fixed schedule over the next 20 years and beyond.

The extension and/or widening of planned arterial and collector roads in the study area should be funded in a private/public partnership. This estimate assumes a 75/25 percent public/private partnership, respectively. The public share is assumed to be split between the Post Falls Highway District and the Cities of Post Falls and Rathdrum, generally in proportion by political boundary (Area of City Impact).

Table 11- Funding Implementation - Option

Project	Funding Responsibility		1-5	6-10	11-20	20+	Total Cost (millions)	Annual Revenue Requirement (20 yrs) (millions)
			Funding Implementation Years					
State Highway 41			**$4.5**	**$4.5**	**$7.5**	**$7.0**	**$23.5**	
			I-90 to Poleline		Poleline to Hayden	Hayden to Lancaster		
	State	90%	$4.1	$4.1	$6.8	$6.3	$21.2	$0.743
	Private	10%	$0.5	$0.5	$0.8	$0.7	$2.4	$0.083
Local Roadways							**$52.6**	
			N/S Access Roads - 1/4-mile spacing				$18.0	
			N/S Access Roads - 1/2-mile spacing				$15.2	
			E/W Access Roads - 1/4-mile spacing				$19.4	
	Private		*As development occurs.*				$52.6	
Arterial/Collector Streets			**$13.8**	**$13.8**	**$27.6**	**$13.8**	**$69.0**	
	Private	75.0%	$10.4	$10.4	$20.7	$10.4	$51.8	$2.070
	Post Falls Hwy Dist	16.3%	$2.2	$2.2	$4.5	$2.2	$11.2	$0.449
	City of Post Falls	7.5%	$1.0	$1.0	$2.1	$1.0	$5.2	$0.207
	City of Rathdrum	1.3%	$0.2	$0.2	$0.3	$0.2	$0.9	$0.035

Required Increase in Local Revenues:

	2002 Dollars (millions)		
	Total	Annual	20-Year Period
Post Falls Hwy Dist	$11.2	$0.449	$9.0
City of Post Falls	$5.2	$0.207	$4.1
City of Rathdrum	$0.9	$0.035	$0.7
Private	$106.7	As development occurs.	
State of Idaho	$21.2	$0.7	$14.9

As also shown in Table 11, ITD will need to provide almost $15 million for Highway 41 improvements over the next 20 years, $8 million in the first ten years of the plan and another $7 million over the later ten years of the plan. The Post Falls Highway District will need to provide about $9 million (about $450,000 annually) towards collector/arterial roadway improvements in the study area over the next twenty years. The Cities of Post Falls and Rathdrum will need to provide about $5 million (about $207,000 annually) and $1 million ($35,000 annually), respectively, over the next 20 years to help pay for needed improvements to the arterial/collector road network in the 75/25 scenario. Public funding may include grants or impact fees. The funding plan is heavily dependant on private development paying for new transportation system improvements, either paid by the developer or collected in impact fees.

Potential Sources of Local Funding

The study included a general examination of the current or recent budgets of the Post Falls Highway District and City of Post Falls. Table 12 summarizes each jurisdiction's recent or expected revenue (by source) and expenses. The major sources of consistent transportation revenue for the Post Falls Highway are state/federal gas tax receipts (highway user fund) and the local roadway levy. The Highway District's annual expenditure for new capital roadway improvements is only about 17 percent of all expenses. The remaining budget is used for operations, maintenance, and personnel.

The City of Post Falls levies a traffic development impact fee on new development. It is the only consistent transportation revenue program for the City. Much of the annual revenue raised by the City of Post Falls is spent on small transportation improvement projects within the City of Post Falls (i.e., new traffic signals and minor intersection improvements). Current development impact fees do not allocate funds to improvements on Highway 41.

In general, both the Post Falls Highway District and City of Post Falls have very limited capacity to pay for the new, needed capital roadway improvements within the Highway 41 corridor. There are a number of ways to pay for local transportation improvements. The most popular strategy is often to use "somebody else's money" in the form of grants from the Federal or State governments.

In reality, it is "everyone's" money, because citizens pay the taxes that are used by Federal and State agencies, and each community has an expectation that some of that money will come "home" in the form of grants for public facilities.

It is possible that Federal and/or State funding would pay part of the cost of local improvements. It is unlikely that such funding would pay for the whole cost, and there is a possibility that there would be no Federal or State funds for the local projects. Table 13 summarizes a number of federal programs that local jurisdictions can look towards additional funding. The programs are highly competitive nation-wide, and require significant coordination and assistance by ITD in grant application, award and coordination.

There are other local funding options that the Post Falls Highway District and City of Post Falls may consider to potentially fund the local share of Highway 41 corridor improvements, including local option vehicle registration fees and new and/or increased traffic impact fees paid by new development. Further, inclusion of the transportation improvements in local Transportation Plans, and subsequent inclusion in long-range capital improvement programs will assist in seeking federal and state grant funds. A recent designation for a municipal planning organization for the area may provide other opportunities for funding and project coordination.

Table 12
Current Local Transportation Funding-Revenue and Expenses

City of Post Falls Street Capital Improvements: 2001 - 2006					
Proposed Funding Source	Budget FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06
Impact Fees	$170,000	$170,000	$170,000	$170,000	$170,000
Post Falls Highway District			$200,000		
Urban Renewal Agency	$270,000				
Extra Ordinary Impact Fees	$300,000				
Developer	$18,900	$37,500			
Existing Impact Fee - Dollars Contribution	$423,600	$482,500	$540,000	$460,000	$630,000
Total Sources Available:	**$1,182,500**	**$690,000**	**$910,000**	**$630,000**	**$800,000**
Proposed Projects (engineering, design, and construction)					
Bay Street	$350,000				
Mullan / Idaho	$430,000				$20,000
McGuire / Seltice	$140,000				
Greensferry Rail Crossing		$75,000			
Chase Rail Crossing		$75,000			
Chase / Seltice	$250,000				
Pleasant View / Seltice			$220,000		
Cole / Seltice					$150,000
Greensferry / Mullan					$150,000
Cedar / Seltice					$150,000
Total Project Expenditures:	**$1,170,000**	**$150,000**	**$220,000**	**$0**	**$470,000**

Post Falls Highway District - Fiscal Years	FY 98-99	FY 99-00	FY 00-01	3-year average
Budget Receipts (major items)				
Road Levy	$670,367	$690,478	$711,193	$690,679
Highway Users Revenue	$1,300,000	$1,400,000	$1,500,000	$1,400,000
Other	$808,056	$796,913	$538,726	$714,565
Total Receipts	**$2,778,423**	**$2,887,391**	**$2,749,919**	**$2,805,244**
Anticipated Expenditures				
Operations	$461,250	$459,550	$475,125	$465,308
Maintenance	$612,000	$477,500	$584,931	$558,144
New Construction	$467,451	$525,204	$450,000	$480,885
Other	$1,237,722	$1,425,137	$1,268,367	$1,310,409
Total Expenditures	**$2,778,423**	**$2,887,391**	**$2,778,423**	**$2,814,746**

Source: City of Post Falls and Post Falls Highway District

Table 13

Summary of Road-Related Transportation Funding Programs: Federal Sources

Program Name	Description
Transportation Equity Act for the 21st Century (TEA-21)	TEA-21 is designed to provide flexibility in federal funding of transportation projects. TEA-21 established several funding programs including: 1) National Highway System; 2) Interstate Program; 3) Surface Transportation Program; 4) Congestion Management and Air Quality Improvements Program; and 5) National Scenic Byways Program.
Federal Surface Transportation Program (STP)	The Surface Transportation Program (STP) funds are allocated to the State and sub-allocated to cities/counties/highway districts on a formula basis by the Idaho Transportation Commission. STP funds may be used for any road that is not functionally classified as a local or rural minor collector and must be included in the Idaho Statewide Transportation Improvement Program to receive STP funds.
Federal Enhancement Funds	TEA-21 includes provisions that require the State to set aside a portion of its Surface Transportation Program (STP) funds for projects that will enhance the cultural and environmental value of the State's transportation system. Eligible transportation enhancement projects must be directly related to the intermodal transportation system. This program funds enhancements, including pedestrian and bicycle facilities; preservation of abandoned railway corridors; landscaping and other scenic beautification; control and removal of outdoor advertising; acquisition of scenic easements and scenic or historic sites; scenic or historic highway programs; historic preservation; rehabilitation and operation of historic transportation buildings, structures, or facilities; archaeological planning and research; and mitigation of water pollution due to highway runoff.
Highway Enhancement System (HES)	The FHWA Highway Enhancement System Program provides funding for safety improvement projects on public roads. Safety improvement projects may occur on any public road and must be sponsored by a local jurisdiction. To be eligible for Federal aid, a project should be part of either the annual element of a Regional Transportation Plan or the annual listing of rural projects by ITD, although they do not have to be part of the approved State Highway Improvement Program to receive HES funding.
Congestion Mitigation and Air Quality Improvement	The Congestion Mitigation and Air Quality Improvement program, continued in TEA-21, provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Eligible activities include transit improvements, travel demand management strategies, traffic flow improvements, and public fleet conversions to cleaner fuels, among others. Funding is available for areas that do not meet the National Ambient Air Quality Standards (non-attainment areas), as well as former non-attainment areas that are now in compliance (maintenance areas). Under ISTEA, only non-attainment areas were included in the funding formula. Funds are distributed to States based on a formula that considers an area's population by county and the severity of its air quality problems within the non-attainment or maintenance area. Further, greater weight is given to carbon monoxide non-attainment and maintenance areas.
Community Development Block Grants (CDBG)	Community Development Block Grants (CDBG) are administered by the Department of Housing and Urban Development (HUD) and could potentially be used for transportation improvements in eligible areas.

Local Option Vehicle Registration Fees

The State of Idaho authorizes local governments to enact local vehicle registration fees at the discretion of each county. Local option vehicle registration fees could be adopted at the Kootenai County level to pay for some or all of the local project costs that would be paid by local sources. There is a relationship between vehicle registration fees and the benefits of the arterial/collector roadway improvements. Many, but not all, of the Kootenai County vehicle operators that would pay a local option registration fee would use a portion of the Highway 41 study area arterial/collector roadway network, and thus benefit from that use of registration fees.

Traffic Development Impact Fees

Impact fees are one-time charges paid by new development to pay for part of the capital cost of providing public facilities that serve the new development and the people who occupy it. The Idaho State Legislature recently passed a new law requiring local jurisdictions to revise their current TDIF ordinances so that the funding methodology is based on a set list of capital improvements. Even without raising their fee structure, the City of Post Falls will need to revise their TDIF ordinance in accordance with the new state law. At such time the City may consider:

> (1) Including their portion of Highway 41 study area arterial/collector street capacity improvements to the TDIF methodology; and, (2) raising the TDIF fee commensurately to generate sufficient revenue to cover the cost of citywide, growth-related capital improvements, including the City's jurisdiction within the Highway 41 study area. That information would then be used to determine the portion of the cost of the citywide arterial/collector roadway improvements that would be recoverable from new development. The recoverable cost would be divided by the growth trips attributable to new development, and the result would be the impact fee cost per trip. Each new development's impact fee would be calculated by multiplying the cost per trip times the number of trips generated by the new development.

NOTE: Those capital improvements paid for by new development within the City of Post Fall's portion of the Highway 41 study area will be considered eligible for TDIF credits. The City's TDIF policies should be investigated and adjusted accordingly for fairness and equity.

Funding Conclusions

The Post Falls Highway District and the Cities of Post Falls and Rathdrum should coordinate the following strategy to raise revenues to pay for their share of the Highway 41 study area roadway improvements:

- **High Priority**: Coordinate with ITD to seek and obtain federal funds to pay for needed safety and capacity projects.
- **Low Priority**: (1) Consider revising the current Post Falls TDIF program for traffic to expand the project eligibility and fee amount to cover the local share of study area improvements; and (2) consider a Kootenai County-wide vehicle registration fee to fund study area improvements.
- Develop a Coordinated regional impact mitigation program.

Implementation

Introduction

People and places are connected to one another by transportation systems. The safe movement of people, property, and products is closely related with the economy and established land use patterns of a region. Close coordination between land use and transportation planning must be maintained if an area is to develop in an orderly fashion. The Highway 41 Corridor Master Plan provides transportation and land use management goals and policies as tools for guiding and assuring continued growth and development within the corridor planning area, while maintaining minimal disruption and enhancement of traffic flow along the highway. If the goals and policies of the plan are to be realized during the 20-year planning period, the development of a meaningful implementation program is essential. Implementation of the Highway 41 Corridor Master Plan will require specific regulations and more detailed planning to shape the strategy of the plan into reality. Coordination and cooperation among the jurisdictions and agencies is critical for the successful implementation of the plan.

Selected Land Use Alternative

Three land use plan alternatives were analyzed with a preferred alternative selected to reflect community values and the desired future state of the corridor. These planning concepts range from a "do nothing" status quo approach to an optimal land use alternative. The recommended land use scenario was the ***Compact Mixed Use Plan*** (Figure 15), which represents a "medium" density of development for the corridor, while retaining agricultural and open space areas. Most notably the Plan encourages a mix of land uses within zones, while recognizing existing land uses when addressing transportation and land use issues within the corridor.

To address corridor circulation, a transportation plan (Figure 16) was developed to serve land uses within the corridor, enhance traffic flow within and through the corridor, provide safety improvements, provide a uniform access management plan, and preserve the function of the highway. A key issue was the provision of an off-corridor circulation network for local trips that currently use and access Highway 41. Roadway improvements to meet these needs include controlled access, traffic signalization, road widening,

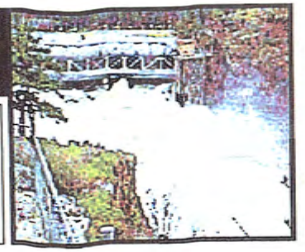
The plan also designates the area within one-quarter mile of the highway as an aesthetic overlay for control of signage regulations, landscaping requirements, site design, setback standards, and the provision of open space. Adoption of the aesthetic corridor will assure uniformity within the corridor.

The Rathdrum Prairie Implementation Strategy suggests uniform development standards for the Prairie. Examination of performance standards for roadways, subdivisions, commercial, and industrial development, landscaping, signage, buffering between land uses, roadway access policies, mixed use projects, and the means to allow and encourage creative development patterns. These same issues are of central concern within the Highway 41 Corridor Master Plan, including:

Aesthetic Corridor Application with Landscaping, Setbacks, and Signage Controls

Highway 41 Corridor Plan

Figure 15



Land Use Scenarios
Compact Mixed Use Plan - Recommended Alternative

- Aesthetic Corridor Overlay- Standards apply within one-quarter mile on each side of Highway 41 for signage, landscaping, site design, and the provision of open space.

- Open Space Areas -Designated adjacent to railroad crossings and commercial development to provide separation of land uses and areas for land application of wastewater treatment. Preservation of open space may also be used for agricultural or recreational purposes.

- Mixed Use Overlay- Applies to the entire corridor for the provision of mixed uses within all zones. Performance Zoning allows for development bonuses (increased density) for clustered development and use of open space within uses and separation of land uses.

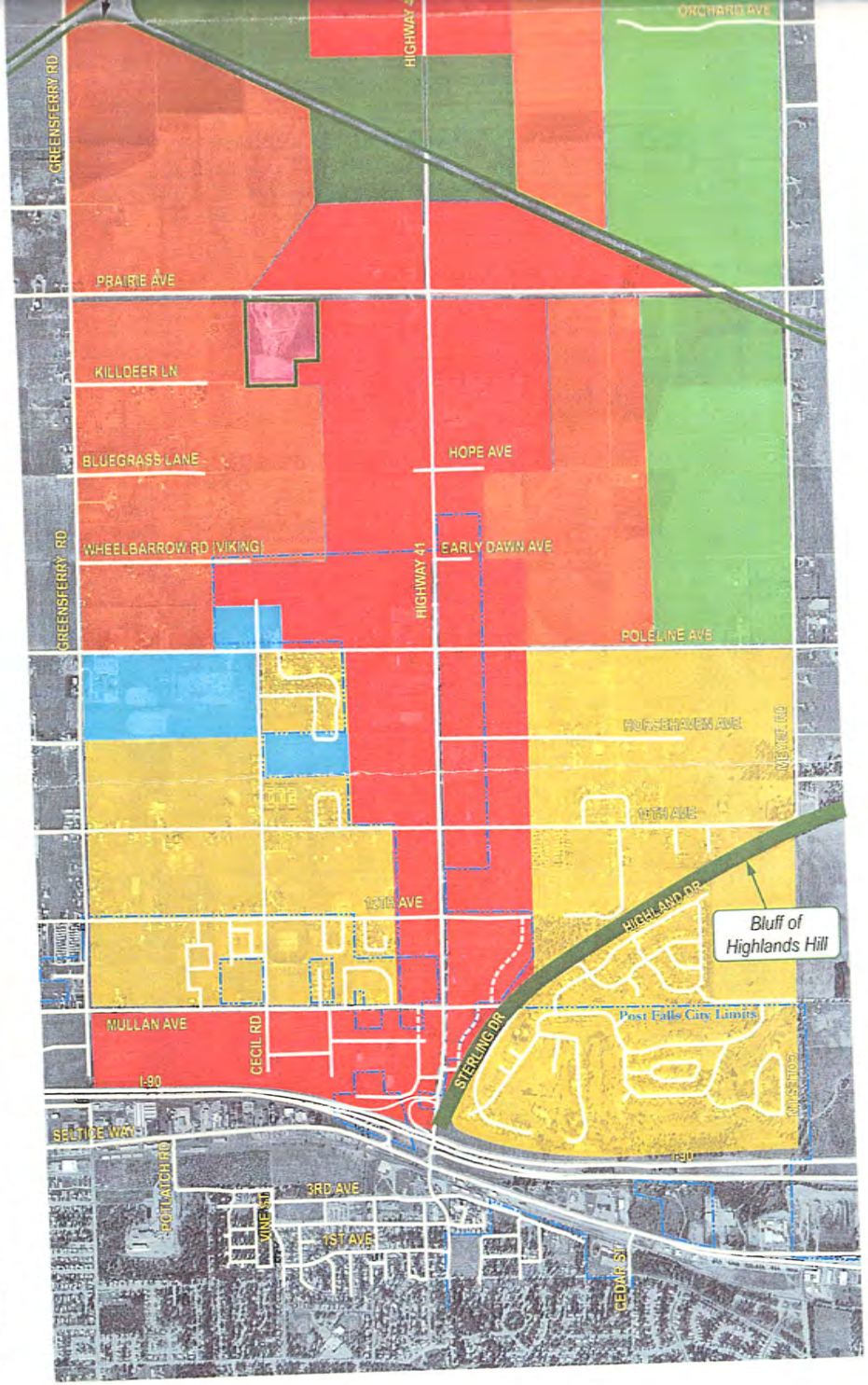
- Overall densities of the Commercial Corridor and Compact Mixed Use Plans can be equivalent under Performance based Zoning; thereby, netting the same densities; however, the Mixed Use Plan provides for more open space.

- Railroad Buffer- Provides separation of land uses and future reservation of right of way for transportation purposes.

- Land Use Buffer- 50 feet of open space provided around Mining uses.

Land Use Summary

CLASSIFICATION	LAND USE (IN ACRES)	DENSITIES
SUBURBAN RESIDENTIAL	440	.5 - 1.5 - unit/acre
URBAN RESIDENTIAL (LOW)	1,560	2 - 6 - units/acre
URBAN RESIDENTIAL (HIGH)	265	7 -20 - units/acre
COMMERCIAL / RETAIL	765	95 - employees/acre
COMMERCIAL / OFFICE	425	132 - employees/acre
COMMERCIAL / LT MFG	335	86 - employees/acre
INDUSTRIAL / MINING	415	86 - employees/acre
AGRICULTURAL / OPEN SPACE	2,880	Varies- Seasonal use
TOTAL CORRIDOR	7,085	



LEGEND

LAND USE CLASSIFICATION

- SUBURBAN RESIDENTIAL
- URBAN RESIDENTIAL (LOW)
- URBAN RESIDENTIAL (HIGH)
- PUBLIC RESERVE
- INDUSTRIAL
- COMMERCIAL / LIGHT MANUFACTURING
- AGRICULTURAL / LAND APPLICATION
- OPEN / GREEN SPACE / LAND APPLICATION OF WASTE WATER
- MINING

NOT TO SCALE

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Figure 16

Transportation and Implementation Plan - Recommended

- Aesthetic Corridor Overlay- Standards apply within one-quarter mile on each side of Highway 41 for signage, landscaping, site design, and the provision of open space.

- East/West Access Roads (North of Poleline Avenue)- Minor Collector access to Highway 41 is provided at quarter mile increments. Access to the Highway is limited to right in/right out turning movements. Local road right of way is proposed at two 13' travel lanes, a 14' center turn lane, grass drainage swales, utility corridors, and pedestrian/bicycle path as a local access road with 40'-44' of developed roadway (minimum r/w width 80-100 feet).

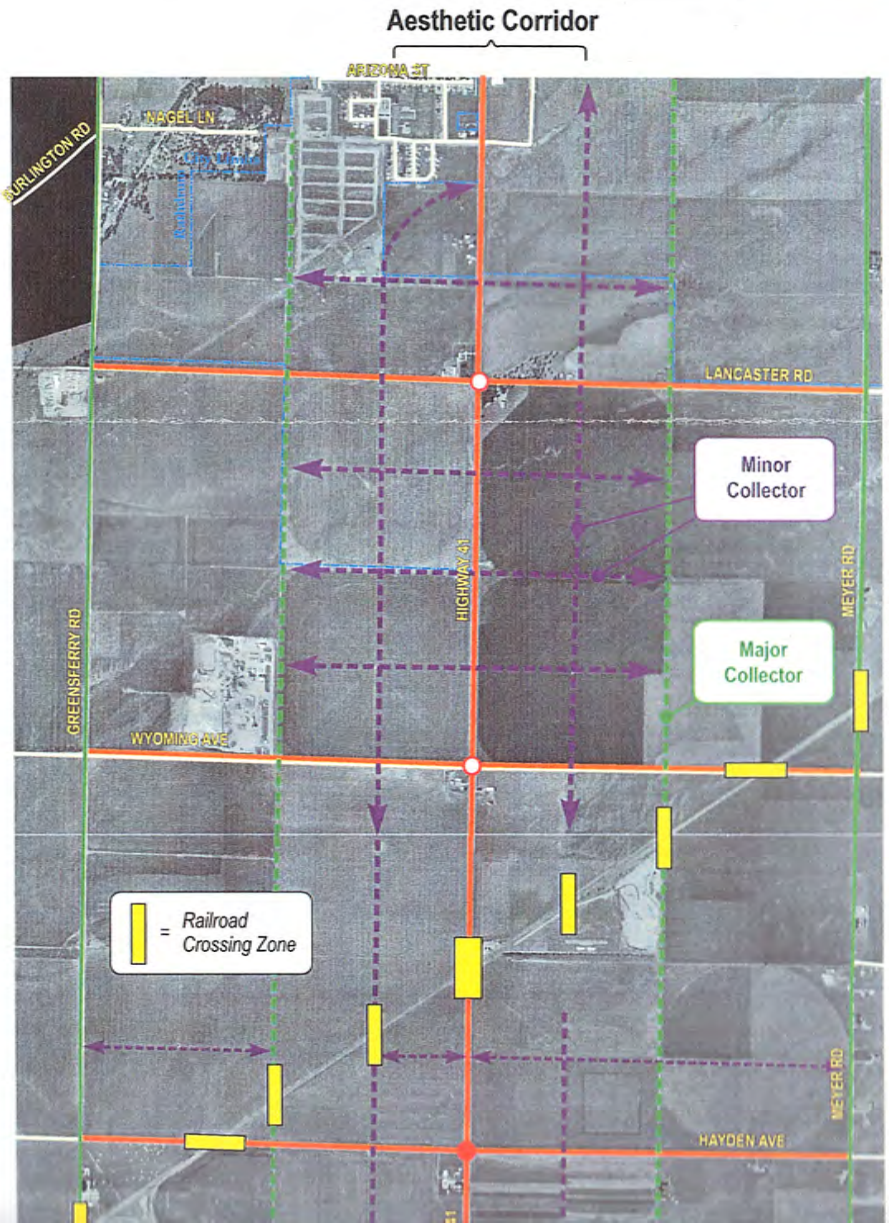
- North/South Access Roads (North of 12 th Avenue)- Access roads are provided at one quarter mile from the corridor as a Minor Collector and one half mile as a Major Collector roadway. Collector roadway is limited to left turning movements at intersecting roadways. Collector improvements include a landscaped median strip for 300' from intersecting arterials and pedestrian/bicycle pathway (total r/w width 80-100 feet).

- Rail Crossing Zones- Access roads terminate at the rail crossings until rail use is abandoned. Rail right of way could be reserved for other transportation uses, such as Rails to Trails or future transportation options. Existing Rail Crossings on Greensferry and Meyer roads to remain until use is abandoned.

- Secondary "Backage" Roads- Are intended to provide off corridor north/south circulation and access to properties fronting on Highway 41.

- Private Drives- Are intended to provide access to properties in those areas not served by "Backage" roads.

- Future construction of roads should include continuous road naming for

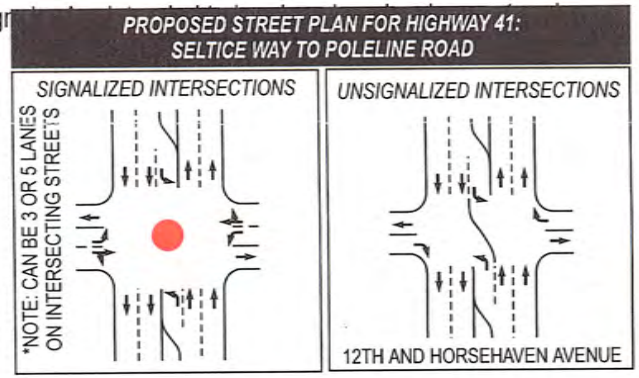


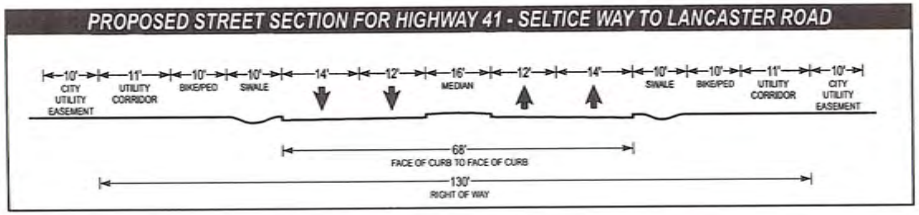
- Future construction of roads should include continuous road naming for consistency in accordance with Kootenai County guidelines.

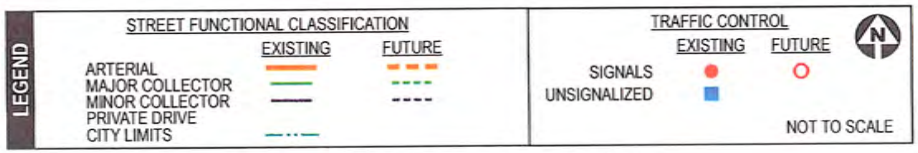
- Highway Access and Control (South of Poleline Avenue)- in conformance with the adopted Memorandum of Understanding between the City of Post Falls and the Idaho Transportation Department (total right of way width 130 feet). North of Poleline Avenue is proposed as four travel lanes with left turning movements at major intersections only. Right of Way width north of Poleline is proposed at 150-200 feet with a possible future R/W reservation of 300'.

- Major intersecting roadways- Are proposed as 3 lanes at the intersection with left turning movements (Lancaster- possible future 5-lanes, Wyoming, Hope, Poleline-east of Highway 41, and 16th Avenue) and 5 lane roadways at the intersection with left turning movements (Prairie, Hayden, Poleline-west of Highway 41 and Mullan Avenues). All other minor intersecting roadways are proposed as two lanes without left turning movements. Greensferry and Meyer Roads proposed at 3 lanes with left turning movements at intersecting roads.

- Future Traffic Sign[illegible] traffic warrants.







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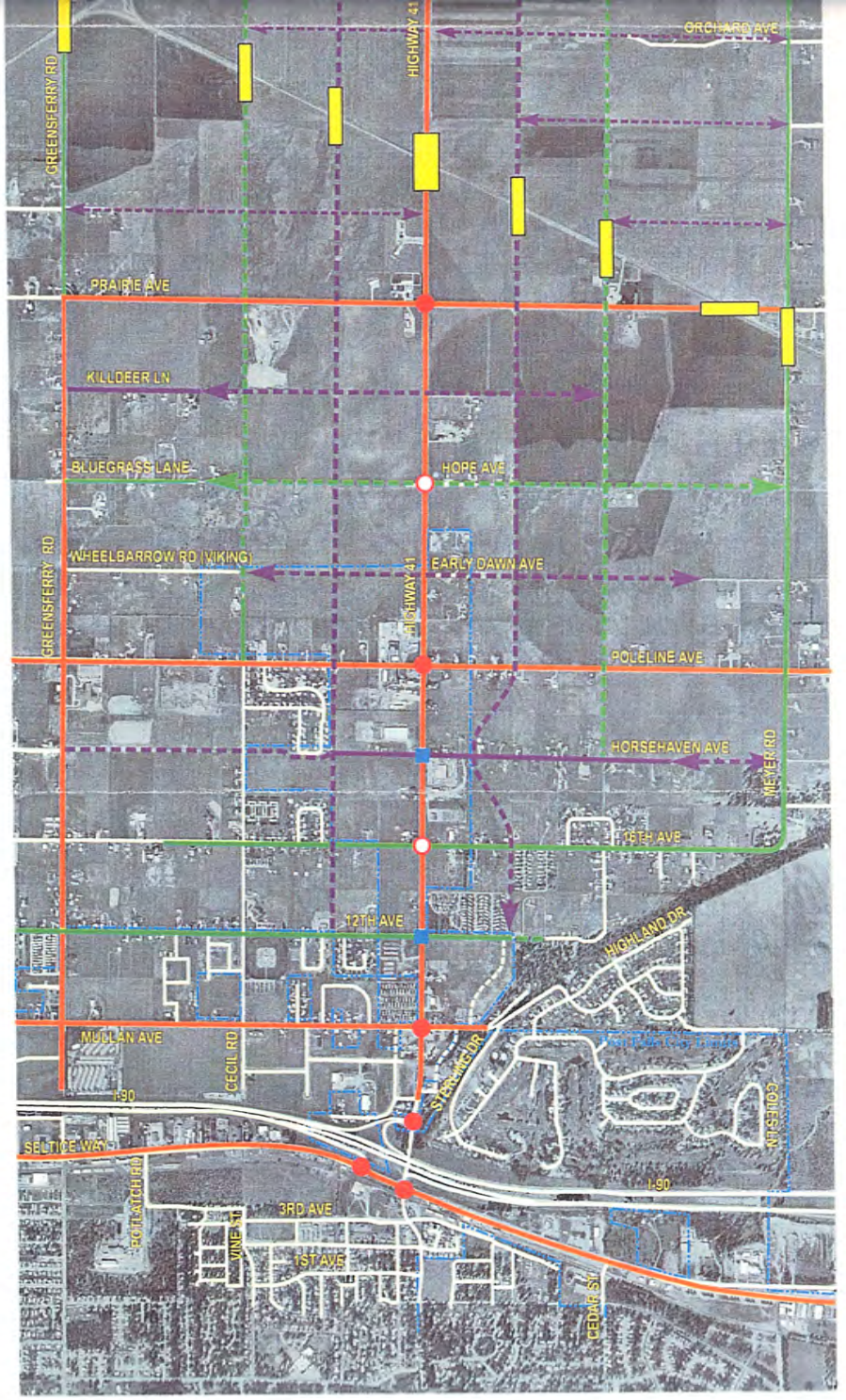


- Alternative subdivision/Planned Unit Development regulations to allow cluster development, pinwheel, or commons design, zero lot-line development, etc.
- Use of buffers and easements between land uses and around utilities and rail lines.
- A flexible agricultural policy to allow conversion to other development uses, when farming is no longer economically feasible.
- Address right-to farm issues in subdivision standards and Conditions, Covenants, and Restrictions (CC&R's) on the Prairie.
- Evaluate Transfer of Development Rights (TDRs), bonus densities and other means of directing growth, managing density, and procuring open space.
- Define what rural character standards are acceptable from a land use and design standpoint.
- Evaluate open space preferences regarding ownership, maintenance, uses, and desirable regional connections.
- Link the transportation strategy with overall land use strategies for the Prairie, rather than allowing it to evolve as an afterthought.
- Re-examine current protection methods in place on the Prairie, recommend strategies for well-head protection and consider appropriate types of development relative to impacts to the aquifer.
- Evaluate and consider incentives and strategies for location decision-making; types of new industries that are desirable for the Prairie; requirements for site design; and provision of services.

Land Use/Economic Development

Proximity to major transportation corridors, such as Highway 41 enhances the Prairie's economic development potential. Employers are attracted to areas that are well served by highways. However, there is a heavy reliance of the state highway system to serve local needs and a need for transportation planning specific to the Rathdrum Prairie coordinated with local governments. The Plan is the cornerstone of that effort and adoption of the coordinated plan is the first step in that regional coordination. Implementation of coordinated project review prior to development will serve to meet the interests of the Plan.

Zoning and Land Use Regulations

In general, the area Zoning Codes do not tie back to the respective Comprehensive Plans as much as they should. Standards for regulation of aesthetics and urban design are lacking but are very much needed. Adoption of the Plan and associated implementation controls will serve to guide Prairie development. The Plan encourages mixed uses within zones with appropriate buffering between land uses, clustering of development to maximize open space, and requires access management within the corridor.

Transportation Plan

Highway 41 is considered a major transportation corridor. Levels of service vary by intersection between A and F. The Plan recognizes access restrictions along Highway 41 as a tool to reduce congestion along the corridor. Unrestricted intersection movements are allowed only at major intersections at one-mile intervals or designated intersections. "Backage" roads are secondary access roads to provide local circulation to properties

fronting on Highway 41 and to provide off corridor circulation. Direct access from parcels to the state highway is not anticipated.

Management of area development should include the use of shared parking areas with internal circulation for short trips within a shopping area. The use of Crossover easements is a managed access option that provides local circulation through joined or common parking lots. Existing businesses can adapt to this concept as development infills or congestion and traffic operations warrant. Further placement of buildings along the corridor will be such that parking areas will not be "bordering" the roadways with large setbacks from pedestrian facilities. A *Human Scale* within the corridor that encourages alternative mode choices, provides excellent visibility from vehicular traffic, and is mixed with open space areas and landscaped areas will provide an alternative to current development patterns.

Capacity Improvements

Several capacity improvements and refinements are proposed as a function of this plan for Highway 41 and the primary intersecting roadways. The improvements/refinements were determined to be reasonable and may be implemented based upon a variety of public and private funding sources.

The improvements are the result of preliminary forecast analyses of future capacity restraints concerning local and regional needs. Not all of the proposed improvements would be the function of this plan, as there are projects that are likely to occur separately, or in conjunction with other planning/improvement efforts, such as those that will occur with US 95. A summary of improvements for the proposed Highway 41 corridor and adjacent roadways (see discussion on Capacity Improvements on page 33 in the Transportation section) includes:

State Highway 41

The Plan proposes to improve Highway 41 to four lanes from Seltice Way to Rathdrum with a 130 to 200-foot ROW. The newly constructed section would have 12-foot-wide lanes with a 16-foot median restriction that will only allow left turns at principal roadways and ½-mile access locations (at Hope and 16th Avenues). Left turns from Highway 41 would also be allowed at 12th and Horsehaven/20th Avenues. Right turns will be allowed at east/west access roads along the highway. Improvements would also include 10-foot swales for stormwater runoff and a 10-foot paved bicycle/pedestrian pathway on both sides of the roadway.

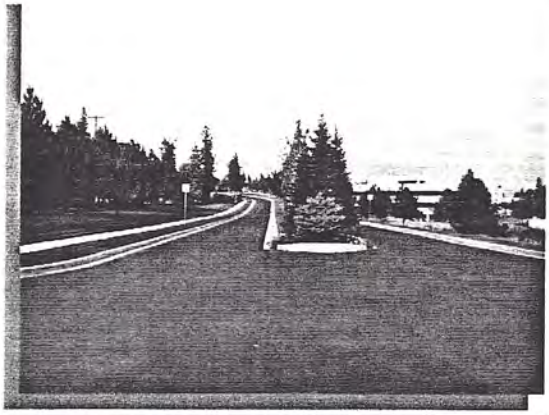
Traffic Signals

Traffic signals are currently located on Highway 41 at Seltice Way, the westbound I-90 ramp, Mullan, Poleline, Prairie, and Hayden Avenues. Traffic signals are proposed at 16th, Hope, Wyoming, and Lancaster Avenues. The signals would allow for protected/exclusive left turns, which means that designated left turn lanes would be provided/constructed on all intersection approaches. Designated right turn lanes would be provided at arterial intersections. Provision of traffic signals will enhance left turn movements from intersecting streets.

Corner Landscaping with Light Standards and Traffic Control

Road Widening Projects

Both approaches to Highway 41 on Lancaster, Wyoming, Hope, Poleline (east-leg only), and 16th Avenues would be widened to three lanes from the Highway 41 intersection to the proposed north/ south ½-mile access road. Both approaches to Highway 41 on Hayden Avenue (from the intersection for ¼ mile), Prairie Avenue, Poleline Avenue (west leg only), and Mullan Avenue would be widened to five lanes. These roadways would allow for designated left turns at Highway 41 and the secondary access road intersections. All other east/west roadways are proposed to have only two lanes without designated left turn movements. Both Greensferry and Meyer Roads would be improved to three lanes. All road improvements would include ten feet swales for stormwater runoff and a 10-foot paved bicycle/pedestrian pathway on both sides of the roadways. A 16-foot landscaped median strip would be provided on all north/south and east/west roadways for 300 feet from the intersecting major arterials.



Access Roads with Landscaped Median and Pedestrian Pathway

Secondary "Backage"/Access Roads

A network of secondary access roads is proposed with the plan to provide access to future development projects. "Backage" roads would be located approximately ¼ mile from the east and west of Highway 41 and will run parallel to the highway. The quarter-mile roads would be designated as a Minor Collector road and would extend from 12th Avenue on the east side of the highway north to Rathdrum and on the west side of the highway from 12th Avenue within the City of Post Falls past Lancaster Avenue into the City of Rathdrum. The quarter-mile roads will serve as local access to properties fronting on Highway 41 and will provide access to intersecting arterials for access to Highway 41 for left turn movements. The half-mile road would serve as a Major Collector and run from Horsehaven/20th Avenue on the east side of the highway and from Mullan Avenue on the west side to Rathdrum. The east/west access roads will connect the "Backage" roads with Highway 41 and will be located approximately every ¼ mile between Poleline and Lancaster Avenues. Access to Highway 41 will be restricted. Connectivity of the proposed roadways will be limited in the vicinity of the railroad tracks to limit uncontrolled crossings of the rail lines. Future realignment or abandonment of the rail would allow for the completion of the roadways for cross-prairie access.

Private Drives

Private drives are proposed in those areas that do not have access to "Backage" roads. Some areas have been specifically identified for private drives, while other areas may emerge as development occurs. Private drives are proposed on the east side of the highway to access 12th and Mullan Avenues. South of Mullan, a private drive, as a continuation of Neufeld Lane, will provide access to the highway and left turn capabilities via Mullan Avenue. A private drive is proposed as a continuation of Central Avenue to provide access to Mullan Avenue.

Crossover Easements

Access control can also be accomplished through the shared use of common driveways and parking areas. Joined parking areas permit circulation between stores/uses without accessing public roadways. Shared rights are allowed through the use of reciprocal easements.

Community Design

Elements that threaten the aesthetic quality of the Prairie include scattered, large lot subdivisions, power line easements, sign clutter, loss of agricultural pursuits, and highway strip commercial development. There is a strong public desire to preserve the visual open space and slopes within the corridor study areas. Adoption and implementation of an Aesthetic Corridor Overlay can provide an overall umbrella for design standards, while still maintaining individual development style. The corridor also serves as an entryway to the Cities of Rathdrum, Post Falls, and to the Rathdrum Prairie. As such, use of controls within these areas serves to provide standards for other development.

Concept Definitions and Descriptions

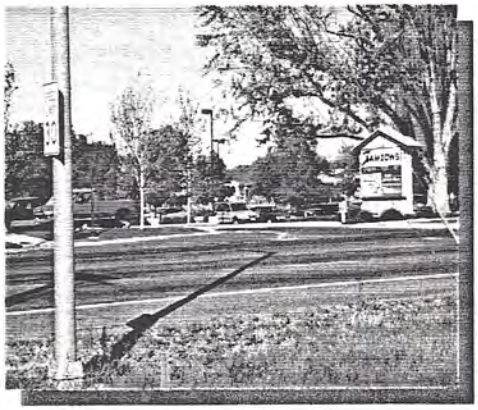
Several planning concepts have been discussed within the above noted transportation and land use goals and policies. A detailed description of these terms follows.

Neighborhood Centers

A Neighborhood Center is intended for concentrated mixed-use development in a suburban location. This sub-regional center will provide a mix of land uses that will bring jobs, shopping, and cultural activities closer to where people live. The type of uses includes retail sales, services, government and business offices, recreational facilities, higher-density residential development, and other uses to serve the needs of the surrounding population.

Commercial Land Use

The commercial category is intended to provide the opportunity for development of commercial uses directly related to major throughways, specifically community and regional shopping and retail uses. Residential use in commercial areas is not intended to be a high priority but may be considered compatible through the use of proper screening and performance standards. Consumer goods offered in strip development frequently differ from those found in shopping centers. Commercial areas feature high-intensity uses that produce high automobile traffic. Related congestion problems with this traffic may create air quality problems, especially along strip commercial development.



Commercial Corridor Setback with Landscaping, Lighting, and Low Level Signage

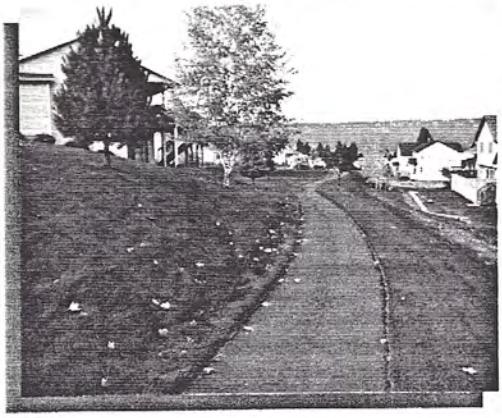
Most commercial development is on flat land with low building profiles. Paved parking, streets, and man-made structures will dominate the site with few natural features to be found. Well defined corridor setbacks, landscaping, screening, lighting, signage, and other architectural treatments will be necessary to provide aesthetically pleasing developments. Aesthetic architectural treatment of new development should be characterized by design, which eliminates or minimizes signage clutter, includes well maintained landscaping that

screens exterior storage and parking areas, and includes sufficient setbacks. Such standards should foster improved land use compatibility with adjacent non-commercial uses, support existing uses, and attract new viable commercial development.

Commercial areas require a full range of public services including sanitary sewer, stormwater treatment, public water systems, and underground utilities such as telephone, electricity, and gas.

Urban Residential Land Use

Areas are intended to provide the opportunity for development of an environment, which includes a variety of land uses, residential densities, public services, and facilities. Urban residential areas are primarily a residential category of single-, two- (duplex), and multi-family development integrated with neighborhood commercial, public, and recreational uses. Agricultural uses will be considered secondary and will be very limited. Open spaces will most likely consist of parks and school grounds, but can include passive recreational open spaces and land application of wasterwater treatment. Low-to-moderate levels of noise will exist in urban areas due to the intensity of activities and the volume of traffic generated. Higher density residential uses (multi-family) will be located near arterial and collector streets. Multi-family structures may be a transitional use between commercial and single-family developments.



Residential Open Space

Suburban Residential Land Use

This category is intended to provide the opportunity for development of residential, agriculture, and open space in a "country-like" setting. The typical land use mix found in rural areas includes agriculture, grazing, large lot single-family residential development, and large unique or environmentally sensitive lands. The aesthetic setting of this land use category will be open space, large cultivated fields, pastures, and natural areas. Few public services will be provided in these areas and most homes will be served by private water systems (wells) and on-site sewage disposal systems (septic tanks and drain fields). Commercial, retail, and industrial development could be allowed with appropriate controls.

Suburban Mixed Use – Single Family Residential with Farming

Agricultural Land Uses

The agricultural land use category is intended to provide a means to protect land primarily for agricultural uses and to identify lands presently farmed or can potentially be farmed as a source of income. The predominant use of land within this category will be cultivation, grazing, animal husbandry, horticulture, and agriculturally related commercial activities. The

aesthetic setting of agricultural areas is open space, large cultivated fields, pastures, and natural areas. Commercial and industrial uses may occur in agricultural areas when they are associated with agriculture. Homes will be served by private water systems (wells) and on-site sewage disposal systems (septic tanks and drain fields).

In-fill Development

In-fill development provides an economic tool for revitalizing underutilized areas of the community. In-fill development is the process of developing or redeveloping vacant or underutilized parcels of land within existing developed areas that are already provided with public services and utilities. In-fill development helps to reduce the cost for extension of public service and utilities.

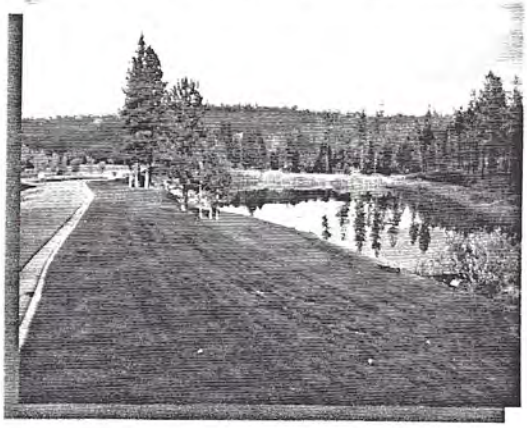
Aesthetic Corridor

An aesthetic corridor is intended to protect the visual appeal along Highway 41. The corridor would be an overlay zone with standards that would apply within one-quarter mile of Highway 41. Aesthetic corridors provide special design standards for visual appearance (including signage, landscaping, site design, and the provision of open space) along the major transportation route to help maintain and enhance a quality image of the Rathdrum Prairie and associated cities.

Aesthetic Corridor Setback with Landscaping, Lighting, and Low Level Signage

Open Space

Open space area is intended to retain and provide for a system of natural areas, land application of wastewater treatment, and parks through pedestrian linkages. The open space may be used for outdoor recreation ranging from unobtrusive nature trails and bicycle paths to baseball fields, golf courses, or agricultural uses. Open space is designated adjacent to railroad crossings, around mining uses, and commercial development to provide separation of land uses and areas for land application of wastewater treatment. Open space should be included in residential and commercial developments and be incorporated into site design and maintenance.



Open Space with Stormwater Management

Transportation/Traffic Development Impact Fees

Impact fees are charges imposed on new development by a local jurisdiction to assist in the funding of off-site public improvements/facilities and services made necessary by the development. There is flexibility to customize the fees, within limits, to meet local needs. The fees are generally levied based on LOS standards established by the Highway 41 Corridor Master Plan.

Implementation Strategies and Programs

The Highway 41 Corridor Plan cannot be achieved without establishing development regulations and construction guidelines. Zoning ordinances, overlay zones, increased density allowances, and development right/conservation incentives are just a few of the implementation strategies and programs for attaining transportation and land use goals.

Special Overlay Zones

Special overlay zones or districts may be used to encourage pedestrian orientation, maintenance of the urban and rural character of Highway 41, and accommodate higher density in exchange for open space areas. The guidelines may be used as special conditions to permit approval in these districts, which can be reviewed by staff, a design review board, or the planning commission.

Bonus Programs

Higher density may be allowed as an incentive for developers to connect to sewer, provide open space tracts, etc. The guidelines can be applied to these bonus programs to ensure quality design and neighborhood vitality.

Urban Design Guidelines

Design guidelines can be established for the corridor, which regulate the design and quality of commercial development through implementation of specific signage, landscaping, building design and bulk, exterior site, and building lighting controls.

Transfer/Purchase of Development Rights

The transfer or purchase of development rights is a technique to preserve open space. These programs allow development rights to be either sold by one property owner to another or transfer from one property to another where development can be built at a higher density.

New Housing Concepts

New design ideas and housing solutions can be established for efficient utilization of land, the provision of utilities, and reduction of sprawl. Techniques may include clustered development, zero lot-line development, accessory units, infill housing, and small lot development. Applying design guidelines to these new housing types can help insure that they are compatible with their neighbors and maintain high design quality.

Clustered Housing Ordinances

Clustered housing opportunities are used as a way to provide greater flexibility and better site planning, primarily for residential development. These types of developments are particularly successful in rural areas.

Highway 41 Corridor Planning Goals and Policies

Thirteen goals have been identified to address development within the corridor. Each goal is followed by transportation policies and land use concepts that may be implemented to attain the goals.

Maximize Coordination of Jurisdictional Interests

- Coordinate planning and operational aspects of the various jurisdictions for Highway 41.
- Develop Intergovernmental Agreements with the Cities of Post Falls and Rathdrum, ITD, and Kootenai County to facilitate and accomplish regional coordination efforts to assure consistent and equitable implementation of the Highway 41 Corridor Master Plan.
- Encourage regional adoption of the Highway 41 Land Use and Transportation Maps, goals, policies, and development standards.
- Revise the applicable Cities of Post Falls and Rathdrum, and Kootenai County Comprehensive Land Use Plans, land use maps, zoning designations, and official zoning maps to assure consistency between jurisdictions.
- Develop new, or modify existing subdivision standards with adoption by all jurisdictions.

Provide Safe Corridor Circulation Alternatives That Maximize Highway Preservation

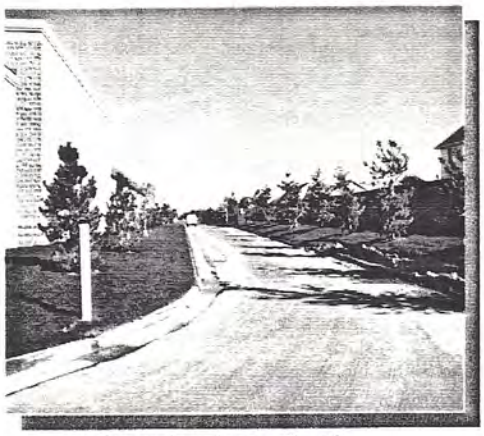
- Preserve existing and designate new ROW that supports the function of Highway 41.
- Require local secondary transportation roads to minimize Highway 41 access and enhance traffic flow.
- Curb, sidewalk (pedestrian/bicycle paths), traffic controls, and street lighting should be constructed along the Highway and secondary access roads for security.
- Install traffic controls (full intersection control, stop signs, advance-caution lights) at major intersections.

Separated Pedestrian/Bicycle Facility

- Establish design techniques and street improvement standards for Highway 41 to impede visual impairment during winter months caused by blowing snow that creates blizzard-like conditions. Design techniques should be employed that disrupt the path of blowing snow and emphasizes the location and travel lanes of the highway.

Direct and Coordinate Development Opportunities Through Access Management and Policy Directions

- Coordinate land use with access control.
- Commercial development should be located at primary intersections along Highway 41.



Secondary Access Road

- Preserve existing and prohibit new private access to Highway 41, until access control improvements are made.
- Provide unlimited, but controlled access to secondary access routes.
- Allow minimal setbacks for commercial development along Highway 41 and secondary access routes to allow for exposure of businesses.
- Require parking areas and access to be located/gained from the rear of the buildings along secondary access roads that are located parallel or intersect with Highway 41.
- Encourage planned commercial areas with well-defined access points and off-corridor circulation.
- Clustered commercial and industrial development should be encouraged.

Protect Agricultural/Open Space Areas Along the Corridor

- Develop design standards for properties located adjacent to Highway 41 to address compatibility of new development while preserving the rural character of the corridor.
- Provide incentives for open space conservation easements through Planned Unit Development (PUD) clustering/bonus density alternatives.
- Support PUD clustering/bonus density alternatives as tools for protecting and preserving rural areas and open space.
- Promote the establishment of interconnected open space and pedestrian walkways.
- Consider land evaluations by the Kootenai County/Shoshone Soil Conservation District in determining which lands should remain zoned for agricultural and non-development issues.
- Provide for useable open space.
- Protect prime agricultural soils from development.
- Provide passive (natural areas), recreational (parks, golf courses), and active (agri-business) open space areas.

Open Space with Land Application of Wastewater Treatment, Subdivision with Recreational Use- Golf Course

Provide Multi-Modal Facilities Along the Corridor

- Create pedestrian-oriented and transit-supportive development.
- Bicycle/pedestrian facilities should be included in roadway development projects.
- Streets, pedestrian ways, and bike paths should contribute to a system of connected and interesting routes to all destinations.

- Include access for mobility challenged individuals in roadway and development projects (ramps or audio-signals for the blind).
- Encourage adequate circulation patterns within commercial areas and provide planned accesses to future public transit interfaces.
- Provide safe areas for pedestrian/bike access across Highway 41.
- Support ongoing efforts for conversion of UPRR tracks to pedestrian trails and bicycle paths. In the future, an elevated footbridge could be constructed to assure pedestrian safety over Highway 41.
- Cooperate with railroads to develop traffic safety and noise reduction solutions.
- Encourage the consolidation of operating rail lines and corridors to facilitate safety, improve operating effectiveness, and reduce the impacts on adjacent land and development.
- Facilitate public transit to reduce dependence on automobiles.
- Support development of secure and conveniently located park-and-ride/park and pool lots.

Provide Land Use and Transportation Alternatives that Address Community Values

- Expand and enhance the Memorandum of Understanding for the provision of access management and development of the roadway within the corridor.
- Develop and adopt a Land Use Plan that is consistent with and compliments transportation planning policies.
- Discourage strip commercial development along the Highway.
- Create centrally located, clustered, and master-planned centers, where mixed-use development, including commercial, multi- and single-family residences, and open space is encouraged through Planned Unit Developments.
- Site and design commercial development to reduce adverse visual impacts.
- Support areas of commercial and industrial land uses along the corridor that are separated by open space and urban residential development.
- Special attention should be given to major entryways or gateways into the Cities of Post Falls and Rathdrum to clearly identify the community to residents and visitors and ensure a positive image for the communities.
- Promote highway beautification through an aesthetic corridor overlay zone that provides standards for site design, landscaping, signage, and the provision of open space.
- Promote a street tree program within the corridor identifying appropriate varieties, sizes, and spacing standards, as well as maintenance requirements.

Pedestrian Scale Used in New Developments with Landscaping, Lighting, and Low Level Signage

- Provide landscaped medians on intersecting roadways, 300 feet from Highway 41 and major east/west roadways.

- Commercial, industrial, and mining areas should be buffered to protect incompatible adjacent land uses and zones. Encourage compatibility between uses through the orientation of structures and/or facilities to maintain or improve the aesthetics and energy efficiency, as well as the provision of buffering through landscaping, screening, and increased setbacks.
- Provide open space areas within and between land uses.
- Preserve agricultural uses within the corridor and on the Prairie and provide access to farm acreage.

Reduce Congestion on Highway 41 and Intersecting Roads

- Improve east-west street connectivity.
- Establish and support secondary north-south transportation routes.
- Secondary minor collector access routes should not be located closer than one-quarter mile from Highway 41.
- Secondary north-south major collector access routes should be located at least one half mile from Highway 41.
- Enhance turning movements at primary intersections through traffic signals and protected turn bays.
- Synchronize traffic signals along Highway 41 to provide unimpeded traffic flow along the highway.
- Encourage interconnectivity of off-street parking lots and joint use parking easements.

Minimize Impacts to Farmland/Operations

- Encourage PUDs, cluster developments, and other regulations in exchange for perpetual preservation and protection of existing agricultural land and open spaces.
- Provide notice to owners of property located adjacent to farmland and agricultural activities of potential health, safety, and welfare risks.
- Preserve and promote the growth of existing farming activities.

Minimize Impacts to Residential Properties

- New urban density subdivisions that abut existing rural residential land uses should provide screening and transitional densities to buffer intensive urban development from rural residential uses.
- Residential land uses should be buffered from commercial and industrial development through landscaping, screening, and increased setbacks.
- Support "in-fill" development within existing neighborhoods and incorporated cities as a priority.
- Clustered housing in subdivisions provide open spaces that can be used as recreational areas and maintained through homeowner associations.

Encourage Mixed-Use Development Along the Corridor

- Support the development of new land use compatibility criteria that encourages innovative land use mixes and contributes to the quality of life in the community.

- Require all future commercial, industrial, and high-density residential development to have adequate infrastructure including public water and sewer systems.
- Encourage mixed-use development. Mixed-use clustering proposals complimentary to existing and/or proposed commercial development should be positively considered when such proposals accomplish the intent of established policies, standards, and criteria. Some examples include sharing physical facilities, such as ingress/egress, parking facilities, sidewalks, signs, buffering, and landscaping features; or providing cooperative amenities in landscaping and/or innovative design features.

Mixed Use – Residential and Commercial Uses

- Encourage the clustering of commercial uses that are oriented toward the community or regional markets.
- Appropriately located multi-family residential development compatible with existing and potential commercial activities may be permitted, as a transition between high-intensity commercial uses and low-intensity single-family uses.
- Promote mixed-use development that encourages alternative transportation modes and provides neighborhood centers.

Minimize Costs to Acquire Future ROW and Build New Road Improvements

- Establish a corridor level Capital Facilities Plan for achieving proposed transportation improvements.
- Provide for corridor transportation/traffic development impact fees for the funding of local access roads and other required infrastructure improvements.
- Allow for conditions of approval to be placed on developments to mitigate on and off site adverse traffic and land use impacts.

Maximize Use of Transportation System Management Strategies Along the Corridor to Improve Safety and Capacity

- Include traffic signal system coordination and access management improvements within the corridor.
- New development proposals should analyze and mitigate traffic impacts.
- Require developers to provide sufficient land for off-street parking at multi-family, commercial, and industrial sites.
- Encourage joint use/shared parking arrangements to promote efficient use of land.
- Encourage patterns of connecting streets and blocks for ease in vehicular travel, emergency services, and pedestrian circulation.
- Street widths should be used to manage vehicular speeds and traffic flow.
- Designate specific roads as private drives or local access roads.

Protect and Preserve Natural Resources

- Enforce environmental quality standards to reduce environmental impacts created from development on natural systems.
- Allow for increased residential density when, developments are served by public sewer.
- Prohibit commercial/industrial development and residential development greater than one dwelling unit/five acres in areas where no public sewer is available (as a tool to protect the aquifer).

Land Application of Wastewater Treatment

- Encourage alternative wastewater disposal and treatment systems as a measure to protect the aquifer.
- Enhance and preserve natural resources, such as prime agricultural soils and the Rathdrum Prairie/Spokane Valley Aquifer.
- Commercial and industrial activities should be sited and designed to be compatible with the natural environment.
- Support the prevention of point and non-point contamination of the Rathdrum Prairie Aquifer.
- The discharge of non-domestic wastewater should be directed to municipal wastewater treatment plants, only after appropriate treatment.
- Alternative means of wastewater treatment should be encouraged and incorporated into open space areas.

Appendices

Within the corridor, three jurisdictions are responsible for development controls: City of Post Falls, City of Rathdrum, and Kootenai County. Jurisdiction of roadways is under the Idaho Transportation Department for state highways, Post Falls Highway District for the unincorporated areas, and the Cities of Post Falls and Rathdrum within their respective jurisdictional boundaries. The following appendices provide a comparison of the study corridor goals and the jurisdiction's current Comprehensive Plans and development regulations. Appendix D provides planning level cost estimates for proposal roadway improvements.

Appendix A- City of Post Falls

Comprehensive Plan/Implementation Ordinance Analysis

Population Growth

- 1990 Population: 7,349 persons (US Census Bureau)
- 2000 Population: 17,247 persons (US Census Bureau)
- Estimated Average Annual Growth Rate: 8 percent per year (Comprehensive Plan page 2.4)
- 2010 Projected Population for the Post Falls Study Area: 37,038 (Comprehensive Plan page 2.4)

  Policy 1.2 (Population): No new residential, commercial, or industrial development should be approved without urban services (water and sewer) available at the time of final approval.

Land Use Plan

The Post Falls Generalized Future Land Use Plan provides land use designations for the City proper, as well as the Area of Impact. The Land Use Plan designates land as Commercial, Residential Urban, Residential Suburban, and Rural Transition and Agriculture within the Highway 41 study area.

> *Policy 1.15 (General Land Use):* The city should support the development of new land use compatibility criteria, which will encourage innovative land use mixes, and contributes to the quality of life in the community.

The Commercial category includes land planned for business offices, retail stores, services and neighborhood commercial in close proximity to arterials and collectors.

> *Policy 4.2 (Commercial):* The city should encourage planned commercial areas with limited access points and off-corridor circulation rather than strip commercial development.
>
> *Policy 4.3 (Commercial):* The city should encourage neighborhood commercial areas near intersections of collectors and/or arterials.
>
> *Policy 4.6 (Commercial):* Community commercial shopping centers should be encouraged to locate at arterial intersections and near high traffic intensity areas.

The Residential Urban (1-5 DU/AC) category is the predominant land use category in the City. This category recommends a density of approximately 3.5 dwelling units per acre.

The Residential Suburban category identifies land where large lot residential areas have been annexed or will likely be annexed into the City. The Residential Suburban category recommends a lot size ranging from one to five acres.

The Rural Transition and Agriculture category identifies land that is planned for large lot rural living, agricultural activities, and provides an expansion area for future urban growth. Lots within the Rural Transition and Agriculture category shall be no less than ½ acre in

size. Large portions of this land are under farm use property tax assessment and/or parcels of 20 acres or more.

Policy 7.1 (Rural Development): Management of rural land outside the urban service boundary and within the area of city impact should be a joint responsibility of Post Falls and Kootenai County as recognized in the impact area agreement.

Policy 7.2 (Rural Development): The city should encourage clustering of residential units in rural areas in order to retain rural land in agricultural production and to provide community open space.

Policy 7.3 (Rural Development): Any development or land division in the rural transition area should be planned in a manner that will promote its potential conversion to urban uses, including:

a) Rural densities that permit conversion to urban densities in the future
b) Agreement to annex in the future
c) Lot design that meets stormwater runoff and health considerations
d) Site design that meets Post Falls subdivision requirements
e) Agreement to hook-up to Post Falls sewer, if annexed

Policy 7.4 (Rural Development): New urban density subdivisions, which abut existing rural residential land uses should provide screening and transitional densities to buffer the transition between urban level densities and rural residential densities.

Planned Densities/Intensities

Lots within the Rural Transition and Agriculture category shall be no less than ½ acre in size. Large portions of this land are under farm use property tax assessment and/or parcels of 20 acres or more. The Residential Suburban category recommends a lot size ranging from one to five acres. The Residential Urban category allows for densities ranging from 1 to 5 dwelling units per acre.

Transportation Plan

The City of Post Falls, Post Falls Highway District, and Idaho Transportation Department are jointly responsible for road construction and maintenance in the study area. Post Falls' roadway system is described in terms of a functional classification of streets divided into principal arterials, minor arterials/collectors, and local streets. Poleline Road, Prairie Avenue, Mullan Avenue and Highway 41 are designated as principal arterials. 16th and 12th Avenues are designated as collectors.

General Transportation Goal Statement: To develop a transportation system designed to promote livable neighborhoods to reduce existing traffic congestion and to facilitate the safe, efficient movement of people and freight within the community.

Policy 1.3 (General Land Use): Streets, pedestrian ways and bike paths should contribute to a system of connected and interesting routes to all destinations.

Policy 1.14 (General Land Use): A master network including bike and pedestrian plans should be considered in all land use decisions.

Policy 1.3 (Transportation): The city should encourage controlled access points and off-corridor circulation.

Policy 1.4 (Transportation): The city should give special attention to major entryways or gateways into Post Falls to ensure that they contribute to a positive image for the community.

Policy 1.6 (Transportation): The city should plan and protect future transportation corridor rights-of-way.

Policy 1.7 (Transportation): The city may request traffic studies on individual development proposals, evaluating the impact of generated traffic volumes from land use changes.

Policy 1.9 (Transportation): The city should support the safe and improved railroad crossings throughout the city and area of city impact.

Policy 1.12 (Transportation): The city should participate in the development of regional transportation systems.

Policy 1.15 (Transportation): The city should work cooperatively with the State and Post Falls Highway District to plan transportation corridors affecting Post Falls.

Pathway Goal Statement: To consider pedestrians and bicyclists in all transportation plans and improvements.

Policy 2.1 (Transportation): The city should adopt and implement through ordinance a city-wide trail network plan, which is designed to encourage pedestrian, and bicycle use and interconnects with the community.

Policy 2.3 (Transportation): The city should encourage land use regulations that provide safe and adequate pedestrian and bike access for school children.

Policy 2.4 (Transportation): The city should . . . incorporate access for handicapped people.

Community Design

The community design section of the Comprehensive Plan focuses on an analysis of beautification, landscaping, site design, signage, etc. Key factors contributing to community design include:

- The physical arrangement of the community
- Scale of development
- Relationships between buildings and the natural environment

Highway 41 is designated as an "Entryway Corridor" which is an arterial that enters the community introducing both visitors and residents to Post Falls. Entryway Corridors are considered a community's "front door."

Community Design Goal Statement: To create a strong community identity through design and development standards.

Policy 1.7 (Community Design): The city should promote the design of attractive roadway entryways into Post Falls, which clearly identify the community to residents and visitors.

Policy 1.2 (Community Design): The city should promote city beautification through adopted sign controls and design standards.

Policy 1.3 (Community Design): The city should support landscaping and beautification guidelines for city entryways and commercial corridors.

Policy 1.5 (Community Design): The city should encourage a well-defined edge around the perimeter of Post Falls, such as agriculture or other open space land uses.

Policy 1.6 (Community Design): The city should consider a street tree program to identify appropriate varieties, sizes and spacing standards.

Policy 1.7 (Community Design): The city should encourage new urban development to landscape street rights-of-way in accordance with the street tree-planting program.

Policy 1.8 (Community Design): The city should establish policies and ordinances to preserve and/or replace visually prominent vegetation within then public right-of-way including existing trees.

Policy 1.11 (Community Design): The city should continue to encourage business owners and groups to promote beautification of the business corridor and entryways.

Policy 2.1 (Community Design): The city should encourage the beautification of the entryway along the Highway 41 corridor.

Policy 2.2 (Community Design): The city should plan entryway corridors into Post Falls with Kootenai County, Idaho Transportation Department, and Post Falls Highway District, when appropriate.

Policy 2.3 (Community Design): The city should encourage clustered business development on entrance corridors.

Policy 2.4 (Community Design): The city should require that entrance corridors be adequately signed to appropriately welcome and direct visitors to points of interest and special events.

Land Use/Economic Development

The economic base for Post Falls has been diversifying considerably within the last five years. Based on the city's active economic development, current employment forecasts, and knowledge of future development projects, it has been estimated that specific land area must be available to accommodate non-residential growth. To support economic development, the Comprehensive Plan has designated land adequate for expansion areas that allow commercial, business, office, and industrial land uses. The Comprehensive Plan supports the development and improvement of I-90 interchange accesses and other roadways including I-90/Highway 41 intersection improvements.

Economic Development Goal Statement: To promote expansion of existing businesses and the location of business that will provide a variety of commercial and industrial activities that are compatible with the natural environment.

Policy 1.11 (Economic Development): The city should support regional agriculture/agri-business on the Rathdrum Prairie through well-planned rural transition development within the area of city impact.

Policy 1.3 (Economic Development): The city should encourage the expansion of existing business and industry.

Policy 1.7 (Economic Development): The city should reserve and designate sufficient land to fulfill the community's industrial, retail and commercial needs.

Rathdrum Prairie Aquifer

Below the soils of the city is the Rathdrum Prairie Aquifer, known to be one of the most vulnerable and prolific aquifers in the country. It has been designated by the EPA as a "sole source aquifer" because it is the only economical source of drinking water for the region. Depth of ground water from the land surface is about 150 feet. Soils are very permeable so there is concern about contaminated infiltration of the aquifer from septic tanks, stormwater runoff, and chemicals. Individual subsurface sewage disposal systems can pose a threat in terms of ground water pollution. However, the Panhandle Health District and Idaho Division of Environmental Quality concur that residential development on five acre parcels on the Prairie, in Post Falls, and within the city impact area is acceptable when using approved on-site sewage disposal systems. For commercial and industrial development, municipal sewage facilities are required.

Groundwater Quality Goal Statement: To maintain the existing high quality of the Rathdrum Prairie Aquifer groundwater which provides the existing and future municipal water supply.

> *Policy 2.1 (Groundwater Quality)*: The city should support the prevention of point and non-point contamination of the Rathdrum Prairie Aquifer.
>
> *Policy 2.4 (Groundwater Quality):* The city should support the prevention of ground water contamination from sewage and wastewater through appropriate treatment and by enforcement of Best Management Practices (BMP).
>
> *Policy 2.7 (Groundwater Quality):* The city should support regional efforts to store, use, and handle chemicals in a manner which will allow them to be contained and recovered on site without coming in contact with the ground surface above the aquifer and its recharge areas.
>
> *Policy 2.8 (Groundwater Quality):* The city will recommend secondary containment of tanks and associated piping for all new underground storage tanks (UST) installations.
>
> *Policy 2.9 (Groundwater Quality):* The discharge of non-domestic wastewater should be directed to the municipal wastewater treatment plant, only after appropriate treatment.

Area of City Impact

In compliance with Idaho State Law (67-6526), the City of Post Falls and Kootenai County negotiated and adopted a City of Post Falls Impact Area in 1994. Impact areas include land in the unincorporated area surrounding the City within which there is potential for land use changes that must be planned in an orderly way to insure timely and economical provisions of public services such as public water, sewer, police protection, roads, etc.

Access Regulations

The City of Post Falls and the Idaho Transportation Department (ITD) have entered into a joint and collaborative agreement for access management of that portion of Highway 41 located between Interstate 90 and Poleline Road. This stretch of right-of-way is within the jurisdiction of Kootenai County, Post Falls, and ITD, all with differing development standards. Access restrictions identified in the "Memorandum of Understanding" are as follows:

1. Signalized intersections are intended to be located at Mullan Avenue, 16th Avenue and Poleline Road.
2. Intersections at 12th and Horsehaven/20th Avenues will have left turn pockets on the Highway. Left turns and through movements from 12th Avenue and 20th Avenue would not be permitted.
3. Direct access from adjacent properties will be limited to right-turn-in and right-turn-out when the highway improvements are completed or when safety and volume requirements require such limitations.
4. Limiting turning movements from properties adjacent to the highway will be based upon decreasing levels of service as determined by ITD. ITD will issue access permits to Highway 41.
5. The City may require that access points be shared whenever possible and will encourage the connection of parking areas during site plan review to permit the movement of vehicles from property to property. The City may assist in determination of such access patterns by requiring additional considerations to facilitate off-corridor circulation.
6. The City will encourage the development of collector or connector streets parallel to Highway 41 to promote the flow of traffic to controlled intersections.

As per the *"Memorandum of Understanding"* established between the City of Post Falls and the Idaho Transportation Department (ITD), additional right-of-way dedication may be obtained through the City's site plan review process, at time of annexation, as part of a subdivision approval, or through other lawful means. The City will collaborate to establish a per-unit cost to be used as an estimate of the cost of frontage improvements. The City will undertake consideration of ordinance provisions, which would establish the standards agreed upon by the City and ITD and the procedures to be used in application of the standards.

Mixed Use

In some areas of the community, a variety of land uses such as residential, office, and light industrial, as well as commercial uses can be successfully integrated. Sites adjacent to arterials and collector streets should be considered as opportunities to mix land use while utilizing specific development and design criteria of planned unit development (PUD) guidelines. Mixing appropriate land uses can be a desirable way to reduce and/or redistribute peak traffic, create interesting, innovative architecture, reduce home-to-office commute, encourage walking and bicycling between residential and commercial areas, and create neighborhood "village" centers. Mixes of land use such as Retail/Commercial, Neighborhood/Retail and Commercial/Light Industrial are suggested within the Comprehensive Plan.

> *Mixed Use Goal Statement:* To maintain Post Falls' unique quality of life and develop land use guidelines, which are innovative, promote well-designed urban and rural

development, and are appropriate in meeting the needs of the local Post Falls community.

Policy 6.1 (Mixed Use): Development should be conducted under Planned Unit Development (PUD) procedures and as conditional uses, when two or more land uses are proposed which includes residences.

Policy 6.2 (Mixed Use): Clustering of uses and controlled access points along arterial and collector streets should be required.

Zoning

The Post Falls Comprehensive Plan suggests that the zoning and subdivision ordinances should be amended to reflect adopted policies of the Comprehensive Plan. (*Policy 1.9 General Land Use).*

Appendix A -Table 14

Highway 41 Corridor Plan Policy Matrix Existing City of Post Falls Land Use Goals, Policies, and Development Regulations

Highway 41 Corridor Plan Goals	Existing Comprehensive Plan Goals and Policies	Existing Development Regulations
Maximize Coordination of Jurisdictional Interests	In compliance with Idaho State Law (67-6526), the City of Post Falls and Kootenai County negotiated and adopted a City of Post Falls Impact Area in 1994. *Policy 7.1 (Rural Development):* Management of rural land outside the urban service boundary and within the Area of City Impact should be a joint responsibility of Post Falls and Kootenai County, as recognized in the impact area agreement. *Policy 1.12 (Transportation):* The City should participate in the development of regional transportation systems. *Policy 1.15 (Transportation):* The City should work cooperatively with the State and Post Falls Highway District to	Section 18.12.100 of the Post Falls Zoning Code (Municipal Code Title 18) requires Post Falls' staff to coordinate with other departments and agencies concerning all permits. Ordinance 206 identifies, establishes, and defines the Area of City Impact for the City of Post Falls within unincorporated Kootenai County. The Area of City Impact requires any application for subdivision, zone change, comprehensive plan amendment, and/or request for special permits (variances and conditional use permits) that are applied for outside the corporate limits of the City and within the impact area to be submitted to the Post Falls City Clerk providing the City an opportunity to comment on said proposal. Within impact areas, Kootenai County must enforce Post Falls' standards for infrastructure improvements, subdivision and public works design standards, and the regulations of any special district that may have jurisdiction within the Area of City Impact.

Highway 41 Corridor Plan Policy Matrix Existing City of Post Falls Land Use Goals, Policies, and Development Regulations

Highway 41 Corridor Plan Goals	Existing Comprehensive Plan Goals and Policies	Existing Development Regulations
Maximize Coordination of Jurisdictional Interests (continued)	plan transportation corridors affecting Post Falls. *Policy 2.2 (Community Design):* The City should plan entryway corridors into Post Falls with Kootenai County, Idaho Transportation Department, and Post Falls Highway District, when appropriate.	
Provide Safe Corridor Circulation Alternatives which Maximize Highway Preservation	*General Transportation Goal Statement:* To develop a transportation system designed to promote livable neighborhoods to reduce existing traffic congestion and to facilitate the safe, efficient movement of people and freight within the community.	
Direct and Control Development Opportunities Through Access Management and Policy Directions	*Policy 4.2 (Commercial):* The City should encourage planned commercial areas with limited access points and off-corridor circulation rather than strip commercial development. Policy 4.3 (Commercial): The City should encourage neighborhood commercial areas near intersections of collectors and/or arterials. *Policy 4.6 (Commercial):* Community commercial shopping centers should be encouraged to locate at arterial intersections and near high traffic intensity areas.	Access restrictions identified in the *"Memorandum of Understanding"* are as follows: 1. Signalized intersections are intended to be located at Mullan Avenue, 16th Avenue, and Poleline Road. 2. Intersections at 12th and Horsehaven/20th Avenues will have left turn pockets on the Highway. Left turns and through movements from 12th Avenue and Horsehaven/20th Avenue would not be permitted. 3. Direct access from adjacent properties will be limited to right turn-in/turn-out when the highway improvements are completed or when safety and volume requirements require such limitations. 4. Limiting turning movements from properties adjacent to the highway will be based upon decreasing levels of service as determined by ITD. 5. ITD will issue access permits to Highway 41.

Highway 41 Corridor Plan Policy Matrix Existing City of Post Falls Land Use Goals, Policies, and Development Regulations

Highway 41 Corridor Plan Goals	Existing Comprehensive Plan Goals and Policies	Existing Development Regulations
Direct and Control Development Opportunities Through Access Management and Policy Directions (continued)	*Policy 1.3 (Transportation):* The City should encourage controlled access points and off-corridor circulation. *Policy 6.2 (Mixed Use):* Clustering of uses and controlled access points along arterial and collector streets should be required.	6. The City may require that access points be shared whenever possible and will encourage the connection of parking areas during site plan review to permit the movement of vehicles from property to property. The City may assist in determination of such access patterns by requiring additional considerations to facilitate off-corridor circulation. 7. The City will encourage the development of collector or connector streets parallel to Highway 41 to promote the flow of traffic to controlled intersections.
Protect Agricultural/Open Space Areas Along Corridor	*Policy 7.2 (Rural Development):* The City should encourage clustering of residential units in rural areas in order to retain rural land in agricultural production and to provide community open space. *Policy 1.5 (Community Design):* The City should encourage a well-defined edge around the perimeter of Post Falls, such as agriculture or other open space land uses. *Policy 1.11 (Economic Development):* The City should support regional agriculture/agri-business on the Rathdrum Prairie through well-planned rural transition development within the Area of City Impact.	
Provide Multi-Modal Facilities Along Corridor	*Policy 1.3 (General Land Use):* Streets, pedestrian ways, and bike paths should contribute to a system of connected and interesting routes to all	

Highway 41 Corridor Plan Policy Matrix Existing City of Post Falls Land Use Goals, Policies, and Development Regulations

Highway 41 Corridor Plan Goals	Existing Comprehensive Plan Goals and Policies	Existing Development Regulations
Provide Multi-Modal Facilities Along Corridor (continued)	destinations. *Policy 1.14 (General Land Use):* A master network including bike and pedestrian plans should be considered in all land use decisions. *Policy 1.9 (Transportation):* The City should support safe and improved railroad crossings throughout the City and Area of City Impact. *Pathway Goal Statement:* To consider pedestrians and bicyclists in all transportation plans and improvements. *Policy 2.1 (Transportation):* The City should adopt and implement through ordinance a City wide trail network plan which is designed to encourage pedestrian and bicycle use and interconnects with the community. *Policy 2.3 (Transportation):* The City should encourage land use regulations that provide safe and adequate pedestrian and bicycle access for school children. *Policy 2.4 (Transportation):* The City should incorporate access for disabled people.	

Highway 41 Corridor Plan Policy Matrix Existing City of Post Falls Land Use Goals, Policies, and Development Regulations

Highway 41 Corridor Plan Goals	Existing Comprehensive Plan Goals and Policies	Existing Development Regulations
Provide Land Use and Transportation Alternatives that Address Community Values	*Policy 1.4 (Transportation):* The City should give special attention to major entryways or gateways into Post Falls to ensure that they contribute to a positive image for the community. *Community Design Goal Statement:* To create a strong community identity through design and development standards. *Policy 1.7 (Community Design):* The City should promote the design of attractive roadway entryways into Post Falls, which clearly identify the community to residents and visitors. *Policy 1.2 (Community Design):* The City should promote City beautification through adopted sign controls and design standards. *Policy 1.3 (Community Design):* The City should support landscaping and beautification guidelines for City entryways and commercial corridors. *Policy 1.6 (Community Design):* The City should consider a street tree program to identify appropriate varieties, sizes, and spacing standards.	*Section 18.44.330* of the Zoning Code establishes landscaping standards for commercial and industrial development. That portion of a lot not covered by building, parking lots or driveways are to be landscaped. Landscaping should consider snow removal and storage to minimize the damage to plants and to complement stormwater management design. Trees planted in the ROW shall follow procedures described in the Post Falls Community Forest Ordinance. All trash receptacles shall be screened from public ROWs and residential uses/zones (See Section 18.44.420). 75% of the required landscaping shall be evergreen. ROW landscaping, installation, irrigation, and maintenance are the responsibility of the property owner. ROWs shall be landscaped with a combination of trees, low growing shrubs, ground covers, and/or turf grass. Landscaping shall comply with the Post Falls Tree Standards Manual. The sides of a driveway access shall maintain visibility for the area within a triangle on either side of an access, having perpendicular sides of 10 feet. Visibility between 2½ and 10 feet from the street level shall be maintained at all intersections in accordance with Idaho State Code and Section 18.44.030 of the Zoning Code. Sign design and Section 18.50 of the Zoning Code regulates location. No off-premise signs (i.e., billboards) are allowed along Highway 41 within the Post Falls City limits.

Highway 41 Corridor Plan Policy Matrix Existing City of Post Falls Land Use Goals, Policies, and Development Regulations

Highway 41 Corridor Plan Goals	Existing Comprehensive Plan Goals and Policies	Existing Development Regulations
Provide Land Use and Transportation Alternatives that Address Community Values (continued)	*Policy 1.7 (Community Design):* The City should encourage new urban development to landscape street rights-of-way in accordance with the street tree-planting program. *Policy 1.8 (Community Design):* The City should establish policies and ordinances to preserve and/or replace visually prominent vegetation within the public ROW, including existing trees. *Policy 1.11 (Community Design):* The City should continue to encourage business owners and groups to promote beautification of the business corridor and entryways. *Policy 2.1 (Community Design):* The City should encourage the beautification of the entryway along the Highway 41 corridor. *Policy 2.3 (Community Design):* The City should encourage clustered business development on entrance corridors. *Policy 2.4 (Community Design):* The City should require that entrance corridors be adequately signed to appropriately welcome and direct visitors to points of interest and special events.	

Highway 41 Corridor Plan Policy Matrix Existing City of Post Falls Land Use Goals, Policies, and Development Regulations

Highway 41 Corridor Plan Goals	Existing Comprehensive Plan Goals and Policies	Existing Development Regulations
Reduce Congestion on Highway 41 and Intersecting Roadways		
Minimize Impacts to Farmland/Operations		
Minimize Impacts to Residential Properties	*Policy 7.3 (Rural Development):* Any development or land division in the rural transition area should be planned in a manner that will promote its potential conversion to urban uses, including: Rural densities that permit conversion to urban densities in the future; Agreement to annex in the future; Lot design that meets stormwater runoff and health reasons; Site design that meets Post Falls subdivision requirements; and Agreement to hook-up to Post Falls' sewer, if annexed. *Policy 7.4 (Rural Development):* New urban density subdivisions which abut existing rural residential land uses should provide screening and transitional densities to buffer the transition between urban level densities and rural residential densities.	
Encourage Mixed Use Development Along the Corridor	*Policy 4.2 (Commercial):* The City should encourage planned commercial areas with limited access points and off-corridor circulation rather than strip commercial development.	