

# CITY OF COEUR D'ALENE



## Development Impact Fee Report Update

February 23, 2004

COEUR d'ALENE



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## Development Impact Fee Report Update February 23, 2004

**Prepared for:**  
**The City of Coeur d'Alene**  
710 Mullan Ave  
Coeur d'Alene, Idaho 83814

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Original - November 16, 1993  
1<sup>st</sup> Update - July 30, 1996  
2<sup>nd</sup> Update - December 7, 2000  
3<sup>rd</sup> Update - February 23, 2004

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## IMPACT FEE SUMMARY

Table 1 on page 2 is a summary of all development impact fees generated by this report. The following report has been updated to include the latest development information as of December 1, 2002. The fees were revised to reflect the development that has occurred since 1996 as well as a re-analysis of future circulation needs by the City of Coeur d'Alene Engineering Department. The results of the report are based on considerable research and analysis. The derivation of the fees can be closely followed by the documentation and methodology contained in this report. The intent of this revision was to provide an update to the 1996 Development Impact Fee Report, which was an update to the original Development Impact Fee Report prepared in 1993. This update maintains the report in a form that is as easy to follow as possible without sacrificing the detail necessary to withstand close scrutiny, either legal or otherwise.

The results of this update show an increase in development impact fee amounts for all facilities as shown below. The increases were the result of either higher cost assumptions or higher actual costs that were provided by various City departments.

	SFD	MF	Commercial/Industrial
<b>PARKS</b>			
1996	\$410.10	\$410.10	---
2003	\$755.97	\$755.97	---
<b>POLICE</b>			
1996	\$60.13	\$60.13	\$20.71
2003	\$70.31	\$70.31	\$24.21
<b>FIRE</b>			
1996	\$11.71	\$11.71	\$4.03
2003	\$138.00	\$138.00	\$47.52
<b>CIRCULATION</b>			
<i>Quadrant 1</i>			
1996	\$743.48	\$594.78	\$20.61
2003	\$875.54	\$700.43	\$26.99
<i>Quadrant 2</i>			
1996	\$627.80	\$502.24	\$13.00
2003	\$639.64	\$511.71	\$14.01
<i>Quadrants 3 &amp; 4</i>			
1996	\$652.42	\$521.94	\$11.89
2003	\$815.63	\$852.50	\$15.12

Table 1 – Impact Fee Summary

<b>Table 1 - Impact Fee Summary</b>					
<b>Individual Facility Summary</b>					
Facility		Single Family Detached (SFD)	Multifamily (MF)	Commercial (Per 1,000 Sq. Ft.)	Industrial (Per 1,000 Sq. Ft.)
Parks		\$755.97	\$755.97	N/A	N/A
Police		\$70.31	\$70.31	\$24.21	\$24.21
Fire		\$138.00	\$138.00	\$47.52	\$47.52
Circulation				(PER Trips)	(PER Trips)
	Quadrant 1	\$875.54	\$700.43	\$26.99	\$26.99
	Quadrant 2	\$639.64	\$511.71	\$14.01	\$14.01
	Quadrants 3 & 4	\$815.63	\$852.50	\$15.12	\$15.12

## INTRODUCTION

The City of Coeur d'Alene has continued to experience rapid growth, a trend that is expected to continue into the future. As this growth proceeds, increasing demands will be placed upon city services. Improvement of existing facilities and construction of new facilities will be required to meet this demand. The City continues to support the decision that new development must pay for the public facility improvements necessary to support themselves. The City has chosen a development impact fee program as the primary financial mechanism to fund public facility improvements made necessary by new development.



This study is an updated version of the development impact fee report, which was approved by the Coeur D'Alene City Council in 1993 and updated in 1996. After the approval of the original report, a lawsuit was filed to challenge the validity of the report. Although the report withstood the scrutiny of the courts, it was determined that there was no state enabling legislation to allow the City of Coeur d'Alene to adopt a development impact fee program.

The state has since approved legislation to allow for the collection of impacts by all local governments within the state of Idaho. This legislation clearly defines the requirements necessary for the collection of development impact fees. As a part of this legislation, there is a requirement for the preparation of a report that provides tangible justification for an impact fee amount.

The following development impact fee report was prepared to adhere to the adopted legislation and provide updated development impact fee amounts for the City of Coeur d'Alene. Unless noted, most of the format, methodologies and assumptions were not changed from the original report.

The public facilities addressed by this study are:

- **Parks**
- **Police**
- **Fire**
- **Circulation**



The 1996 updated impact fee report eliminated library facilities. This was decided because the enabling legislation does not contain a provision for the collection of impact fees for library facilities. Although not included in the original report, it was decided that the 1996 updated report should include park facilities.

The impact fee is based on a citywide level analysis for all facilities with the exception of circulation. Because of the regional nature of larger arterials and the local nature of collector streets, different service area sizes must be developed. The sizing of service areas based on actual impacts to facilities is important to assure that a rational 'nexus' is made between a particular development's impacts and the impact fee being charged to that development. For

purposes of the impact fee, the smallest service area unit size is the quadrant. This is discussed in greater detail in the Build Out Projections chapter following this introduction. This report is divided into the following major sections:

**Introduction**  
**Build Out Projections**  
**Park Facilities**  
**Police Facilities**  
**Fire Facilities**  
**Circulation Facilities**  
**Implementation**  
**Appendices**

## **BUILD OUT PROJECTIONS**

### **I. INTRODUCTION**

The first step in determining an equitable development impact fee is to calculate the total amount of development anticipated at build out of the City within each of the service areas. Since the impact fee will apply to both residential and nonresidential development, a dwelling unit and population projection must be made for residential development and a square footage projection must be made for nonresidential development. Total build out projections are a combination of existing development and projected future development.



This section defines the study area and discusses the methodology and resulting build out projections for both residential and nonresidential development within the study area. The build out projections provided in the following sections have been updated to include all development that has occurred since 1996. Individual sections will identify the changes that have occurred.

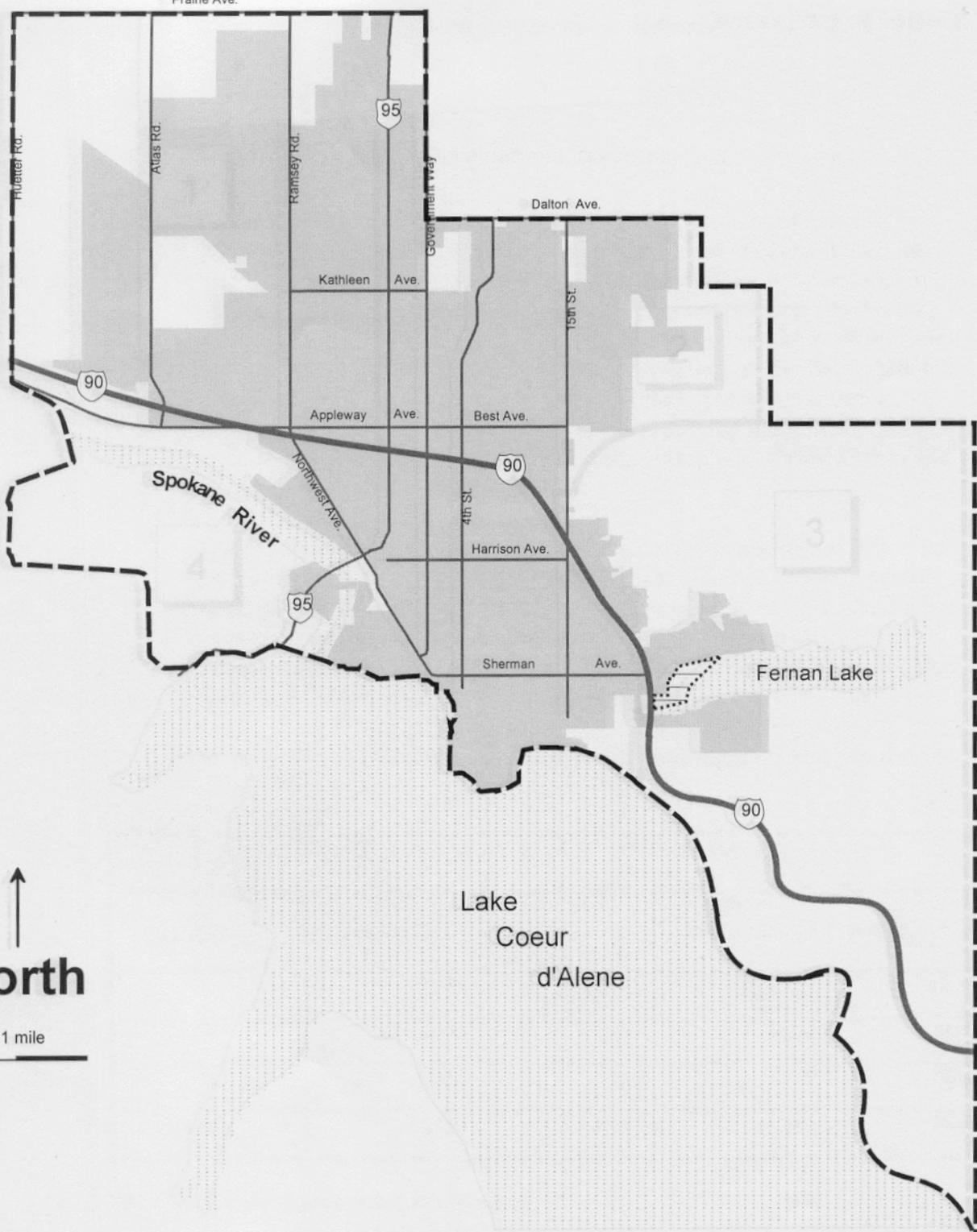
### **II. STUDY AREA**

The study area is defined as the "Area of Impact", identified in the Coeur d'Alene Comprehensive Plan. This area is shown on Exhibit 1, page 7. All annexations occurring after 1996 are reflected on exhibits. For purposes of the circulation facilities analysis, the study area is partitioned into four quadrants. These quadrants are numbered clockwise beginning from the northwest section of the city. The study areas and quadrants are illustrated on Exhibit 2, page 8. There were no changes to the quadrant or zone boundaries.

Quadrant 1 is composed of the land north of Interstate 90 and west of US 95 stretching to the northwestern boundary of the area of impact. Quadrant 2 is bordered on the west by US 95, and on the north and east by the boundaries of the area of impact. The southern border is defined as Interstate 90 east of its intersection with US 95 to the intersection of 15th Street, and north of 15th Street to a prominent ridgeline that runs in a southeast to northwest direction to the eastern boundary of the area of impact. Quadrant 3 is composed of the land south of this ridgeline, east of Interstate 90 and south along to the eastern boundary of the Coeur d'Alene Resort Golf Course to Coeur d'Alene Lake, just south of and adjacent to Interstate 90. The remainder of Quadrant 3 consists of the area to the southern and eastern boundaries of the area of impact. The City of Fernan Lake is within this quadrant, but is not included in this study. Quadrant 4 is the remaining area south and west of I-90 to the western boundary of the area of impact.

Included in the study area is land, which is located outside the existing city limit, but within the city's area of impact. These areas are likely to be annexed into the

city limits and for ease of reference will be referred to hereafter as the "annexation area." It is appropriate to include the annexation area into the impact fee study since this area will contribute to future demands on city services.



↑  
**North**  
 1 mile

**Legend**

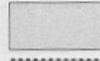
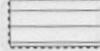
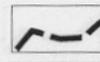
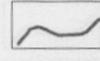
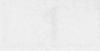
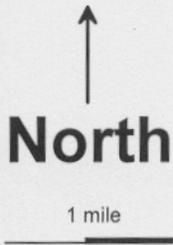
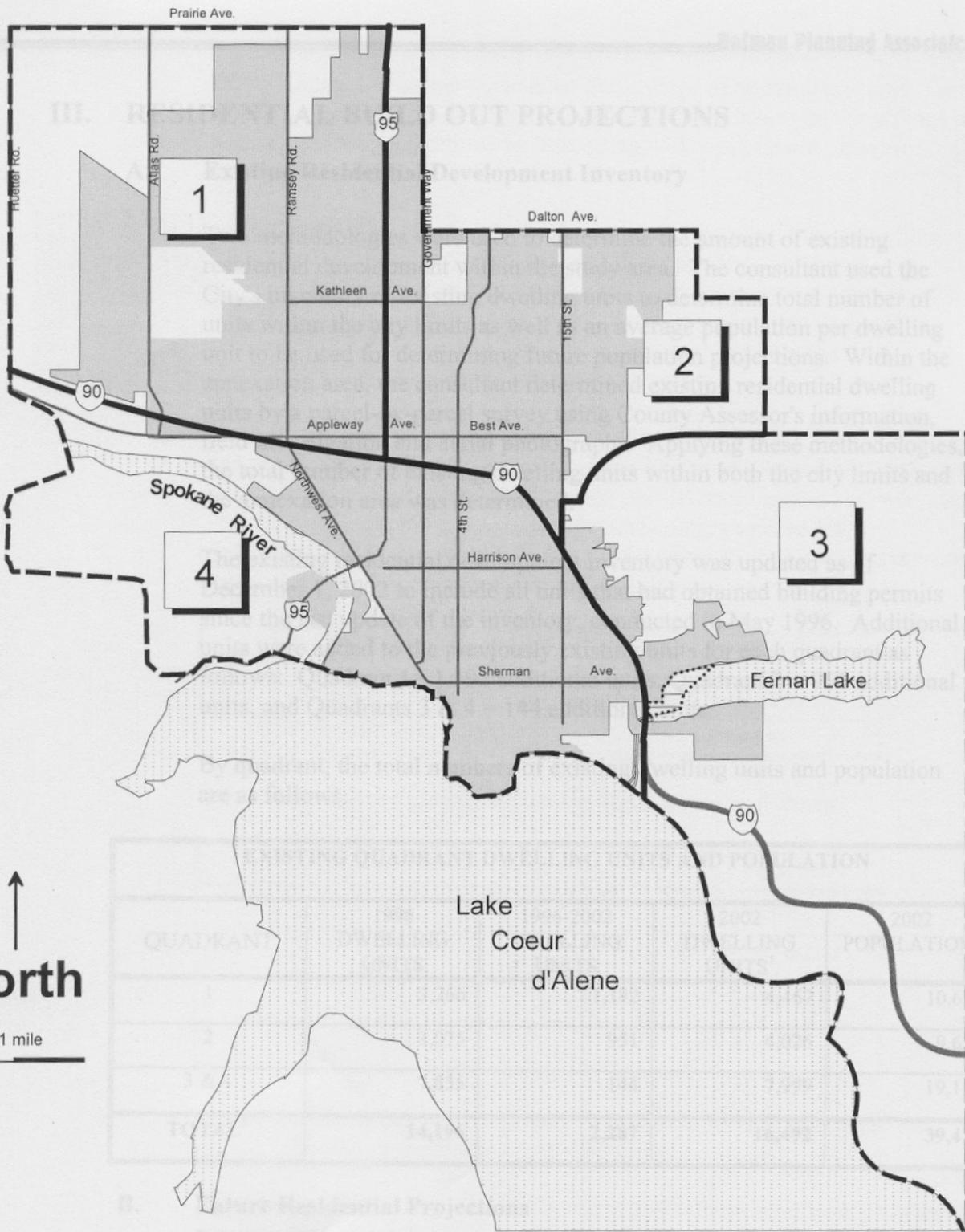
-  Water Features
-  Coeur d'Alene City Limits
-  City of Fernan, Not a Part
-  Area of Impact Boundary
-  Roadways
-  Quadrant Number

Exhibit 1



**Legend**

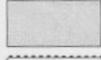
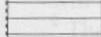
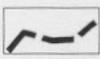
-  Water Features
-  Coeur d'Alene City Limits
-  City of Fernan, Not a Part
-  Area of Impact Boundary
-  Roadways
-  Quadrant Number

Exhibit 2

### III. RESIDENTIAL BUILD OUT PROJECTIONS

#### A. Existing Residential Development Inventory

Two methodologies were used to determine the amount of existing residential development within the study area. The consultant used the City's inventory of existing dwelling units to determine total number of units within the city limits as well as an average population per dwelling unit to be used for determining future population projections. Within the annexation area, the consultant determined existing residential dwelling units by a parcel-by-parcel survey using County Assessor's information, field investigation and aerial photographs. Applying these methodologies, the total number of existing dwelling units within both the city limits and the annexation area was determined.

The existing residential development inventory was updated as of December 1, 2002 to include all units that had obtained building permits since the last update of the inventory, conducted in May 1996. Additional units were added to the previously existing units for each quadrant as follows: Quadrant 1= 1,192 additional units, Quadrant 2 = 951 additional units, and Quadrants 3 & 4 = 144 additional units.

By quadrant, the total numbers of existing dwelling units and population are as follows:

EXISTING QUADRANT DWELLING UNITS AND POPULATION				
QUADRANT	1996 DWELLING UNITS	1996-2002 DWELLING UNITS	2002 DWELLING UNITS <sup>1</sup>	2002 POPULATION <sup>2</sup>
1	3,266	1,192	4,467	10,676
2	3,075	951	4,026	9,622
3 & 4	7,855	144	7,999	19,118
<b>TOTAL<sup>3</sup></b>	<b>14,196</b>	<b>2,287</b>	<b>16,492</b>	<b>39,416</b>

#### B. Future Residential Projections

Future residential development projections were determined by applying a density factor<sup>4</sup> to the remaining vacant lands within the study area. The

<sup>1</sup> Existing dwelling units as shown include temporary existing dwelling units. These units are existing units, which will likely be removed upon development of an underutilized property.

<sup>2</sup> The population generation rate is 2.39 people per dwelling unit based on the 2000 Census for the City of Coeur d'Alene.

<sup>3</sup> Throughout this report, some numbers within the charts were adjusted to account for rounding errors.

City Planning Department provided the acreage of remaining vacant<sup>5</sup> land within the city limits. Within the annexation area, however, the acreage of vacant land was determined by measuring with a planimeter, assessor maps and aerial photos.



The density factors used to determine future dwelling units were based on actual densities of several residential projects built in various comprehensive plan land use categories. Also, consideration was given to topography and other geographical constraints such as steep hillsides and flood plains.

Next, the comprehensive plan was overlaid on the study area map and density factors were applied. An important assumption made at this point was to use the 1992 comprehensive plan for determining land uses within the city limit and to use the latest proposed comprehensive plan designations (as of January 7, 1993) for the annexation areas. The density factors used within the city limits are as follows:

LAND USE DESIGNATION	DENSITY FACTOR
R1, R3, R8, R12	3.0 du/ac
R17, R34	13.0 du/ac

The density factors used in the annexation area are as follows:

LAND USE DESIGNATION	DENSITY FACTOR
RR	0.15 du/ac
LR <sup>6</sup>	0.5 du/ac - 3.0 du/ac
MR	3.0 du/ac
MHR	13.0 du/ac

Detailed calculations used to project future residential development are contained in the appendices.

Since the original study was conducted in 1993, there have been changes made to the Comprehensive Plan regarding land use designations and density factors associated with the revised land use designations. The overall change has been a decrease in density, which could result in a lower population at build out. However, in 2000, HDR Engineering

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<sup>4</sup> The density factor used was determined on a case-by-case basis, depending on topographical constraints.

<sup>5</sup> Appendix A provides the assumptions used in determining vacant land.

<sup>6</sup> The density factor used was determined on a case-by-case basis, depending on topographical constraints.

prepared a Wastewater Facilities Plan for the City, which provides future flow and waste load estimates based on build out projections greater than those provided in the 1996 Development Impact Fee Report. There appears to be a discrepancy in the population anticipated at build out for the City of Coeur d'Alene.

Since the current density factors contained in the latest Comprehensive Plan indicate that there would be a lower population at build out and the Wastewater Facilities Plan indicates that there will be a higher population at build out, it was determined that the build out number of dwelling units as contained in the 1996 update is appropriate for continued use in this update.

Because the Coeur d'Alene Comprehensive Plan was updated in 1995, the assumptions utilized during the previous land use analysis remain valid. Considerable effort was expended to ensure that the assumptions used in the previous report and retained in this revised report would continue to maintain the integrity of the report. Since the build out projections are a function of future vacant land, the updated future dwelling units were determined by subtracting the updated existing dwelling units as provided by the City from the build out dwelling units provided in the original Development Impact Fee Report and the 1996 Development Impact Fee Report.

The 1996 report utilized the 1990 Census data and a population factor of 2.32 persons per unit. Population projections for this update were

<b>FUTURE PROJECTED RESIDENTIAL UNITS AND POPULATION</b>		
<b>QUADRANT</b>	<b>FUTURE DWELLING UNITS</b>	<b>FUTURE POPULATION</b>
1	10,062	24,048
2	2,473	5,910
3 & 4	3,226	7,710
<b>TOTAL</b>	<b>15,761</b>	<b>37,669</b>

calculated using a population factor of 2.39 people per unit. This factor was derived from the 2000 census data for the City of Coeur d'Alene.

**C. Build Out Residential**

Combining the existing dwelling units and population counts with the projected future dwelling units and population projections results in the following build out projection:

<b>RESIDENTIAL DEVELOPMENT SUMMARY</b>				
<b>QUADRANT</b>	<b>EXISTING DWELLING UNITS</b>	<b>FUTURE DWELLING UNITS</b>	<b>BUILD OUT DWELLING UNITS</b>	<b>BUILD OUT POPULATION</b>
1	4,467	10,062	14,529	34,724
2	4,026	2,473	6,499	15,533
3 & 4	7,999	3,226	11,225	26,828
<b>TOTAL</b>	<b>16,492</b>	<b>15,761</b>	<b>32,253</b>	<b>77,085</b>

Due to the demographic changes between the 1990 Census and the 2000 Census, the build out population assumed in this report increased from 74,827 in 1996 to 77,085.

#### **IV. NON-RESIDENTIAL BUILD OUT PROJECTIONS**

The methodology for obtaining existing and future non-residential acreage is the same as the residential process. The City Planning Department provided acreage for the areas within the city limits and the consultant obtained the acreage for the annexation areas by measurement with a planimeter of assessor parcel maps and aerial photos.

##### **A. Existing Non-Residential Inventory**

Existing non-residential square footage was calculated by applying a coverage factor<sup>7</sup> of 25% on a given developed, non-residential parcel. The 25% coverage factor is based on an average coverage of existing non-residential centers within the City of Coeur d'Alene. Several centers were measured using assessor maps and aerial photographs to develop an average 25% coverage factor.



The downtown area is an exception to this rule because the amount of building coverage is much higher. Based on actual measurement, a coverage factor of 65% was used for determining existing non-residential square footage in the downtown area<sup>8</sup>.

<sup>7</sup> The coverage factor is a percent ratio of the building coverage to the parcel size.

<sup>8</sup> The area defined as “downtown” is shown in Appendix C.

As indicated in the residential build out projection section, this 2003 update report has been updated to include all construction that has occurred since May 1996. The additional non-residential square footage from May 1, 1996 to December 1, 2002 was added to the previous existing square footage for each quadrant.

The existing non-residential development inventory by quadrant is as follows:

<b>EXISTING NON-RESIDENTIAL DEVELOPMENT</b>			
QUADRANT	1996 DEVELOPMENT (Sq.Ft.)	1996-2002 DEVELOPMENT (Sq.Ft.)	EXISTING NON-RESIDENTIAL DEVELOPMENT (Sq.Ft.)
1	2,911,641	943,782	3,855,423
2	3,860,678	331,128	4,191,806
3	30,492	8,497	38,989
4	8,827,288	268,351	9,095,639
<b>TOTAL</b>	<b>15,630,099</b>	<b>1,551,758</b>	<b>17,181,857</b>

**B. Future Non-Residential Projections**

Similar to future residential projections, the existing comprehensive plan and the proposed comprehensive plan were overlain on the incorporated area of the city and the annexation areas respectively. A coverage factor of 20% was used to determine future non-residential square footage on vacant property. The reason for the reduction from 25% for existing development to 20% for future projections is that a coverage factor of 20% accounts for reductions of build-able land area for street dedications and other utility or land dedications. In other words, a 25% coverage is used on acreage where street improvements have already been installed, whereas a 20% coverage is used on acreage where street dedications and improvements have not yet been made.

The updated future non-residential projections are a function of the previous build out projections. The updated projections were determined by subtracting the existing non-residential square footage from the build out square footage. The projected future non-residential projections are as follows:

<b>FUTURE NON-RESIDENTIAL PROJECTIONS</b>	
QUADRANT	FUTURE NON-RESIDENTIAL DEVELOPMENT
1	4,181,238
2	1,347,938
3	161,387
4	2,347,012
<b>TOTAL</b>	<b>8,037,575 Sq. Ft.</b>

**C. Non-Residential Build Out Projections**

Combining the existing non-residential inventory with future projected development, the total non-residential build-out projections are as follows:

QUADRANT	EXISTING DEVELOPMENT	FUTURE DEVELOPMENT	BUILD OUT DEVELOPMENT
1	3,855,423	4,181,238	8,036,661
2	4,191,806	1,347,938	5,539,744
3	38,989	161,387	200,376
4	9,095,639	2,347,012	11,442,651
<b>TOTAL</b>	<b>17,181,857 Sq.Ft.</b>	<b>8,037,575 Sq.Ft.</b>	<b>25,219,432 Sq.Ft.</b>

## **PARK FACILITIES**

### **I. INTRODUCTION**

The provision of park facilities is evaluated on a citywide basis for the purposes of this analysis. Citywide facilities are defined as benefiting all residents within the City equally. This benefit is limited to residential development within the City. As a result, only future residential development in the Study Area will be assessed the Impact Fee for park facilities. This fee will remain constant for all quadrants of the City.



### **II. FACILITY ANALYSIS**

The information needed to calculate the Park Impact Fee was obtained from the November 1994 Parks Master Plan, written communication and conversations with the Parks Director for the City of Coeur d'Alene, and information from the Building Department. An inventory of existing facilities, the level of service specified, and the costs for development of future parks were provided by the City Parks and Cemetery Department.

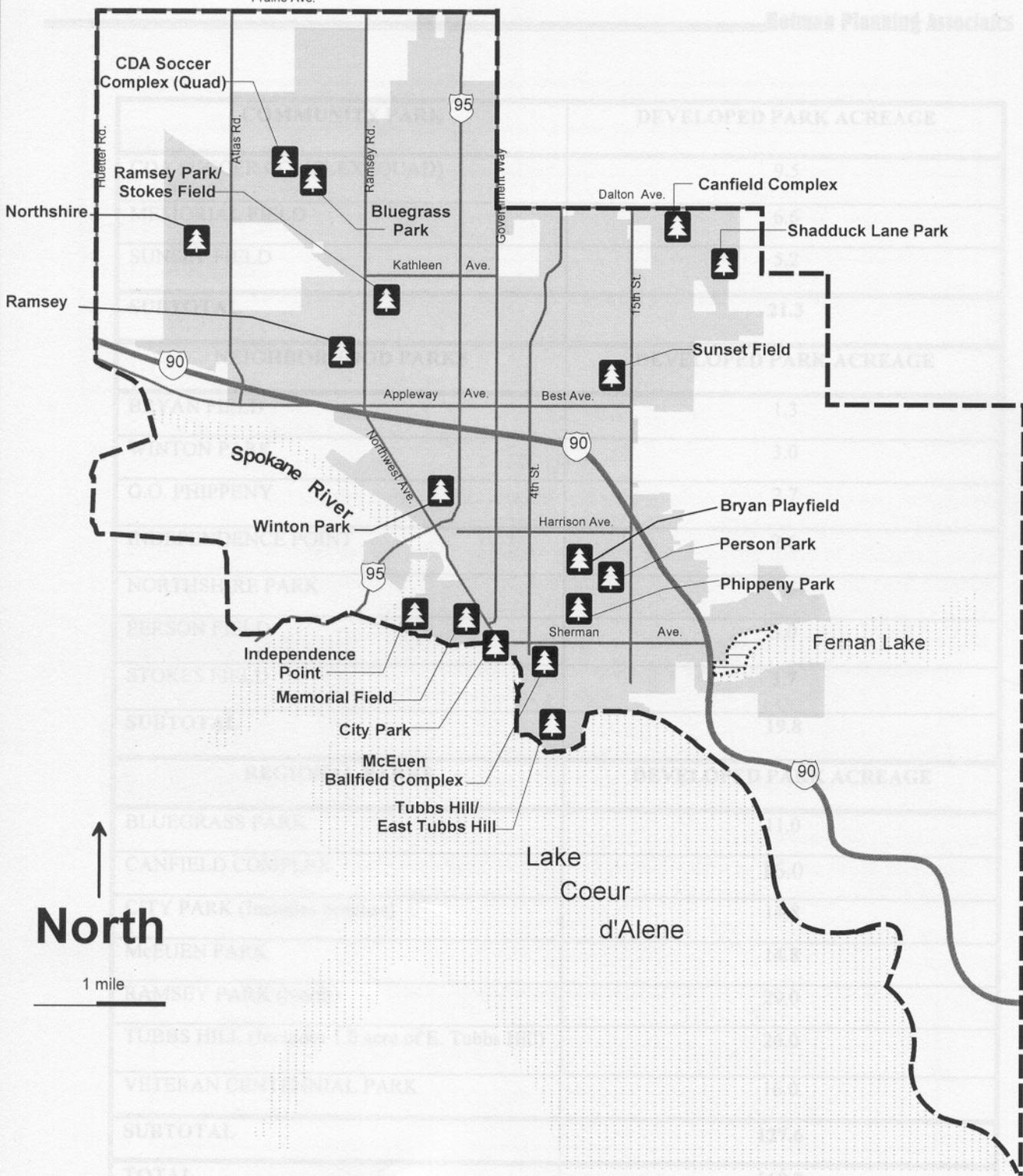
#### **A. Existing Inventory**

##### Regional Parks

Several regional parks exist within the City of Coeur d'Alene. Ramsey Park North includes 29.0 acres of developed parkland and is located within Quadrant 1 as shown on Exhibit 3, page 17. Ramsey Park South consists of 12.0 acres of undeveloped land. Per the direction of the City, only 25.0 acres of the Tubbs Hill area is considered to serve as a regional park area. City Park is 14.8 acres, a measurement that includes the beaches present. For the purposes of this report, all parks exceeding 10 acres are classified as regional parks.

##### Community/Neighborhood Park Facilities

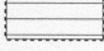
Community parks range in size from 5 to 10 acres, while neighborhood parks are defined as occupying less than 5 acres. Community parks attract residents from the entire City while neighborhood parks generally serve a more limited population adjacent to the park. There are four developed community parks and seven existing neighborhood parks as shown on Exhibit 3. Park names and acreages are provided below.



North

1 mile

**Legend**

-  Water Features
-  Coeur d'Alene City Limits
-  City of Fernan, Not a Part
-  Area of Impact Boundary
-  Roadways
-  Park Location

**Exhibit 3**

**Park Locations**

<b>COMMUNITY PARK</b>	<b>DEVELOPED PARK ACREAGE</b>
CDA SOCCER COMPLEX (QUAD)	9.5
MEMORIAL FIELD	6.6
SUNSET FIELD	5.2
<b>SUBTOTAL</b>	<b>21.3</b>
<b>NEIGHBORHOOD PARKS</b>	<b>DEVELOPED PARK ACREAGE</b>
BRYAN FIELD	1.3
WINTON PARK	3.0
G.O. PHIPPENY	2.7
INDEPENDENCE POINT	2.6
NORTHSHIRE PARK	3.5
PERSON FIELD	3.0
STOKES FIELD	3.7
<b>SUBTOTAL</b>	<b>19.8</b>
<b>REGIONAL PARKS</b>	<b>DEVELOPED PARK ACREAGE</b>
BLUEGRASS PARK	11.0
CANFIELD COMPLEX	16.0
CITY PARK (Includes beaches)	14.8
McEUEEN PARK	14.8
RAMSEY PARK (North)	29.0
TUBBS HILL (Includes 1.0 acre of E. Tubbs Hill)	26.0
VETERAN CENTENNIAL PARK	16.0
<b>SUBTOTAL</b>	<b>127.6</b>
<b>TOTAL</b>	<b>168.7</b>

Source: City of Coeur d'Alene: Parkland Comparison Spreadsheet

In addition, the City has acquired some parkland, which is not yet developed. The following lists an inventory of undeveloped parkland for the City of Coeur d'Alene:

COMMUNITY PARKS	UNDEVELOPED PARK ACREAGE
CHERRY HILL	30.0
NORTHWOOD PARK	3.5
RAMSEY PARK (SOUTH)	12.0
SHADDUCK LANE	6.0
WINTON PARK	3.0
<b>TOTAL</b>	<b>54.5</b>

**B. 1996 Level of Adequacy**

At the time the impact fee for parks was developed, the Parks Director had indicated that the minimum level of service standard for park facilities is 4.0 acres per 1,000 population. The 1996 existing level of adequacy was determined by comparing the existing demand with existing park acreage as shown below. The 1996 existing demand was based on the current population as identified in the Build Out section of the 1996 update and multiplied by the standard of 4.0 acres per 1,000 population.



In order to accurately account for existing demand in 1996, the report assumed that a number of existing units had satisfied their impacts to park facilities by either monetary contribution, land contribution or a combination of both. There were 250 existing units that had satisfied their impacts on park facilities. These units were not counted as existing units for the purpose of determining the 1996 existing park demand.

EXISTING DEMAND	129.5 ACRES
EXISTING PARKS SUPPLY	109.5 ACRES
ADEQUACY/(DEFICIENCY)	(20) ACRES

As shown above, there was originally a deficiency of 20 acres of parkland in the City based on the adjusted existing demand and supply. This deficiency cannot be financed by new development and therefore, must be paid for through alternate funding sources.

Since 1996, 33.84<sup>9</sup> acres of parkland have been developed and 36.13 acres have been acquired by funding sources other than the Development Impact Fees. The acres of developed parkland have exceeded the 1996 existing deficiency of 20 acres. Therefore, as the following table shows, the 1996 deficiency has been removed, and impact fees can be used to fund future parks.

ORIGINAL 1996 EXISTING DEFICIENCY	20.0 Acres
CREDIT TOWARD DEFICIENCY AS OF 2003	33.84 Acres
SURPLUS BEYOND DEFICIENCY- YEAR 2003	13.84 Acres

**C. Existing Level of Adequacy**

The level of service standard for park facilities remains 4.0 acres per 1,000 population. Since the creation of a Parks Impact Fee in 1996, additional parkland has been acquired and/or developed by development impact fees. Analysis of this parkland shows that the impact fee is working as discussed below.

In the Residential Build Out section of this report, it is stated that 2,287 new dwelling units have been added since 1996, creating a total of 16,492 existing dwelling units. Of these dwelling units, 154 were part of the Coeur d’Alene Place project that had previously satisfied its park demand. The adjusted number of dwelling units (16,088) has created a demand for 153.80 acres of parkland to satisfy current level of service requirements.

Since 1996, development impact fees have funded the development of acres of parkland, and the acquisition of 3.37 acres. When combined with the parkland financed by other sources, the City has acquired 39.5 acres and developed 59.2 acres since 1996.

As indicated previously, there was an existing demand for 129.5 acres of developed park land at the time the impact fee was introduced, and since then the demand has increased to 153.80 acres. Because the present park inventory shows 168.7 acres of developed parkland, the City is currently exceeding the required level of service by 14.90 acres.

**D. Build Out Requirements**



<sup>9</sup> Source: City of Coeur d’Alene Parks Department: Parks 5 – Years of Development East Tubbs Hill.

Based on a level of service standard of 4.0 acres/1,000 population and an adjusted build out population of 71,019 people, a total of 284.08 acres of parkland will be needed at build out of the Study Area. The adjusted build out population is only utilized for determining park facilities. The reason for the adjustment is to account for existing and future units that have contributed their fair share toward satisfying their impacts on park facilities. The adjusted build out population assumes that 2,538 of the future units are a part of the Coeur d'Alene Place project and have already satisfied their impacts on park facilities. The park fee established for the build out population is representative of the cost required to provide residents with a sufficient level of service.

**E. Costs**

The cost per acre to develop future parks depends on the type of park constructed. Neighborhood parks generally provide more amenities and active facilities and therefore have greater development costs per acre. Regional parks are generally passive parks (i.e. trails) and therefore, have lower construction costs per acre. For purposes of this analysis, an average cost of \$90,000 per acre<sup>10</sup> was used to calculate future park development costs.

In addition to the development costs, the costs for parkland acquisition must also be considered. The cost for acquiring parkland can be quite varied depending on the location. For the purpose of this report, an average cost of \$29,862 per acre<sup>11</sup> was used to calculate park acquisition costs.

As previously indicated, there was a deficiency of 20 acres of developed park facilities in 1996. The funds used to correct this deficiency were not collected through an impact fee; rather, they were generated through other sources by the City of Coeur d'Alene. This deficiency has been cured.

**F. Fee Calculation**

The fee calculation for parks is a three-step process. The first step is to determine the total parks cost. This is calculated by subtracting the existing park acres from build out park acres and multiplying the sum by the average cost per acre to acquire the land and develop the park.

Build out acres	- Existing acres	= Acres to be acquired
284.08 acres	- 223.20 acres	= 60.88 acres
Acres acquired	x Acquisition cost	= Total Acquisition Cost

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<sup>10</sup> City of Coeur d'Alene, Parks Department, January, 2003

<sup>11</sup> City of Coeur d'Alene, Parks Department, January, 2003

60.88 acres	x \$29,861.84 / acre	= \$1,817,851.45
Build out acres	- Existing acres	= Acres to be Developed
284.08 acres	- 168.70 acres	= 115.38 acres
Acres Developed	x Development Cost	= Total Development Cost
115.38 acres	x \$90,000.00 acres	= \$10,383,786.00
Acquisition Cost	+ Development Cost	= Total Park Build Out
\$1,817,851.45	+ \$10,383,786.00	= \$12,201,637.45

The next step involves identifying other sources of funding available to the City that will be used for the construction of future parks. The City has a Parks Capital Improvements Fund that currently collects approximately \$95,000 per year for park construction. This revenue is generated from City-owned dock leases, City parking fees and profit from City-run Park Department Programs. For the purposes of this plan, it is assumed that a Parks Capital Improvement Fund Credit of \$1,900,000 exists. This credit is based on an average Parks Capital Improvement Fund collection of \$95,000 per year over a 20-year build out period.

The last step involves subtracting the Parks Capital Improvement Fund Credit from the total parks cost to identify future residential development's fee. This fee is simply calculated by dividing the estimated cost by the number of future dwelling units calculated in the Study Area. Again, the future dwelling units have been adjusted to account for units that have satisfied their impacts on park facilities, but have not yet been built. The result is a fee per dwelling unit as shown on the following table:

Table 2 – Park Facilities Fee Calculation

<b>Table 2 - Parks Improvement Fee Calculations - 4.0 Acres / 1,000 Population</b>			
Future Facility Cost (1)			\$12,201,637.45
Future Facility Cost			\$12,201,637.45
- Other City Funding Sources (2)			\$1,900,000.00
Future Development's Total Cost			\$10,301,637.45
Total Costs to be collected from Future Development	/	Projected Future Dwelling Units (3)	= Fee / DU
\$10,301,637.45	/	13,627	= \$755.97
<b>ASSUMPTIONS</b>			
(1) Future Facility Costs are the costs based on the need to provide 115.38 acres of parks to meet future residential demand. This cost assumes \$29,862 per acre for acquisition of 60.88 acres and \$90,000 per acre for the construction of 115.38 acres.			
(2) The "Other City Funding Sources" is the Parks Capital Improvements Fund. This fund is based on an average collection of \$95,000 per year over a 20 year build out period.			
(3) The Projected Future Dwelling Units are based on the adjusted future dwelling units to account for the dwelling units in the Coeur d'Alene Place project that have already either paid for or dedicated park land for impacts to park facilities.			

## POLICE FACILITIES

### I. INTRODUCTION

Police facilities are considered a citywide facility having equal benefit to both residential and non-residential land uses. The police impact fee, therefore, will be consistent for residential and non-residential uses throughout the city. The following section provides the methodology and assumptions used to calculate the impact fee for future police facilities.

### II. FACILITY ANALYSIS

The information needed to calculate the police impact fee was obtained primarily from the Chief of Police. This information included an inventory of existing facilities, the level of service to be used for the basis of the impact fee, and costs per square foot for future facilities.



#### A. Existing Facilities Analysis

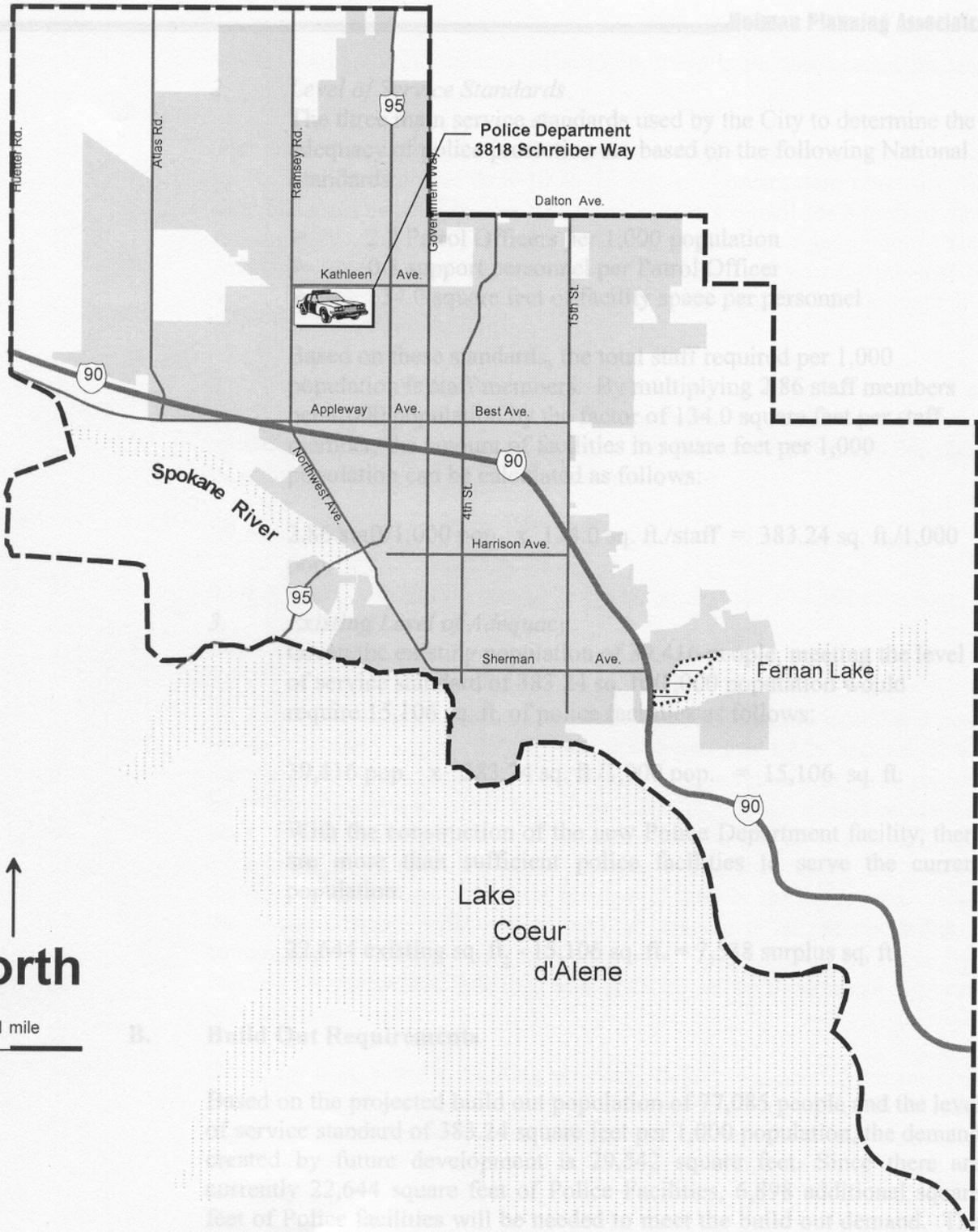
##### 1. Existing Inventory

The primary police facilities for the City are housed at the new Police Department building on Schreiber Way (see Exhibit 4 on page 25). Additional holding facilities are located within City Hall and Fire Station #3.

Provided below is an inventory of existing police facilities:

EXISTING POLICE FACILITY INVENTORY		
FACILITY	LOCATION	EXISTING SQUARE FOOTAGE
POLICE DEPARTMENT	3818 Schreiber Way	22,400
CITY HALL	710 Mullan Ave.	144
FIRE STATION #3	15 <sup>th</sup> & Hazel	100
<b>TOTAL</b>		<b>22,644 sq.ft.</b>

Police Department  
3818 Schreiber Way



↑  
**North**  
1 mile

**Legend**

-  Water Features
-  Coeur d'Alene City Limits
-  City of Fernan, Not a Part
-  Area of Impact Boundary
-  Roadways
-  Police Station Location

**Exhibit 4**

**Police Facilities**

2. *Level of Service Standards*

The three main service standards used by the City to determine the adequacy of police protection are based on the following National Standards:

- 2.2 Patrol Officers per 1,000 population
- 0.3 support personnel per Patrol Officer
- 134.0 square feet of facility space per personnel

Based on these standards, the total staff required per 1,000 population is staff members. By multiplying 2.86 staff members per 1,000 population by the factor of 134.0 square feet per staff member, the amount of facilities in square feet per 1,000 population can be calculated as follows:

$$2.86 \text{ staff/1,000 pop.} \times 134.0 \text{ sq. ft./staff} = 383.24 \text{ sq. ft./1,000 pop.}$$

3. *Existing Level of Adequacy*

Given the existing population of 39,416 people, meeting the level of service standard of 383.24 sq. ft./1,000 population would require 15,106 sq. ft. of police facilities as follows:

$$39,416 \text{ pop.} \times 383.24 \text{ sq. ft./1,000 pop.} = 15,106 \text{ sq. ft.}$$

With the construction of the new Police Department facility, there are more than sufficient police facilities to serve the current population.

$$22,644 \text{ existing sq. ft.} - 15,106 \text{ sq. ft.} = 7,538 \text{ surplus sq. ft.}$$

**B. Build Out Requirements**

Based on the projected build out population of 77,085 people and the level of service standard of 383.24 square feet per 1,000 population, the demand created by future development is 29,542 square feet. Since there are currently 22,644 square feet of Police Facilities, 6,898 additional square feet of Police facilities will be needed to meet the build out demand. The new Police Department facility was designed to allow for any needed expansion to meet the ultimate build out demand.

**C. Facility Costs**

The cost for police facilities is limited to actual construction costs for additional square footage since the City has indicated that the new Police Department site has sufficient availability to accommodate the future square footage requirements. Therefore, there is no cost needed for land acquisition.

The new Police Department has provided sufficient square footage for police facilities for the next 10 to 15 years. Construction costs for this facility were financed by the Pan Handle Area Council for a total of \$2.3 million including the financing costs, or \$102 per square foot. This financing is being paid back at a cost of \$225,000 per year for the next 10 years. Future development must reimburse the City for its fair share at a rate of \$102 per square foot.

The cost for police facilities for new development is based on a cost of \$102 per square foot. This cost is representative of the local building valuation for public buildings. The cost for future development's fair share of police facilities is \$1,472,491 as shown below:

29,542 build out sq. ft. - 15,106 existing sq. ft. = 14,436 sq. ft. needed

14,436 sq. ft. x \$102.00 construction cost/ sq. ft. = \$1,472,491 total cost

#### **D. Fee Calculation**

To determine an equitable police impact fee for both residential and non-residential uses, a methodology was developed that fairly apportions the fee for both land use types. To do this, an equivalency must be created between a residential dwelling unit and square footage of non-residential uses. Based on the build out projections discussed earlier in this report, an average of three dwelling units per acre is assumed to be the average density for the remaining vacant residential land in the study area. Also, the non-residential build-out projections assume a 20 percent building coverage factor over vacant non-residential land. Based on these two factors, an equivalent dwelling unit (EDU) can be determined for non-residential land uses.

Based on a 20 percent building coverage factor, one acre of vacant non-residential land can be expected to develop 8,712 sq. ft. of floor area. Equating the residential density average of three du/acre to non-residential square footage, a non-residential equivalent dwelling unit is 2,904 sq. ft. as follows:

**3 du/acre = 8,712 sq. ft./acre, therefore, 1 EDU = 2,904 sq. ft.**

A non-residential equivalent dwelling unit of 2,904 sq. ft. is used in the police fee calculation as shown on Table 3 on page 29.

To account for previously collected impact fees, the number of dwelling units and EDUs constructed prior to December 1, 2002 were subtracted from current totals. These numbers were then multiplied by the corresponding impact fee assessed, and the total amount was subtracted from facility cost for future development.

Table 3 – Police Facilities Fee Calculation

<b>Table 3 - Police Fee Calculations</b>											
Facility Cost for Future Development	(1)		\$1,472,491								
Future Development's Share of Facility Costs			\$1,472,491								
- Impact Fees Collected			\$169,654								
Future Development's Total Cost			\$1,302,837								
Future Residential Units	=	15,761 DUs	= 15,761 Future EDUs								
+ Future Nonresidential EDUs	=	8,037,575 Sq. Ft.	= 2,768 Future EDUs								
Total EDUs			18,529 Future EDUs								
<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Future Development's Total Cost /</td> <td>Total Future EDUs</td> <td>=</td> <td>Cost / EDU</td> </tr> <tr> <td>\$1,302,837 /</td> <td>18,529</td> <td>=</td> <td>\$70.31 / EDU</td> </tr> </table>				Future Development's Total Cost /	Total Future EDUs	=	Cost / EDU	\$1,302,837 /	18,529	=	\$70.31 / EDU
Future Development's Total Cost /	Total Future EDUs	=	Cost / EDU								
\$1,302,837 /	18,529	=	\$70.31 / EDU								
<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Cost / EDU /</td> <td>Non-Res. Equivalency Factor</td> <td>=</td> <td>Cost per Non-Res. Sq.Ft.</td> </tr> <tr> <td>\$70.31 /</td> <td>2,904</td> <td>=</td> <td>\$0.02421</td> </tr> </table>				Cost / EDU /	Non-Res. Equivalency Factor	=	Cost per Non-Res. Sq.Ft.	\$70.31 /	2,904	=	\$0.02421
Cost / EDU /	Non-Res. Equivalency Factor	=	Cost per Non-Res. Sq.Ft.								
\$70.31 /	2,904	=	\$0.02421								
<table border="1" style="width: 100%; text-align: center;"> <tr> <td>COST PER DWELLING UNIT</td> <td>=</td> <td>\$70.31</td> </tr> <tr> <td>COST PER 1,000 SQ. FT. NONRESIDENTIAL (2)</td> <td>=</td> <td>\$24.21</td> </tr> </table>				COST PER DWELLING UNIT	=	\$70.31	COST PER 1,000 SQ. FT. NONRESIDENTIAL (2)	=	\$24.21		
COST PER DWELLING UNIT	=	\$70.31									
COST PER 1,000 SQ. FT. NONRESIDENTIAL (2)	=	\$24.21									
NOTES:											
(1) Facility requirements are based on a Level of Service standard of 2.2 patrolmen / 1,000 population, 0.3 support											
(2) The nonresidential cost per square foot is calculated using the following assumptions. An equivalent dwelling unit (EDU) for nonresidential development is determined by using a 3 DU / acre citywide average for residential density and a 20% coverage factor. This results in 1 EDU = 2,904 nonresidential square feet. A full explanation of the assumptions and methodology for the equivalency factor is provided under the Fee Calculation section of the Police Facilities chapter.											

# FIRE FACILITIES

## I. INTRODUCTION

Fire facilities are considered a citywide facility having an equivalent benefit to both residential and non-residential development. The fire impact fee, therefore, will be consistent for residential and non-residential uses throughout the city. The following section provides the methodology and assumptions used to calculate the impact fee for future fire facilities.



## II. FACILITY ANALYSIS

The information needed to calculate the fire impact fee was acquired from the Fire Chief. This information included an inventory of existing facilities; exact future fire facility needs and costs for facilities and equipment.

### A. Existing Facilities Analysis

#### 1. Existing Inventory

The City currently has three fire stations to meet the needs of existing development in the City. The location of each station is shown on Exhibit 5 on page 32. The size and address of each site is listed as follows:

EXISTING FIRE FACILITY INVENTORY		
STATION	LOCATION	SIZE (sq. ft.)
Station No. 1	320 Foster Ave.	9,960 sq.ft.
Station No. 2	3850 Ramsey Rd.	3,000 sq.ft.
Station No. 3	15 <sup>th</sup> Street	7,909 sq. ft.

#### 2. Level of Service Standards

The Fire Department uses the Idaho Survey & Rating Bureau criteria of a 3 minute, 12 second response time for engines and a 4 minute, 54 second response time for aerials as a level of service standard.

#### 3. Existing Level of Adequacy

In 1996, the Fire Department provided a five-minute response map for the existing fire stations. These fire response times showed that the majority of the City is within the five-minute response of either

Fire Station No. 1 or 2. With the recent addition of Fire Station No. 3, the City is able to meet the identified fire response times.

Station #4  
Atlas and Wilber  
(Future)

95

90

Dalton Ave.

Kathleen Ave.

15th St.



Appleway Ave.

Best Ave.

90

Spokane River

Northwest Ave.

90

Station #3  
15th and Hazel  
(Future)

Harrison Ave.

Station #2  
3850 Ramsey Road

95



Station #1  
320 Foster Ave.

Sherman Ave.

Fernan Lake

Lake  
Coeur  
d'Alene

90



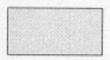
North

1 mile

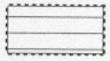
**Legend**



Water Features



Coeur d'Alene City Limits



City of Fernan, Not a Part



Area of Impact Boundary



Roadways



Fire Station Location

Exhibit 5

**B. Build Out Requirements**

A Fire Master Plan was prepared by the City of Coeur d'Alene Fire Department. The Master Plan identified the number and location of future fire stations, additional personnel requirements and future equipment needs. The Fire Department has determined that an additional fire station is needed within ten years. This study assumes that only 4 stations will be needed for purposes of the fee calculation.

**C. Facility Costs**

The most recently constructed station in the City is Fire Station No. 3 on 15th Street, just north of Hazel Avenue. Fire Station No. 4 is planned to be located at Wilbur and North Atlas. The size of this facility will be approximately 8,000 square feet and will cost \$1,260,000 for construction. This cost is based on the cost for Fire Station #3.

**D. Fee Calculation**

To equitably determine a fee for both residential and non-residential development, a methodology must be used to equate a residential dwelling unit to non-residential square footage. Such a methodology is described in the Police section under II. D: Fee Calculation. Please refer to that section for an explanation of the methodology and underlying assumptions used in this analysis.

To account for previously collected impact fees, the number of dwelling units and EDUs constructed prior to December 1, 2002 were subtracted from current totals. These numbers were then multiplied by the corresponding impact fee assessed, and the total amount was subtracted from facility cost for future development.

The fee calculation for fire facilities is shown in Table 4 on page 34.

Table 4 – Fire Facilities Fee Calculations

<b>Table 4 - Fire Station Fee Calculations</b>			
Future Facility Cost			\$2,590,000
Future Development's Share of Facility Costs			\$2,590,000
-	Impact Fees Collected		\$33,034
Future Development's Total Cost			\$2,556,966
Future Residential Units	=	15,761 DUs	= 15,761 Future EDUs
+ Future Non-Residential Development	=	8,037,575 Sq. Ft.	= 2,768 Future EDUs
Total Future EDUs			18,529 Future EDUs
Future Development's Total Cost /		Total Future EDUs	= Cost / EDU
\$2,556,966 /		18,529	= \$138.00 / EDU
Cost / EDU /		Non-Res. Equivalency Factor	= Cost per Non-Res. Sq.Ft.
\$138.00 /		2,904	= \$0.04752
COST PER DWELLING UNIT		=	\$138.00
COST PER 1,000 SQ. FT. NONRESIDENTIAL (2)		=	\$47.52
<b>NOTES:</b>			
(1) The Nonresidential Equivalency is calculated using the following assumptions: An equivalent dwelling unit (edu) for nonresidential development is determined by using a 3 DU/ acre citywide average for residential density and a 20% coverage factor. This results in 1 EDU = 2,904 nonresidential square feet. A full explanation of the assumptions and methodology for the equivalency factor is provided under the Fee Calculation section of the Police Facilities chapter.			

## **CIRCULATION FACILITIES**

### **I. INTRODUCTION**

The circulation fee identified in this section is based on the City of Coeur d'Alene Traffic Analysis prepared by Bouman and Associates, Inc. on October 21, 1993. The report analyzes the existing level of service in the City and identifies future circulation needs based on projections of future residential and non-residential development in the study area.

In addition, consideration has been given for development that has occurred since the traffic analysis was prepared. Development includes the construction of 4,084 dwelling units and 2,998,013 square feet of non-residential uses. The Coeur d'Alene City Engineer has considered this new development and the necessary changes to circulation improvements were included in this updated report.

Circulation facilities are considered somewhat differently than the other facilities in this study. Certain major circulation facilities are regional in function and have citywide benefit. Other circulation facilities will primarily benefit a smaller service area. For this reason, circulation facilities have been divided into citywide facilities and quadrant facilities. In terms of the impact fee, this means that the portion of the fee that would go towards paying for the citywide facilities would be spread equally over the entire study area. Fees needed for the quadrant facilities would only be paid by the development within the same quadrant as the facility.

For purposes of the circulation impact fee, improvements to citywide circulation facilities are: Government Way, Seltice Avenue, Ramsey Road, 15th Street and 4th Street. These streets carry a greater percentage of regional traffic and, as such, a rational nexus can be made for a citywide fee to pay for impacts created by new development. The remaining streets are defined by Quadrant 1, Quadrant 2 and the combination of Quadrants 3 and 4. These are logical service areas for the city's other circulation facilities. In any quadrant, the total fee is determined by adding the citywide fee to the quadrant fee.

### **II. FACILITY ANALYSIS**

This report has been revised to accommodate new assumptions as provided by the Coeur d'Alene City Engineer as well as development that has occurred since the approval of the original Development Impact Fee Program. One of the primary assumptions from the original report was revised for this update. The original report assumed that all roadways adjacent to vacant land would not be a part of the impact fee because the developer of property fronting the roadway would improve these roadways. The updated report assumes that the three inside lanes (36 feet) for arterial roadways not constructed and adjacent to vacant land would constitute a portion of the impact fee. In addition, the impact fee will fund the

removal and replacement of pavement between curbs for collectors and arterials as identified by the City Engineer.

As stated in the original report, the impact fee may not be used for the correction of existing deficiencies created by past development. In order to establish a rational nexus between a development project and the fee being imposed, fees can only be collected to pay for improvements necessitated by future development. To the extent that future traffic will create greater deficiencies than presently exist, the fee may fund the correction of such future impacts.

The following provides an analysis of the existing Level of Service (LOS) for all circulation element roadways in the study area. Table 5 on page 38 follows the LOS analysis, which identifies the improvements and costs needed to upgrade facilities in a manner consistent with the specified LOS.

#### **A. Methodology**

The evaluation of street segment operations includes a comparison of the daily traffic volumes with the adopted level of service standards<sup>12</sup>.

##### *1. Level of Service (LOS)*

Street improvements and intersections are rated in regards to the Level of Service (LOS) they provide to the motoring public. Such ratings are expressed as LOS A, representing the best performance, to LOS E representing a failing performance. Tables 5 through 7 on the following pages provide the specific definitions of LOS's for street segments and intersections.

##### *2. Existing Street Conditions*

In order to determine the LOS on Coeur d'Alene's street network, a review of all available traffic flow information was undertaken during the winter months of 1992-1993. Sources of information consisted of the City Engineering Department, District 1 of the Idaho Department of Transportation, Boise Headquarters of the Idaho Department of Transportation, and some local private and public agencies.

Traffic volume information on local state highways (US 95 and I-90) was adequate, but the City street system had major gaps in the traffic volume information base. The severity of the 1992-1993 winter made it impossible to conduct reliable traffic counts. Meanwhile, a review of state highway information revealed substantial seasonal fluctuation on US 95 and on I-90. "Average" traffic on I-90 west of the City, and on US 95 north of the City

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<sup>12</sup> The City Council adopted a Level of Service standard for streets of LOS C I non-peak hours and LOS D in peak periods of traffic volume.

occurs during the spring and fall months of May and October. However in January, traffic is only 70% of the average, while in August it increases to 140% of the average.

Recognizing that the heavy summer tourist-oriented traffic on the freeway and on US 95 may be reflective of certain City streets but certainly not all of them, the City staff and City Council were consulted and a decision was made to "standardize" Coeur d'Alene Street planning at the "average" daily trip (ADT) volume, which typically occurs in May and October.

It was further decided that for such "average" conditions, the City's goal is a Level of Service C for all streets and intersections during off-peak hours. In making such a decision, it was acknowledged that certain tourist-oriented City streets may drop to LOS D during the summer months, and that some other streets and intersections may operate at LOS D during the morning and afternoon peak traffic hours.

As indicated on Table 11, some of the ADT values were increased. These increases were based on the Coeur d'Alene City Engineer's knowledge and observations of traffic conditions within the study area.

3. *Traffic Census Program*

Since machine traffic counters could not be set during the severe winter, and because counts made then would not reflect average conditions anyway, the counting program, and in turn, the completion of the final impact fee study was necessarily delayed. However, by March 1993, the City Engineering Department had mobilized an intense machine counting program at 30 locations where traffic volume information was deemed necessary by the consultant.

Table 5 – Street Segment Levels of Service Definitions

<u>Level of Service</u>	<u>Operating Conditions</u>
A	Free flow; speed controlled by driver's desires, speed limits, or physical roadway conditions.
B	Stable flow; operating speeds beginning to be restricted; little or no restrictions on maneuverability from other vehicles.
C	Stable flow; speeds and maneuverability more closely restricted.
D	Approaches unstable flow; tolerable speeds can be maintained, but temporary restrictions to flow cause substantial drops in speed. Little freedom to maneuver, comfort and convenience low.
E	Volumes near capacity; flow unstable; stoppages of momentary duration. Ability to maneuver severely limited.
F	Forced flow; low operating speeds; volumes above capacity, queues form.

Table 6 – Intersection Levels of Service Definitions

<u>Level of Service</u>	<u>Operating Conditions</u>
A	Very low delay; most vehicles arrive during the green time; most vehicles do not stop at all.
B	Low delay; more vehicles stop than for LOS A causing higher delays; more vehicles stop but all vehicles clear the traffic signal.
C	Average delay; vehicles may wait longer due to longer cycle lengths; number of vehicles stopped is significant, although many pass through the intersection without stopping.
D	Significant delay; congestion becomes more noticeable; long cycle lengths; many vehicles stop and the portion of vehicles not stopping declines; some vehicles may not clear intersection.
E	Heavy delay; congestion is apparent; longer cycle lengths; almost all vehicles stop; may take waiting through at least one cycle to clear intersection.
F	Extreme delay; very long cycle lengths; all vehicles stop; takes at least two or more cycles to clear intersection.

Table 7 – Time Delays for Intersection Levels of Service

(As You Approach Traffic Signal on the Main Arterial)

<u>Level of Service</u>	<u>Operating Conditions</u>
A	Almost always green. If red, delay not likely to exceed 20 seconds.
B	Usually green. If red, delay likely to be 20 to 30 seconds, probably because of left turn phase.
C	Green about half the time. If red, always clear intersection on next green. Maximum delay 1 to 1½ minutes. Left turns will not always clear on first green.
D	Most likely red as you approach. Delays in range of 1½ to 2 minutes. Left turns will not always clear on first green.
E	Stop may be required, even if signal shows green. Usually will clear intersection on next green. Left turns frequently fail to clear on next green. Delays in range of 2 to 3 minutes.
F	Heavy congestion! Stop always required, sometimes 500 to 1,000 feet from intersection. Through and left turns rarely clear on first green. Delays in range of 3 to 5 minutes.

Table 8 – Levels of Service for Various Street Classifications and Traffic Volumes

<u>CLASS</u>	<u>LANE CONFIG.</u>	<u>ROAD X-SECTION</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
Average Daily Vehicle Trips							
Prime Arterial		104/124*	36,000	42,000	48,000	54,000	60,000
Principal (6 lanes + median) Arterial	(5 lanes + median)	104/124*	30,000	35,000	40,000	45,000	50,000
	(4 lanes + median)	92/112*	27,000	31,500	36,000	40,500	45,000
		80/100*	24,000	28,000	32,000	36,000	40,000
Minor Arterial	(4 lanes + median)	64/84*	18,000**	21,000**	24,000**	27,000**	30,000**
Collector	(2 lanes + parking)	40/60	5,250	6,125	7,000	7,875	8,750
Collector	(2 lanes + median)**	40/60	9,000	10,500	12,000	13,500	15,000
Industrial		50/72	6,000	7,000	8,000	9,000	10,000
Local (2lanes + parking) Street		40/60	***	***	2,500**	***	***
		36/56	***	***	1,200**	***	***

\*Additional right-of-way at intersection shall be required to accommodate dual left turn lanes as necessary.

\*\*These items were revised by the Coeur d'Alene City Engineer in 1996.

\*\*\*Levels of Service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of Service normally apply to roads carrying through traffic between major trip generators and attractors.

**B. Existing Facilities Analysis**

*1. Existing Level of Service*

From analyses of the traffic volume information assembled during the spring months and frequent observations of the traffic operation of the City's streets and intersections, a LOS was identified for circulation element roadways in the study area. Table 9 on page 43 summarizes existing street conditions by showing the present ADT, current number of lanes, and present LOS. This table has been revised by increasing the ADT for each street segment by 5%<sup>13</sup> to account for development that has occurred since the original report was prepared in 1993. Additionally, the table reflects the changes to Table 11 regarding the LOS trip values. As shown on Table 9, the road segments that are currently below the LOS adopted by the City are the following:

<u>Road Segment</u>	<u>LOS</u>
Appleway (Ramsey - 4th)	D/E
Government Way (Dalton - I-90)	E
15th Street (I-90 - Sherman)	D

*2. Improvements and Costs Needed to Correct Existing Deficiencies*

Table 10 on page 46 shows the roads that need to be improved and the costs needed to correct present deficiencies based on the level of service shown in Table 9. These road improvements and costs would bring all existing roadways to an acceptable Level of Service. The total, including contingencies for design, unanticipated general, and administration, comes to \$4,022,250. Because these are existing deficiencies, the impact fee cannot be used to pay for the improvements necessary to bring these streets into existing sufficiency. The City will have to consider other funding sources to pay for these improvements.

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<sup>13</sup> The 5% increase was provided by the Coeur d'Alene City Engineer.

Table 9 – Existing Roadway LOS

ROADWAY	EXISTING CONDITIONS	TOTAL EXISTING ADTS	EXISTING LOS
<b>CITYWIDE:</b>			
Appleway (Ramsey-US 95)	4 lane Minor Arterial	21,630	D/E*
Appleway (US 95 - 4th)	4 lane Minor Arterial	22,155	D/E*
Seltice (Huetter - Northwest)***	2 lane Minor Arterial	13,500**	C/D
Ramsey (Hanley - Prairie)***	2 lane Minor Arterial	6,500	A
Ramsey (Appleway - Hanley)***	4 lane Minor Arterial	14,000	A
Northwest (Appleway -Sherman)	4 lane Minor Arterial	20,000	C
Government Way (Prairie - Dalton Ave.)***	2 lane Minor Arterial	10,500	C
Government Way (Dalton - I-90)***	2 lane Minor Arterial	14,500+	E
Government Way (I-90 -Harrison)***	4 lane Minor Arterial	15,540+	A
Government Way (Harrison - Northwest)***	2 lane divided Minor Arterial	9,800	B
3rd (I-90 - Sherman)	2-3 lane Collector	8,400	C
4th (Dalton - I-90)	2 lane Collector***	9,400**	C
4th (I-90 - Sherman)	2-3 lane Collector	9,980	A
15th (Dalton - I-90)	2 lane Minor Arterial	7,560	C
15th (I-90 - Sherman)	2 lane Minor Arterial	12,500	D
<b>QUADRANT 1:</b>			
Prairie (Huetter - US 95)	2 lane Minor Arterial	4,520	A
Hanley (Ramsey - US 95)	2 lane Minor Arterial	3,600**	A
Dalton (Ramsey - US 95)	2 lane Collector	3,260	A
Kathleen (Ramsey - US 95)	4 lane Minor Arterial***	6,300	A
Lunceford (4th St. - 15th St.)***		3,680	A
Huetter (I 90 - Prairie)	2 lane Minor Arterial	Low	A
Atlas (I 90 - Prairie)	2 lane Minor Arterial	4,730	B

<b>QUADRANT 2:</b>			
Prairie (US 95-Gov't Way)	2 lane Minor Arterial	Low	A
Hanley (US 95-Gov't Way)	4 lane Minor Arterial	6,620	A
Dalton (US 95-Gov't Way)	2 lane Collector	5,150	B
Kathleen (US 95 - east boundary)	2-3 lane Collector	6,300	B
7th (I 90 - Best)	2 lane Collector	1,800	A
9th (I 90 - Best)	2 lane Collector	3,150	A
<b>QUADRANT 3:</b>			
Hazel	2 lane Collector	Low	A
Stanley Hill Road	2 lane Collector	Low	A
Harrison Ave	2 lane Collector	Low	A
French Gulch Road	2 lane Collector	Low	A
Fernan Hills	2 lane Collector	Low	A
Fernan Lake	2 lane Collector	Low	A
<b>QUADRANT 4:</b>			
Ironwood (NW - Government Way)***	4 lane Collector	11,400	A
Harrison (Northwest - 4th)***	2 lane Collector	5,000	A
Harrison (4th - I-90)***	2 lane Collector	4,400	A
Foster (NW - Government Way)	2 lane Collector	3,100	A
Huetter (Seltice - I-90)	2 lane Minor Arterial	Low	A
7th (Sherman - I-90)	2 lane Collector	1,700	A
9th (Harrison - I-90)	2 lane Minor Arterial	3,000	A
Atlas (Seltice - I-90)	2 lane Minor Arterial	5,100	B

\* LOS identified in original report is determined valid by Coeur d'Alene City Engineer.

\*\* Updated ADT as provided by the Coeur d'Alene City Engineer in 1996.

\*\*\* Revised or added roadway segment as provided by the Coeur d'Alene City Engineer in 1996.

### C. Build Out Requirements

The foundation for determining future traffic impacts on a street network lies in the determination of the amount of total traffic to be generated by future land development. Provided below are the assumptions used in calculating future traffic demand in the study area.

1. *The Circulation Element of the Comprehensive Plan*

While conducting this study, the consultant was advised to use the existing Circulation Element of the Coeur d'Alene Comprehensive Plan, shown on Exhibit 6, page 47, as the future street network. That Circulation Element shows an orderly north-south and east-west grid system of collector streets, minor arterials, one principal arterial and one freeway. However, in working with the Circulation Element, it became evident that future traffic generated in an approximate 20 square-mile area, much of which is presently vacant, cannot possibly be carried on a network in which the highest future category is a minor arterial.

It was also noted that several existing streets (Northwest Boulevard, Appleway Avenue) are shown as minor arterials when they are currently functioning as, and carrying traffic volumes of, at least a principal arterial.

Accordingly, the fee assumes these streets, and several others, as "probables" for upgrading to the next higher classification. The consultant realizes that such a recommendation may require an amendment to the Circulation Element of the Comprehensive Plan.

**Table 10 - Summary of Costs to Correct Existing Deficiencies (to Level of Service C non-peak and Level of Service D peak)**

Street	Limits	Quadrant	Existing Comprehensive Plan Designation	Length (Feet)	Cost of		15% Design Contingency	20% General Contingency	20% Administrative Contingency	ROW Acquisition Cost (1)	Total Cost of		Remarks
					Existing Upgrade	Existing Upgrade					Existing Upgrade	Existing Upgrade	
<b>Government Way</b>	90 - Dalton	2	Minor Arterial	8,500	\$2,100,000	\$315,000	\$420,000	\$420,000	not required		\$3,255,000		
<b>15th Street*</b>	Sherman - I-90	4	Minor Arterial	4,950	\$495,000	\$74,250	\$99,000	\$99,000	not required		\$767,250		(Seasonal - Not Recommended for Present Upgrade)
<b>Appleway Ave.*</b>	Ramsey - US-95	1	Minor Arterial	2,244	n/a	n/a	n/a	n/a	not required		n/a		(Seasonal - Not Recommended for Present Upgrade)
<b>Appleway Ave.*</b>	US-95 - 4th Street	2	Minor Arterial	2,640	n/a	n/a	n/a	n/a	not required		n/a		(Seasonal - Not Recommended for Present Upgrade)
<b>Total Cost</b>					\$2,595,000	\$389,250	\$519,000	\$519,000			\$4,022,250		

\* - Indicates Citywide Facility

1) ROW acquisition is required only when a street segment's Comprehensive Plan Designation is upgraded.

Exhibit 6 – Circulation

Please call Renata McLeod, Project Coordinator,  
at 666-5741 if you would like a copy of this exhibit.

## 2. Assumptions

In the calculations leading to the assignment of traffic volumes, the following assumptions were made:

- Every two trips, one an origin, one a destination, are represented by one vehicle.
- Short trips are balanced by long trips so that each vehicle movement is counted on the arterial/collector system only once.
- External trips are assumed to have an origin or destination within the study area, and are thus counted as part of new traffic generation.
- Intra-quadrant trips (those that remain within a quadrant) are not distinguished from other trips (Quadrant 1 is so big it cannot be done).
- Inter-quadrant trips are in balance; that is the same number of trips are made from any one quadrant to any other quadrant.
- Trips have been assigned to US 95 but not to I-90 freeway. (Short trips by freeway must utilize the City street system to access the freeway.)
- Northwest Boulevard is eligible for Idaho DOT funding and upgrading, but has been included in City street improvements.
- Five percent of all generated trips will remain on local streets and never impact the arterial/collector system.

## 3. Build Out Traffic Volumes

As previously described, the study area has been divided into four quadrants, with Quadrants 3 and 4 combined into one zone for circulation analysis. Future trip generation for each quadrant was reduced by 5% to reflect trips that remain on local streets and thus do not impact the arterial/collector system. The trips are then rounded to the nearest 10,000, and divided by two to reflect average daily traffic (ADT).

It is important to note that there will be just under one million new daily vehicle trips generated in the Coeur d'Alene area, and that even with

reductions for local trips and rounding of figures, there will be 460,000 additional vehicles moving about the area daily.

In order to determine the total traffic volumes to be expected on the future network, it is necessary to add trips resulting from new development to existing traffic on the existing street network. Additional trips were added to the previous counts at a rate of 5% per road segment as identified in Table 9 to account for development that has occurred since 1993. Also, the City Engineer provided updated ADT counts for other road segments as identified on Table 9.

#### 4. Build Out Requirements and Costs

Table 11 on page 51 compares the future build out traffic with the existing street network to show the LOS if no improvements were made other than improvements needed for existing conditions. Table 12 on page 53 shows the improvements needed to bring a LOS C to all road segments within the study area. The following streets are shown as candidates for probable reclassification in a future update of the Comprehensive Plan.

The streets recommended for reclassification are:

<u>Street</u>	<u>From</u>	<u>To</u>
Government Way	Minor Arterial	Principal Arterial
Ramsey Road	Minor Arterial	Principal Arterial
Northwest Boulevard	Minor Arterial	Principal Arterial
Appleway Avenue	Minor Arterial	Principal Arterial
Huetter Road	Minor Arterial	Principal Arterial
Atlas Road	Minor Arterial	Principal Arterial
Dalton Avenue	Collector	Minor Arterial

As previously mentioned, the fee calculation assumes the reclassification of streets as identified above.

The City Engineer has provided revised average unit cost estimates for principal and minor arterials and collector roadways. The revised unit costs assume that the impact fee will not fund the construction of new collector roadways. These roadways will be constructed by the development in need of and/or adjacent to the roadway. Existing collector roadways identified as needing improvement to accommodate future development will be partially funded by the impact fee. With regards to Prime and Minor Arterials, the impact fee will fund three lanes or 36 feet of identified arterials that have not been constructed at a unit cost of \$200 per linear foot. The impact fee will also fund the removal and replacement of pavement between the curbs of existing arterial roadway segments requiring improvements to meet future demand. The assumed cost is \$150

per linear foot. Also provided were the cost estimates for the needed right-of-way acquisition that will not be acquired through the subdivision process.

Table 11 – Future Build Out Traffic

<b>ROADWAY</b>	<b>EXISTING ROAD CONDITIONS*</b>	<b>TOTAL BUILD OUT TRIPS</b>	<b>BUILD OUT LOS</b>
<b>CITYWIDE:</b>			
Appleway (Ramsey-US-95)	4 lane Minor Arterial	36,000	E
Appleway (US 95-4th)	4 lane Minor Arterial	36,000	E
Seltice (Huetter - Ramsey)	4 lane Minor Arterial	28,000	E
Ramsey (Hanley - Prairie)	4 lane Minor Arterial	36,000	E
Northwest (Appleway -Sherman)	5 lane Minor Arterial	40,000	E
Government Way (Prairie I-90)	5 lane Minor Arterial	32,000	E
Government Way (I-90-Harrison)	5 lane Minor Arterial	32,000	E
3rd (I-90-Sherman)	2-3 lane Collector	16,000	E
4th (Dalton-I-90)	2-3 lane Collector	10,000	A
4th (I90-Sherman)	2-3 lane Collector	16,000	E
15th (Dalton-I90)	3 lane Minor Arterial	22,000	D
15th (I90-Sherman)	3 lane Minor Arterial	20,000	C
<b>QUADRANT 1:</b>			
Prairie (Huetter-US 95)	2 lane Minor Arterial	15,000	E
Hanley (Ramsey-US 95)	2 lane Minor Arterial	20,000	E
Dalton (Ramsey--US 95)	2 lane Collector	20,000	E
Kathleen (Ramsey-US 95)	2 lane Minor Arterial	20,000	E
Lunceford (4th St.-15th St.)	Collector (not constructed)	7,000	E
Huetter (I-90-Prairie)	2 lane Minor Arterial	8,000	E
Atlas (I-90-Prairie)	2 lane Minor Arterial	36,000	E

<b>QUADRANT 2:</b>			
Prairie (US 95-Gov't Way)	2 lane Minor Arterial	15,000	E
Hanley (US 95-Gov't Way)	4 lane Minor Arterial	20,000	C
Dalton (US95-Gov't Way)	2 lane Collector	14,000	E
Kathleen (US 95-east boundary)	2 - 3 lane Collector	20,000	E
7th (I-90-Best)	2 lane Collector	5,000	A
9th (I-90-Best)	2 lane Collector	7,000	C
<b>QUADRANT 3:</b>			
Hazel	2 lane Collector	6,000	B
Stanley Hill Road	2 lane Collector	6,000	B
Harrison Ave	2 lane Collector	6,000	B
French Gulch Road	2 lane Collector	6,000	B
Fernan Hills	2 lane Collector	6,000	B
Fernan Lake	2 lane Collector	6,000	B
<b>QUADRANT 4:</b>			
Ironwood (Northwest - Government Way)	4 lane Collector	16,000	B

\*Assumes that improvements needed under existing conditions are in place.

Table 12 – Future Street Improvement Costs

**Table 12 - Future Street Improvement Costs - Quadrant 1**

Street	Limits	Condition	Existing Comp. Plan Designation	Recommended Designation	Length (Ft)	Cost (1)	15% Design Contingency	20% General Contingency	20% Admin. Contingency	ROW Acquisition Cost (2)	Total	Remarks
<b>Hanley Ave.</b>	Ramsey Rd. - US 95	2 Lanes - no parking	Minor Arterial	Minor Arterial	5,280	\$1,056,000	\$158,400	\$211,200	\$211,200	not required	\$1,636,800	
<b>Dalton Ave.</b>	Isabella Ave. - US 95	2 Lanes - no parking	Collector	Collector	2,500	\$375,000	\$56,250	\$75,000	\$75,000	not required	\$581,250	
<b>Kathleen Ave.</b>	Atlas Rd. - Ramsey Rd.	Not Constructed	Minor Arterial	Collector	5,280	\$792,000	\$118,800	\$158,400	\$158,400	not required	\$1,227,600	
<b>Neider Ave.</b>	Julia Rd. - Fruitland Lane	Not Constructed	Collector	Collector	2,020	\$303,000	\$45,450	\$60,600	\$60,600	not required	\$469,650	
<b>Atlas Rd.</b>	190 - Prairie Ave.	2 Lanes - no parking	Minor Arterial	Minor Arterial	16,180	\$2,427,000	\$364,050	\$485,400	\$485,400	not required	\$3,761,850	Construct as Collector
<b>Atlas Rd.</b>	Hanley Ave. Intersection	Not Constructed	Signal	Signal	n/a	\$200,000	not required	not required	not required	not required	\$200,000	
<b>Atlas Rd.</b>	Kathleen Ave. Intersection	Not Constructed	Signal	Signal	n/a	\$200,000	not required	not required	not required	not required	\$200,000	
<b>Howard St.</b>	Kathleen Ave. - Intersection	Not Constructed	Signal	Signal	n/a	\$100,000	not required	not required	not required	not required	\$100,000	Partially constructed
<b>Howard St.</b>	Appleway Ave. - Kathleen Ave.	Not Constructed	Collector	Collector	5,280	\$792,000	\$118,800	\$158,400	\$158,400	not required	\$1,227,600	
<b>Quadrant Subtotal</b>					<b>36,540</b>	<b>\$6,245,000</b>	<b>\$861,750</b>	<b>\$1,149,000</b>	<b>\$1,149,000</b>		<b>\$9,404,750</b>	

(1) Cost is based on \$200/LF for new Principal and Minor Arterials, \$150/LF for new and existing undeveloped collectors. Signals are based on \$200,000 each. These estimates were provided by the City Engineer (February 2003).

(2) ROW acquisition may be required in some cases.

**Table 12 - Future Street Improvement Costs - Quadrant 2**

Street	Limits	Condition	Existing Comp. Plan Designation	Recommended Designation	Length (Ft)	Cost (1)	15% Design Contingency	20% General Contingency	20% Admin. Contingency	ROW Acquisition Cost (2)	Total	Remarks
<b>Kathleen Ave.</b>	4th Street - 15th Street	2 Lanes - no parking	Minor Arterial	Collector	2,600	\$195,000	\$29,250	\$39,000	\$39,000	\$249,600	\$551,850	50% of Cost to another jurisdiction
<b>Lunceford Ave.</b>	4th Street Intersection	Not Constructed	Signal	Signal	n/a	\$200,000	not required	not required	not required	not required	\$200,000	
<b>Wilbur Ave.</b>	US95 - Intersection	Not Constructed	Signal	Signal	n/a	\$200,000	not required	not required	not required	not required	\$200,000	
<b>Canfield Ave.</b>	US95 - Intersection	Existing	Signal	Signal	n/a	\$75,000	\$11,250	\$15,000	\$15,000	not required	\$116,250	intersection improvements
<b>Hanley Ave.</b>	US95 - Intersection	Existing	Signal	Signal	n/a	\$75,000	\$11,250	\$15,000	\$15,000	not required	\$116,250	intersection improvements
<b>Dalton Ave.</b>	US95 - Intersection	Existing	Signal	Signal	n/a	\$75,000	\$11,250	\$15,000	\$15,000	not required	\$116,250	intersection improvements
<b>Kathleen Ave.</b>	US95 - Intersection	Existing	Signal	Signal	n/a	\$75,000	\$11,250	\$15,000	\$15,000	not required	\$116,250	intersection improvements
<b>Neider Ave.</b>	US95 - Intersection	Existing	Signal	Signal	n/a	\$75,000	\$11,250	\$15,000	\$15,000	not required	\$116,250	intersection improvements
<b>Haycraft Ave.</b>	US95 - Intersection	Existing	Signal	Signal	n/a	\$75,000	\$11,250	\$15,000	\$15,000	not required	\$116,250	intersection improvements
<b>Appleway</b>	US95 - Intersection	Existing	Signal	Signal	n/a	\$75,000	\$11,250	\$15,000	\$15,000	not required	\$116,250	intersection improvements
<b>Quadrant Subtotal</b>					2,600	\$1,120,000	\$108,000	\$144,000	\$144,000	\$249,600	\$1,765,600	

(1) Cost is based on \$200/LF for new Principal and Minor Arterials, \$150/LF for new and existing undeveloped collectors

Signals are based on \$200,000 each. These estimates were provided by the City Engineer (February 2003)

(2) ROW acquisition may be required in some cases.

**Table 12 - Future Street Improvement Costs - Quadrant 3**

Street	Limits	Condition	Existing Comp. Plan Designation	Recommended Designation	Length (Ft)	Cost (1)	15% Design Contingency	20% General Contingency	20% Admin. Contingency	ROW Acquisition Cost (2)	Total	Remarks
Hazel	15th St. - Impact Area Boun	2 Lanes - no parking	Collector	Collector	1,320	\$198,000	\$29,700	\$39,600	\$39,600	not required	\$306,900	
Fernan Hill Rd.	French Gulch - City Limits	2 Lanes - no parking	Collector	Collector	5,200	\$780,000	\$117,000	\$156,000	\$156,000	not required	\$1,209,000	
<b>Quadrant Subtotal</b>					6,520	\$978,000	\$146,700	\$195,600	\$195,600	\$0	\$1,515,900	

(1) Cost is based on \$200/LF for new Principal and Minor Arterials, \$150/LF for new and existing undeveloped collectors. Signals are based on \$200,000 each. These estimates were provided by the City Engineer (February 2003).

(2) ' ROW acquisition may be required in some cases.

**Table 12 - Future Street Improvement Costs - Quadrant 4**

Street	Limits	Condition	Existing Comp. Plan Designation	Recommended Designation	Length (Feet)	Cost (1)	15% Design Contingency	20% General Contingency	20% Admin. Contingency	ROW Acquisition Cost (2)	Total	Remarks
Ironwood Dr.	Government Way - 3rd	Not constructed	Collector	Collector	250	\$37,500	\$5,625	\$7,500	\$7,500	\$80,000	\$138,125	
Ironwood Dr.	3rd St. Intersection	Not constructed	Signal	Signal	n/a	\$200,000	not required	not required	not required	not required	\$200,000	
15th St.	Harrison St. Intersection	Not constructed	Signal	Signal	n/a	\$200,000	not required	not required	not required	not required	\$200,000	
Hubbard	Northwest Intersection	Not constructed	Signal	Signal	n/a	\$200,000	not required	not required	not required	not required	\$200,000	
River Avenue	Northwest Intersection	Not constructed	Signal	Signal	n/a	\$200,000	not required	not required	not required	not required	\$200,000	
Ironwood Dr.	NW Blvd. - US 95	3 Lanes - no parking	Collector	Minor Arterial	4,000	\$400,000	\$60,000	\$80,000	\$80,000	\$80,000	\$700,000	(3)
Ironwood Dr.	Intersection - 4th St.	Not constructed	Signal	Signal	n/a	\$200,000	n/a	n/a	n/a	n/a	\$200,000	
Ironwood Dr.	Intersection - US 95	Signal	Signal	Signal	n/a	\$100,000	n/a	n/a	n/a	n/a	\$100,000	Intersection Improvement
3rd St.	Intersection - Harrison	Not constructed	Signal	Signal	n/a	\$200,000	n/a	n/a	n/a	n/a	\$200,000	
<b>Quadrant Subtotal</b>					4,250	\$1,737,500	\$65,625	\$87,500	\$87,500	\$160,000	\$2,138,125	

(1) Cost is based on \$200/LF for new Principal and Minor Arterials, \$150/LF for new and existing undeveloped collectors.

Signals are based on \$200,000 each. These estimates were provided by the City Engineer (February 2003).

(2) ROW acquisition may be required in some cases.

(3) Cost is based on \$100 per linear foot to widen existing collector.

**Table 12 - Future Street Improvement Costs - Citywide**

Street	Limits	Condition	Existing Comp. Plan Designation	Recommended Designation	Length (Ft)	Cost (1)	15% Design Contingency	20% General Contingency	20% Admin. Contingency	ROW Acquisition Cost (2)	Total	Remarks
<b>Government Way</b>	Dalton Ave. - Prairie Ave.	2 Lanes - no parking	Minor Arterial	Principal Arterial	7,920	\$1,584,000	\$237,600	\$316,800	\$316,800		\$2,455,200	
<b>Government Way</b>	Dalton Ave. Intersection	Not Constructed	Signal	Signal	n/a	\$100,000	not required	not required	not required	not required	\$100,000	Federally Funded
<b>Government Way</b>	Nieder Intersection	Not Constructed	Signal	Signal	n/a	\$100,000	not required	not required	not required	not required	\$100,000	Federally Funded
<b>Seltice Ave.</b>	Northwest - City Limit	2 Lanes - no parking	Minor Arterial	Minor Arterial	2,000	\$150,000	\$22,500	\$30,000	\$30,000	not required	\$232,500	Federally Funded
<b>Ramsey Rd.</b>	Hanley - Prairie Ave.	2 Lanes - no parking	Minor Arterial	Minor Arterial	5,280	\$1,056,000	\$158,400	\$211,200	\$211,200	not required	\$1,636,800	
<b>15th Street</b>	I-90 - Best Ave.	2 Lanes - no parking	Minor Arterial	Minor Arterial	4,200	\$840,000	\$126,000	\$168,000	\$168,000	not required	\$1,302,000	
<b>15th Street</b>	Luncefors Ln. - Dalton Ave	2 Lanes - no parking	Minor Arterial	Minor Arterial	5,280	\$1,056,000	\$158,400	\$211,200	\$211,200	not required	\$1,636,800	
<b>4th Street</b>	Best Ave. - Kathleen Ave	2 Lanes - no parking	Collector	Collector	5,280	\$792,000	\$118,800	\$158,400	\$158,400	not required	\$1,227,600	
<b>Citywide Subtotal</b>					29,960	\$5,678,000	\$821,700	\$1,095,600	\$1,095,600		\$8,690,900	

(1) Cost is based on \$200/LF for new Principal and Minor Arterials, \$150/LF for new and existing undeveloped collectors.

Signals are based on \$200,000 each. These estimates were provided by the City Engineer (February 2003).

(2) ROW acquisition may be required in some cases.

**D. Fee Calculation**

*1. Impact of Development:*

Since the costs for circulation facilities are known, the first step in calculating the fee is to identify the impacts of future development. These impacts are calculated for citywide facilities and each of the four quadrants.

The fee calculation applies to both residential and non-residential development. Trips are used to identify the impacts of development on roadways. Provided below are the trips for non-residential and residential development used in this circulation analysis:

TRAFFIC GENERATION RATES	
LAND USE	TRIP GENERATION RATES
Single Family (SFD)	10 trips/du
Multi- Family (MFD)	8 trips/du
Commercial	120 trips/1,000 Sq. Ft.
Industrial	12 trips/1,000 Sq. Ft.

These trips are representative averages used nationally to estimate the impact of development on roadways. Specifically, the commercial standard is based on the trips for a Neighborhood Shopping Center. The trips for industrial land uses used an average of Industrial/Commercial mix and Industrial only.

To calculate the total trips for future development, future residential dwelling units were separated into a total of single-family units and multi-family units for each quadrant.

Non-residential development was separated into two general categories: Commercial and Industrial acreage. These acreages were converted to square footage by assuming a coverage factor of 20% per acre as previously defined in the Build Out Projections section.

The total impact of future development on roadways is calculated by multiplying the trips for each land use category by residential

dwelling units and non-residential square footage in each quadrant. The result is the total trips for future development in each quadrant.

2. *Adjustments For Development That Has Occurred Since The Original Report*

Future development potential identified in the original fee analysis was adjusted for the updated circulation fee to account for development that has occurred since adoption of the original fee. Substantial development has occurred during the period that the interim development impact fee was adopted in 1993.

As of May 1, 1996, the following development had occurred by quadrant:

<b>Development</b>	<b>Quadrant 1</b>	<b>Quadrant 2</b>	<b>Quadrant 3</b>	<b>Quadrant 4</b>	<b>Total</b>
Single Family Residential (units)	525	367	97	54	1,043
Multi-family Residential (units)	174	279	14	287	754
Non-Residential (Sq. feet)	394,903	246,287	0	296,187	937,377

Between May 1, 1996 and December 1, 2002, the following development occurred by quadrant:

<b>Development</b>	<b>Quadrant 1</b>	<b>Quadrant 2</b>	<b>Quadrant 3</b>	<b>Quadrant 4</b>	<b>Total</b>
Single Family Residential (units)	832	867	52	49	1,800
Multi-family Residential (units)	360	84	3	40	487
Non-Residential (Sq. feet)	343,782	331,128	8,497	268,351	1,551,758

This amount of development was subtracted from the future build out numbers contained in the original Development Impact Fee Study.

3. *Credit for Non-Residential Development*

An adjustment in the impact fee must be made to account for the double counting of commercial and residential trips. For example, round trips from a dwelling unit may include a trip to a commercial destination within the City. This same trip, however, is included in the trips for the commercial land use. To adjust for double counting of trips, this analysis assigns a 40% discount to non-residential development. This is a discount factor recommended by the traffic consultant, which provides a more accurate trip generation measurement.

The adjustment requires calculation of the percent of traffic impact for single family, multi-family, commercial and industrial land uses. This percentage is multiplied by the total cost for facilities in the quadrant to identify the proportional cost for impact of development. The fee credit, however, reduces this cost to non-residential development by 40% and transfers the cost proportionally to residential development. If the cost was reduced by 40% and not transferred to residential development, the fee would be insufficient and there would be a shortage of funds collected by the City for future improvements.

The transfer of the 40% credit is reapportioned to residential development based on the percentage of single family and multi-family units of residential development within the quadrant. The percentage of single family to multi-family development will be different for each quadrant of the City as well as for the citywide analysis.

The result of the transfer of credit for non-residential development to residential development is a cost assigned to the four land use categories: SFD, MFD, commercial and industrial land use in each quadrant. The last step in the fee calculation is to divide the cost per land use by the future trips projected for the four land uses. Due to the credit transfer, the result is a difference in cost per trip between residential and non-residential land uses.

The number of trips assumed for each land use to determine the fee multiplies these costs per trip. There will be a different fee for MFD, SFD, commercial and industrial land uses for each quadrant based on the improvements required for each quadrant.

A summary of the fee calculations is contained in Table 13 on page 62. A detailed breakdown of circulation impact fee calculations is shown on Table 14 on page 63.

Table 13 – Fee Calculation Summary

<b>Table 13 - Circulation Fee Calculation Summary</b>				
<b>CITYWIDE/QUADRANT CIRCULATION COSTS</b>				
	Cost / SFD DU	Cost / MF DU	Cost / Commercial Trip	Cost / Industrial Trip
CITYWIDE	\$294.43	\$235.54	\$7.24	\$7.24
QUADRANT #1	\$581.11	\$464.88	\$19.75	\$19.75
QUADRANT #2	\$345.21	\$276.17	\$6.77	\$6.77
QUADRANT #3	\$521.20	\$416.96	\$7.88	\$7.88
QUADRANT #4	\$521.20	\$416.96	\$7.88	\$7.88
<b>TOTAL CIRCULATION COSTS</b>				
	Cost / SFD DU	Cost / MF DU	Cost / Commercial Trip	Cost / Industrial Trip
QUADRANT #1	\$875.54	\$700.43	\$26.99	\$26.99
QUADRANT #2	\$639.64	\$511.71	\$14.01	\$14.01
QUADRANT #3	\$815.63	\$652.50	\$15.12	\$15.12
QUADRANT #4	\$815.63	\$652.50	\$15.12	\$15.12

Table 14 - Circulation Fee Calculation

<b>Table 14 - Circulation Fee Calculation</b>									
<b>QUADRANT #1</b>									
Total Cost				\$9,404,750					
Funds from other sources		-		\$0					
				<u>\$9,404,750</u>					
<b>Proportional Share of Future Traffic Generation</b>									
Single Family Detached (SFD)	6,799	DUs	X	10	Trips	67,990	Trips		
Multifamily (MF)	3,761	DUs	X	8	Trips	30,088	Trips		
COMMERCIAL	1,239,438	Sq. Ft.	X	120	Trips/1000 sf	148,733	Trips		
INDUSTRIAL	3,236,699	Sq. Ft.	X	12	Trips/1000 sf	<u>38,840</u>	Trips		
<b>TOTAL</b>						<b>285,651</b>	<b>Trips</b>		
<b>Percent of Total Trips</b>									
				<b>Proportional Cost</b>		<b>Comm. / Ind. Credit</b>		<b>Proportional Cost Minus Credit</b>	
SFD	67,990	Trips	23.80%	\$2,238,498				\$2,238,498	
MF	30,088	Trips	10.53%	\$990,615				\$990,615	
COMMERCIAL	148,733	Trips	52.07%	\$4,896,859	x 40.00%	=	\$1,958,744	\$2,938,116	
INDUSTRIAL	38,840	Trips	<u>13.60%</u>	<u>\$1,278,778</u>	x 40.00%	=	<u>\$511,511</u>	<u>\$767,267</u>	
			100.00%	<b>\$9,404,750</b>			<b>\$2,470,255</b>	<b>\$6,934,495</b>	
<b>Commercial / Industrial Credit Reapportionment</b>									
SFD Trips	67,990	Trips	=	69.32%	=		\$1,712,439		
MF Trips	<u>30,088</u>	Trips	=	<u>30.68%</u>	=		<u>\$757,816</u>		
		<b>98,078</b>	<b>Trips</b>	<b>100.00%</b>			<b>\$2,470,255</b>		
<b>Revised Costs including Commercial / Industrial Discount Reapportionment</b>									
SFD	\$2,238,498		+	\$1,712,439	=		\$3,950,937		
MF	\$990,615		+	\$757,816	=		\$1,748,431		
COMMERCIAL	\$4,896,859		-	\$1,958,744	=		\$2,938,116		
INDUSTRIAL	\$1,278,778		-	\$511,511	=		<u>\$767,267</u>		
							<b>\$9,404,750</b>		
<b>Cost per Trip</b>									
SFD	\$3,950,937.01		/	67,990	=		<b>\$58.11</b>	<b>/ Trip</b>	
MF	\$1,748,430.54		/	30,088	=		<b>\$58.11</b>	<b>/ Trip</b>	
COMMERCIAL	\$2,938,115.67		/	148,733	=		<b>\$19.75</b>	<b>/ Trip</b>	
INDUSTRIAL	\$767,266.78		/	38,840	=		<b>\$19.75</b>	<b>/ Trip</b>	
<b>Cost per Residential Dwelling Unit &amp; Commercial / Industrial Trips</b>									
SFD	\$58.11	X	10	Trips / DU	=		<b>\$581.11</b>	<b>/ DU</b>	
MF	\$58.11	X	8	Trips / DU	=		<b>\$464.88</b>	<b>/ DU</b>	
COMMERCIAL					=		<b>\$19.75</b>	<b>/ Trip</b>	
INDUSTRIAL					=		<b>\$19.75</b>	<b>/ Trip</b>	

Table 14 – p.2

**Table 14 - Circulation Fee Calculation**

**QUADRANT #2**

Total Cost		\$1,765,600
Funds from other sources	-	\$0
		<u>\$1,765,600</u>

**Proportional Share of Future Traffic Generation**

Single Family Detached (SFD)	1,346	DUs	X	10 Trips	13,460	Trips
Multifamily (MF)	1,499	DUs	X	8 Trips	11,992	Trips
COMMERCIAL	1,060,742	Sq. Ft..	X	120 Trips/1000 sf	127,289	Trips
INDUSTRIAL	306,038	Sq. Ft..	X	12 Trips/1000 sf	<u>3,672</u>	Trips
				<b>TOTAL</b>	<b>156,413</b>	<b>Trips</b>

Percent of Total Trips				Proportional Cost		Comm./Ind.	Proportional Cost
				Cost		Credit	Minus Credit
SFD	13,460	Trips	8.61%	\$151,937			\$151,937
MF	11,992	Trips	7.67%	\$135,366			\$135,366
COMMERCIAL	127,289	Trips	81.38%	\$1,436,842	x 40.00% =	\$574,737	\$862,105
INDUSTRIAL	3,672	Trips	<u>2.35%</u>	<u>\$41,455</u>	x 40.00% =	<u>\$16,582</u>	<u>\$24,873</u>
			100.00%	<b>\$1,765,600</b>		<b>\$591,319</b>	<b>\$1,174,281</b>

**Commercial / Industrial Credit Reapportionment**

SFD Trips	13,460	Trips	=	52.88%	=	\$312,712
MF Trips	<u>11,992</u>	Trips	=	47.12%	=	<u>\$278,607</u>
	<b>25,452</b>	<b>Trips</b>				<b>\$591,319</b>

**Revised Costs including Commercial / Industrial Discount Reapportionment**

SFD	\$151,937	+	\$312,712	=	\$464,649
MF	\$135,366	+	\$278,607	=	\$413,973
COMMERCIAL	\$1,436,842	-	\$574,737	=	\$862,105
INDUSTRIAL	\$41,455	-	\$16,582	=	<u>\$24,873</u>
					<b>\$1,765,600</b>

**Cost per Trip**

SFD	\$464,649.09	/	13,460	=	<b>\$34.52</b>	/ Trip
MF	\$413,972.65	/	11,992	=	<b>\$34.52</b>	/ Trip
COMMERCIAL	\$862,105.39	/	127,289	=	<b>\$6.77</b>	/ Trip
INDUSTRIAL	\$24,872.87	/	3,672	=	<b>\$6.77</b>	/ Trip

**Cost per Residential Dwelling Unit & Commercial / Industrial Trips**

SFD	34.5207347465	X	10 Trips / DU	=	<b>\$345.21</b>	/ DU
MF	34.5207347465	X	8 Trips / DU	=	<b>\$276.17</b>	/ DU
COMMERCIAL				=	<b>\$6.77</b>	/ Trip
INDUSTRIAL				=	<b>\$6.77</b>	/ Trip

Table 14 – p.3

<b>Table 14 - Circulation Fee Calculation</b>									
<b>QUADRANT #3 &amp; #4</b>									
Total Cost								\$3,654,025	
Funds from other sources								\$0	
								<u>\$3,654,025</u>	
<b>Proportional Share of Future Traffic Generation</b>									
Single Family Detached (SFD)		3,327	DUs	X	10	Trips		33,270	Trips
Multifamily (MF)		-29	DUs	X	8	Trips		(232)	Trips
COMMERCIAL		1,969,919	Sq. Ft.	X	120	Trips/1000 sf		236,390	Trips
INDUSTRIAL		733,616	Sq. Ft.	X	12	Trips/1000 sf		<u>8,803</u>	Trips
						<b>TOTAL</b>		<b>278,232</b>	<b>Trips</b>
<b>Percent of Total Trips</b>									
								<b>Proportional Cost</b>	<b>Comm./Ind. Credit</b>
								<b>Cost</b>	<b>Minus Credit</b>
SFD	33,270.00	Trips	11.96%					\$436,936	\$436,936
MF	(232.00)	Trips	-0.08%					(\$3,047)	(\$3,047)
COMMERCIAL	236,390.28	Trips	84.96%					\$3,104,521	\$1,862,712
INDUSTRIAL	8,803.39	Trips	3.16%					<u>\$115,615</u>	<u>\$69,369</u>
			100.00%					\$3,654,025	\$1,288,054
									\$2,365,971
<b>Commercial / Industrial Credit Reapportionment</b>									
SFD Trips		33,270	Trips	=	100.70%	=		\$1,297,099	
MF Trips		(232)	Trips	=	-0.70%	=		(\$9,045)	
		<b>33,038</b>	<b>Trips</b>					<b>\$1,288,054</b>	
<b>Revised Costs including Commercial / Industrial Discount Reapportionment</b>									
SFD		\$436,936		+	\$1,297,099	=		\$1,734,035	
MF		(\$3,047)		+	(\$9,045)	=		(\$12,092)	
COMMERCIAL		\$3,104,521		-	\$1,241,808	=		\$1,862,712	
INDUSTRIAL		\$115,615		-	\$46,246	=		<u>\$69,369</u>	
								<b>\$3,654,025</b>	
<b>Cost per Trip</b>									
SFD		\$1,734,035.29		/	33,270	=		<b>\$52.12</b>	<b>/ Trip</b>
MF		(\$12,091.86)		/	(232)	=		<b>\$52.12</b>	<b>/ Trip</b>
COMMERCIAL		\$1,862,712.44		/	236,390	=		<b>\$7.88</b>	<b>/ Trip</b>
INDUSTRIAL		\$69,369.13		/	8,803	=		<b>\$7.88</b>	<b>/ Trip</b>
<b>Cost per Residential Dwelling Unit &amp; Commercial / Industrial Trips</b>									
SFD		52.12008700713	X	10	Trips / DU	=		<b>\$521.20</b>	<b>/ DU</b>
MF		52.12008700713	X	8	Trips / DU	=		<b>\$416.96</b>	<b>/ DU</b>
COMMERCIAL						=		<b>\$7.88</b>	<b>/ Trip</b>
INDUSTRIAL						=		<b>\$7.88</b>	<b>/ Trip</b>

Table 14 - p.4

**Table 14 - Circulation Fee Calculation**

**CITYWIDE**

Total Cost	\$8,690,900
Funds from other sources	- \$0
	<b>\$8,690,900</b>

**Proportional Share of Future Traffic Generation**

Single Family Detached (SFD)	11,472	DUs	X	10	Trips	114,720	Trips
Multifamily (MF)	5,231	DUs	X	8	Trips	41,848	Trips
COMMERCIAL	4,270,099	Sq. Ft..	X	120	Trips/1000 sf	512,412	Trips
INDUSTRIAL	4,276,353	Sq. Ft..	X	12	Trips/1000 sf	51,316	Trips
					<b>TOTAL</b>	<b>720,296</b>	<b>Trips</b>

<b>Percent of Total Trips</b>				<b>Proportional Cost</b>			<b>Comm. / Ind.</b>	<b>Proportional Cost</b>
				<b>Cost</b>			<b>Credit</b>	<b>Minus Credit</b>
SFD	114,720	Trips	15.93%	\$1,384,181				\$1,384,181
MF	41,848	Trips	5.81%	\$504,927				\$504,927
COMMERCIAL	512,412	Trips	71.14%	\$6,182,624	x	40.00% =	\$2,473,050	\$3,709,575
INDUSTRIAL	51,316	Trips	7.12%	<u>\$619,168</u>	x	40.00% =	<u>\$247,667</u>	<u>\$371,501</u>
			100.00%	<b>\$8,690,900</b>			<b>\$2,720,717</b>	<b>\$5,970,183</b>

**Commercial / Industrial Credit Reapportionment**

SFD Trips	114,720	Trips	=	73.27%	=	\$1,993,515
MF Trips	<u>41,848</u>	Trips	=	26.73%	=	<u>\$727,202</u>
	<b>156,568</b>	<b>Trips</b>				<b>\$2,720,717</b>

**Revised Costs including Commercial / Industrial Discount Reapportionment**

SFD	\$1,384,181	+	\$1,993,515	=	\$3,377,696
MF	\$504,927	+	\$727,202	=	\$1,232,129
COMMERCIAL	\$6,182,624	-	\$2,473,050	=	\$3,709,575
INDUSTRIAL	\$619,168	-	\$247,667	=	<u>\$371,501</u>
					<b>\$8,690,900</b>

**Cost per Trip**

SFD	\$3,377,695.76	/	114,720	=	<b>\$29.44</b>	/ Trip
MF	\$1,232,128.77	/	41,848	=	<b>\$29.44</b>	/ Trip
COMMERCIAL	\$3,709,574.69	/	512,412	=	<b>\$7.24</b>	/ Trip
INDUSTRIAL	\$371,500.77	/	51,316	=	<b>\$7.24</b>	/ Trip

**Cost per Residential Dwelling Unit & Commercial / Industrial Trips**

SFD	29.4429546918	X	10	Trips / DU	=	<b>\$294.43</b>	/ DU
MF	29.4429546918	X	8	Trips / DU	=	<b>\$235.54</b>	/ DU
COMMERCIAL					=	<b>\$7.24</b>	/ Trip
INDUSTRIAL					=	<b>\$7.24</b>	/ Trip

## **IMPLEMENTATION**

### **I. INTRODUCTION**

This section deals with the actual mechanics of collecting the impact fee. The implementation measures to be discussed include timing of collection, fee collection method, applying the circulation fee to differing types of land uses and application to annexation area parcels.

### **II. TIMING OF FEE COLLECTION**

For collection of the impact fee, it is proposed that all fees be collected at the time of building permit issuance. Reasons for this time of collection rather than at an earlier development approval stage or at a later occupancy stage are many. First, the collection of the fee at building permit issuance is timed more closely to when the actual impacts of the development to public facilities will occur. In most instances, when a building permit is acquired, construction usually occurs within a relatively short period of time. Collecting a fee earlier in the process (e.g. at the development approval stage) assumes the greater risk that the development will not actually be constructed. In that event, the City is obligated to refund monies collected after a certain period of time. This can create both financial and administrative problems for the city, especially if the money has already been spent on a new facility.



Second, collection of the fee at building permit issuance will be administratively easier since most other fees are collected at this time. The developer can pay and the city can collect the fees all at the same time. The necessary accounting of fees to ensure that the monies are spent on facilities actually being impacted by the particular development will be much easier if the money is collected at this stage.

Third, collecting the fee at a later stage of development (i.e. at time of occupancy) creates another burden on the city to collect the fee after construction is complete. Many people may not be willing to pay the fee at that point making it necessary for the City to institute enforcement procedures. This typically adds another strain on city resources and does not lend itself to good public relations.

### **III. FEE COLLECTION METHOD**

The method used by the City to collect fees is critical to ensure that fees are collected in a proper manner and accounted for to withstand any legal challenges. It is recommended that the fees for each facility be charged separately. Although this may sound cumbersome, it is the best way to guarantee an honest accounting of all fees collected. The basic premise of collecting impact fees is that the fees will be used for specific facilities that are being impacted by the new development. The City is required to account for every penny collected and to set

up separate accounts for holding and subsequently spending these fees. Money collected for parks cannot be spent on circulation. Monies collected to pay for a quadrant circulation facility cannot be spent somewhere else in the city.

Another reason to collect fees separately is that if one fee is successfully challenged in the courts, the remaining fees will remain intact. In other words, successful challenge of one fee will not invalidate the entire fee program.

From the developer's point of view, it makes no difference if the fees are accounted separately. The developer would receive a cost accounting of individual fees, but only one check for the total fee would be required.

#### **IV. CALCULATION OF CIRCULATION IMPACT FEE**

The circulation fee is based on a fee per trip generation. Different land uses have different trip generation rates and, therefore, will not have the same fee. Unfortunately, this tends to complicate the collection of circulation impact fees because it is difficult to assign a trip generation rate for all the various land uses. Collection of Residential impact fees is easier because a universally recognized trip generation rate can be used for single-family detached units as well as multi-family units. These generation rates were the basis of the per unit fee given for the circulation fee presented earlier.

Non-residential rates are a different matter. Trip generation rates for commercial uses can vary anywhere from 40 trips per day for a low generating commercial use up to 500 trips for convenience stores. If the fee is based on only an average fee for either commercial, industrial or other non-residential uses, the fee becomes unfair for the low traffic generating uses. However, if a fee is based on a different generation rate for every kind of use, application of the fee becomes an administrative headache. There are just too many uses that are not listed in the trip generation manuals in publication today.

Since there is not an easy solution, it is recommended that a reasonable compromise be used. It is proposed that the non-residential land uses be grouped into specific categories of uses. For example, fast-food drive through restaurants would be a logical grouping of uses. Hotels and motels would become one group along with shopping centers, convenience stores, etc. Most importantly, a general commercial grouping would be created to place any miscellaneous uses that cannot be found easily in a trip generation table.

It is further proposed that the groupings be closely related to the City's Parking Ordinance. Parking requirements are based on trip generation rates and having groupings the city staff is already familiar with will ensure easier implementation of the fee. The actual generation rates would be based on either the ITE standards used nationally or on another set of generation rate tables, which more closely resemble conditions in Coeur d'Alene. A trip generation rate table has been completed and will be available at the time of implementation of the fee.

**CITY OF COEUR D'ALENE**

Please contact Renata McLeod, Project Coordinator, if you would like copies of the Appendixes (208) 666-5741.

**Impact Fee Appendices**

## ASSUMPTIONS FOR BUILD OUT PROJECTIONS

Please contact Renata McLeod, Project Coordinator, at (208) 666-5741, if you would like a copy of this Appendix.

### Appendix A

## **ASSUMPTIONS FOR BUILD OUT PROJECTIONS**

The Build Out Projections portion of this report identifies the existing and projected residential and non-residential development for the Study Area. Within this portion of the report, many assumptions are used with regards to the existing and future land uses. The assumptions used are as follows:

### **I. BOUNDARIES**

#### **A. Study Area Boundaries**

The Study Area boundary is defined as the "Area of Impact" as identified on the proposed Coeur d'Alene Comprehensive Plan. The boundary generally follows the township/range grid system. Property ownership as shown on the assessor maps is used to provide the exact boundaries of the Study Area.

#### **B. Land Use Boundaries: Within the City Limits**

The land use boundaries within the City are based on 2000 Census data. An index map divided into 77 Blocks was provided by the Planning Department. A table corresponding to the census block map provided the Comprehensive Plan land use designation, existing dwelling units, existing non-residential gross acreage, vacant residential gross acreage and vacant non-residential gross acreage.

#### **C. Land Use Boundaries: Outside City Limits**

The proposed Comprehensive Plan as of January 1992 is used to define land use areas outside the city limits, but within the area of impact. The City provided a small-scale map of the proposed Comprehensive Plan '92. The assessor parcel maps are used to define the actual land use boundaries. The land use boundaries identified in this analysis follow the property lines as shown on the assessor's maps in close proximity to the land use boundaries shown on the proposed Comprehensive Plan. The exact boundaries are recorded on the assessor's maps used during the consultant's analysis.

### **II. LAND USE**

#### **A. Vacant Land**

##### *1. Residential*

Vacant land is defined as land, which is not developed or is under utilized. If an area is under utilized, it is given a vacant designation. An area is assumed to be under utilized if additional dwelling units could be constructed on the site. The determination for under utilization is based on access to the area, comparison of the lot size with other lots in the area, topography and the density factor given to that particular area.

Any existing dwelling units located within the under utilized areas are identified as Temporary Existing Dwelling Units on the spread sheets in Appendix B. Temporary existing dwelling units are existing units which are anticipated to be removed upon development of an under utilized property. These units are subtracted from the future projected dwelling unit counts to avoid double counting of dwelling units.

The land uses identified for each sub-area can be found on the assessor map used in the consultants land use analysis.

2. *RR Land Use Designation*

RR designated land that has one dwelling on a parcel which is greater than 6 acres is considered under utilized and therefore vacant.

3. *Non-Residential*

Vacant land for non-residential land uses is defined as land, which is not developed or is under utilized. A property designated as HCM is considered under utilized if there are dwelling units located on property. It is assumed that property designated as HCM and having existing dwelling units has not developed to its full potential. It is also assumed that this property will be redeveloped with a use compatible with the HCM designation and the existing dwelling units will be removed.

**B. Commercial vs. Industrial For Non-Residential Land Uses**

The Build Out Projections portion of the study did not separate commercial and industrial land uses. The land uses in Build Out Projections chapter is divided into two designations: residential and non-residential. Although the land uses with the residential designation are divided into smaller sub-designations, the non-residential designated areas are not divided. The Comprehensive Plan '92 provides a HCM land use designation, which is a combination of commercial and industrial type uses.

**C. Size Of MHR Designated Areas**

Many of the MHR designated land in the annexation area are located at the corners of prominent roadway intersections. The consultant assumes that the size of these areas is 10 acres.

**D. Use Designation For Railroad, Interstate, Major Roadways And Water Ways**

Railroad right-of-way, interstate right-of-way, major roadway right-of-way and water ways were not included as vacant land area.

**E. Limits Of Vacant Land Adjacent To Water Ways**

For areas adjacent to the Spokane River or Coeur D'Alene Lake, the limits of vacant land were determined by the G.L.O. Meander (McCoy 1904).

**F. Interstate-90**

The right-of-way for the future construction of I-90 through the southern portion of Quadrant 3 was shown on some of the assessor maps. Right-of-way areas of I-90, which were not provided, were estimated based on measurements from other assessor parcel maps and as measured from the aerial photographs.

**G. Golf Courses**

The golf course areas were identified as "existing". However, a density or coverage factor was not used to determine impact. Impact was determined by the size of existing structures located on the golf course. The size was estimated using the aerial photographs.

**H. Marinas**

The marinas were identified as "existing". A density or coverage factor was not used to determine impact. Impact was determined by the size of existing structures associated with the use of the marina. The size of the structures was determined using aerial photographs.

### **III. DENSITY**

#### **A. Density Factor For RR**

The RR (Rural Residential) designated areas were given a density factor of 0.15 du/ac. The Planning Department of the City of Coeur d'Alene stated that a density factor ranging from 0.1 - 0.2 du/ac should be used for the areas designated as RR. The mid-point of the range was used to project the build out dwelling units for this land use category.

#### **B. Density Factor For LR**

The density factor for LR (Low Intensity Residential) designated areas range from 0.5 - 3.0 dwelling units per acre. To determine the 3.0 du/ac density, a sampling of three existing land use areas was used. The sample areas were within R-3, R-8 and R-12 designated areas. For each of these land use designations, three different areas of development were located. Within each sample area, the acreage of the area was determined and the existing homes were counted. By dividing the dwelling unit number by the acreage, the density was then determined. Each sample area had a density, which was above 2 d.u./ac and below 4 d.u./ac., except for one area that was 4.1 d.u./ac.

For those areas determined to be constrained due to topography, access or other geographic limitations, a density of 0.5 du/ac or 1.0 du/ac was given for LR designated areas. The particular density assumed for each sub-area is provided in the Density Factor column on the spreadsheets contained in Appendix B.

#### **C. Density Factor For R-1, R-3, R-8, R-12, MR**

The same methodology used to determine the density factor of 3.0 du/ac for LR designated areas was also used for the R-1, R-3, R-8, R-12 and MR designated areas.

#### **D. Density Factor For R-17, R-34, MHR**

The density factor for multi-family residential is 13.0 dwelling units per acre. This was determined by using the information provided by the Planning Department which identified the existing land uses, acreage and number of dwelling units within specific areas of the City. The assumption is based on a sampling of five areas identified as R-17. The density of the sample areas was determined by dividing the number of dwelling units by the acreage of each sample area. The density range of the sample areas was from 20.9 du/ac to 5.6 du/ac. The mid-point for the

range (13.1) is used in determining the potential future units for R-17, R-34 and MHR designated areas.

**E. Coverage Factor For C-17, C-17L, C-34, LM, M, HCM**

A Coverage Factor is the term used to describe the amount of coverage of all buildings located on a parcel of land. The factor itself is the percent of the building coverage on the parcel of land.

A 25% coverage was assumed for existing uses within the non-residential designated areas. The 25% coverage factor is based on an average coverage of existing non-residential centers within the City. The consultant identified several sample areas to determine the coverage factor. Included in these sample areas were Ironwood Shopping Center at 23%, the Silverwood Mall at 32%, Shopko at 21% and three other commercial and industrial sites, which provided the percent coverage of 20%, 26% and 29%.

Assessor maps were used to determine the acreage of the site and the aerial photographs were used to determine the area of coverage.

A 20% future coverage was assumed for those areas that are currently vacant. The coverage factor of 20% accounts for the anticipated reductions of build able area for street, utility and any other land dedications.

The "downtown" area was determined to have a coverage factor of 65%. This determination was made using the same methodology stated previously. The sample area is shown in appendix C.

## LAND USE SUMMARY MATRICES

Please contact Renata McLeod, Project Coordinator, at (208) 666-5741 if you would like a copy of this Appendix.

## Appendix B

## **AREA DESIGNATED AS “DOWNTOWN”**

Please contact Renata McLeod, Project Coordinator, (208) 666-5741, if you would like a copy of this Appendix.

## **Appendix C**

Please contact Renata McLeod, Project Coordinator, at (208) 666-5741 if you would like a copy of this Appendix.

## **BOUMAN AND ASSOCIATES: TRAFFIC REPORT**

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## **Appendix D**

Please contact Renata McLeod, Project Coordinator, (208) 666-5741 if you would like a copy of this Appendix.

## **BUILDING PERMITS ISSUED SINCE JANUARY 1, 1993**

Please contact Renata McLeod, Project Coordinator, (208) 666-5741 if you would like a copy of this Appendix.

## **Appendix E**

Please contact Renata McLeod, Project Coordinator, (208) 666-5741, if you would like a copy of this Appendix.

## **CHANGES TO CIRCULATION IMPROVEMENT**

Please contact Renata McLeod, Project Coordinator, (208) 666-5741, if you would like a copy of this Appendix.

## **Appendix F**

Please contact Renata McLeod, Project Coordinator, (208) 666-5741, if you would like a copy of this Appendix.

## **PARK FACILITIES DOCUMENTATION**

(Source: City of Coeur d'Alene)

Please contact Renata McLeod, Project Coordinator, (208) 666-5741, if you would like a copy of this Appendix.

## **Appendix G**

Please contact Renata McLeod, Project Coordinator, (208) 666-5741, if you would like a copy of this Appendix.