

**GRAND JUNCTION CITY COUNCIL
WORKSHOP AGENDA**

**MONDAY, JANUARY 15, 2011, 7:00 P.M.
MUNICIPAL HEARING ROOM, CITY HALL, 250 N. 5TH STREET**

- 7:00 MAYOR'S INTRODUCTION AND WELCOME**
- 7:05 COUNCILMEMBER REPORTS**
- 7:15 REVIEW WEDNESDAY COUNCIL AGENDA**
- 7:25 REVIEW OF FUTURE WORKSHOP AGENDAS**

PRESENTATIONS

- 7:30 EXISTING INDUSTRY INCENTIVE COMMITTEE:** Diane Schwenke will represent this group and ask Council for an Existing Industry Incentive Proposal for CoorsTek. [Attach W-1](#)
- 7:45 PROPOSAL TO CLOSE INTERSECTION OF 2ND AND COLORADO:** Staff will discuss the potential closure of 2nd Street between Colorado Ave. and Main Street and Colorado Ave. between 1st and 2nd Streets in coordination with the remodel of Two Rivers Convention Center. [Attach W-2](#)
- 8:20 24 ROAD CORRIDOR TRANSPORTATION PLANNING PROCESS:** Discussion of the process and the City's role. [Attach W-3](#)
- 8:55 ADJOURN**

This agenda is intended as a guideline for the City Council. Items on the agenda are subject to change as is the order of the agenda.

Attach W-1
Existing Industry Incentive

Memo to: Grand Junction City Council
From: Existing Industry Incentive Committee
Date: January 10, 2001
Subject: Request for award of incentive funds

The Existing Business Expansion Incentive Committee requests the following item be considered by the Council at workshop on January 15th and possible action be taken at the Council Meeting on January 17th. A corporate decision on where this product will be made is imminent

Project Description

CoorsTek is proposing to significantly expand their fiber optic product line and grow their capacity for producing ceramic ferrules. The ferrule is the component used in connecting and terminating fiber optic transmission lines. Market demand has increased over the past year worldwide. With this expansion, CoorsTek would become the only viable manufacturer of this product in North America.

The company will be investing approximately \$5.25 million dollars in facility improvements and equipment and create 75 new jobs with an average salary of \$10.00 an hour by the end of the first quarter of 2002. The company also provides one of the most generous benefit packages in the area with an additional estimated value of 40% of base salary. The committee also considered the fact that the equipment will be mostly custom designed and built by companies on the Western Slope and other parts of Colorado.

Incentive Committee Recommendation:

The Committee is recommending that the Company receive \$120,000 in cash incentive funds from the City, apply for tax credits under the Colorado Enterprise Zone Act and also apply for job training assistance. Chamber staff will help facilitate those applications.

**Attach W-2
2nd & Colorado Street Closures**

**CITY COUNCIL AGENDA
CITY OF GRAND JUNCTION**

| <i>CITY COUNCIL</i> | | |
|----------------------------|--|-----------------------------|
| Subject: | 2nd Street and Colorado Ave. Street Closures | |
| Meeting Date: | January 15th, 2001 | |
| Date Prepared: | January 5th, 2001 | |
| Author: | Tim Moore | Public Works Manager |
| Presenter Name: | Tim Moore | Public Works Manager |
| X | Workshop | Formal Agenda |

Subject: The closure of 2nd Street between Colorado Ave. & Main Street and the closure of Colorado Ave. between 1st & 2nd Streets.

Summary: Staff will discuss the potential closure of 2nd Street between Colorado Ave. & Main Street and Colorado Ave. between 1st & 2nd Streets in coordination with the remodel of Two Rivers Convention Center. Council will review the traffic report, traffic projections and a site plan for the area.

Background Information: As part of the commitment to improve parking for the expanded Two Rivers Convention Center (TRCC), staff has developed a site plan for Council's review that anticipates the closure of sections of Colorado Ave and 2nd Street as described above. By simply closing the Streets but not vacating the ROW, the City will retain long term flexibility for the area. Additionally, the DDA and the Downtown Association have both reviewed the plan and support the street closures as part of the redevelopment of the parking improvements for the area.

Benefits:

The closure of 2nd Street will provide for a continuation of the feel of the Main Street streetscaping into Two Rivers site and tie downtown all the way to the entrance into TRCC.

It provides for the creation of a sitting / congregating plaza for the area, similar to the seating areas throughout the downtown area. The closure will also provide a friendly visual and /or pedestrian corridor link to the planned transportation hub at the depot and create a simpler, cleaner and more formal entrance into Two Rivers Convention Center.

This space could also be used for outdoor events and special exhibit areas. With the possibility of a multi-level hotel adjacent to the expanded TRCC's lobby, this vehicle-free area could relieve the probable tight feeling created by these structures.

The closure of Colorado Ave. provides for an improved parking lot with improved site circulation and utilization. Both CDOT and the City recognize the curve at Ute Ave and 1st Street is narrow and a safety concern. With the proposed acquisition of property to

the south, the plan provides an opportunity for modifications to this curve (shown in blue on the plan) that CDOT supports and may be willing to fund.

The roundabout at 2nd and Colorado is a preliminary design to provide a drop off and turn around for buses and limousines while providing intersection control and an entry to TRCC. This plan also accommodates bus stops adjacent to the building and improved truck delivery access.

Phasing:

Improvements to the parking area are planned in two phases. Phase I improvements are shown in green and Phase II are shown in red on the site plan. The completion of phase I improvements are planned to coincide with the completion of the remodel of TRCC and provide sufficient parking to meet the requirements of the zoning and development code. Phase II improvements would be completed in 2002 and provide approximately 100 additional parking spaces. Depending upon negotiations, there is a possibility that the parking improvements shown for the Colorado Catfish properties will be included with the Phase I improvements. All of the parking lot improvements are designed with landscaping and lighting improvements that will meet City standards.

Traffic Analysis:

The attached traffic report indicates that due to the low volumes of traffic on both Colorado Ave. and 2nd Street, and the limited growth potential of the area, no adverse impacts are expected on the adjacent streets.

Timing:

The current schedule indicates both streets will be closed March 30, 2001.

Budget: No impact to the current budget for this project.

Action Requested/Recommendation: City Engineering has the authority to close the sections of streets discussed and will proceed unless directed otherwise by Council.

| | | | | | |
|------------------------------|--------------------------|-----------|--------------------------|------------|----------------|
| Citizen Presentation: | <input type="checkbox"/> | No | <input type="checkbox"/> | Yes | If Yes, |
| Name: | | | | | |
| Purpose: | | | | | |

| | | | | | | |
|--|-------------------------------------|-----------|--------------------------|------------|--------------|--|
| Report results back to Council: | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> | Yes | When: | |
|--|-------------------------------------|-----------|--------------------------|------------|--------------|--|

| | | | | | | |
|-----------------------------|--------------------------|----------------|--------------------------|-----------------------------|-------------------------------------|-----------------|
| Placement on Agenda: | <input type="checkbox"/> | Consent | <input type="checkbox"/> | Indiv. Consideration | <input checked="" type="checkbox"/> | Workshop |
|-----------------------------|--------------------------|----------------|--------------------------|-----------------------------|-------------------------------------|-----------------|

Traffic Analysis

Closure of 2nd Street and Colorado Avenue adjacent to Two Rivers Convention Center

Summary

This study evaluates the proposal by Two Rivers Convention Center and the Downtown Development Authority to close two streets adjacent to the convention center – 2nd Street and Colorado Avenue.

Findings

- Two Rivers Convention Center needs to change its front door from a focus on Main Street to one that matches its parking field. This will have the added benefit of making the center a better neighbor to City Market, as many Two Rivers users perceive the City Market parking to be more convenient to the front door of the convention center than the Two Rivers parking.
- Traffic on 2nd Street is heavily weighted to northbound travel (about 75%), and observations suggest this is used as a shortcut to City Market by travelers from the south.
- Closure of 2nd Street will move a high percentage of the current traffic to 1st Street.
- Current access points to Two Rivers do not serve it well. Sight distance at Colorado and 1st is limited to the south and exiting left turns are prohibited. The storage in the median is inadequate for the traffic demands. The 1st Street driveway is limited and the cross-section on 1st Street makes it difficult to use. The access to Main Street is too close to the signalized intersection. The access onto 2nd Street is poorly marked and does not allow for good on-site circulation.
- Closure of Colorado Avenue will be effective only if access to 1st Street is closed or limited. The vacated street could be used as part of the parking lot, and the parking field could be re-oriented for more efficient site circulation and utilization.
- Changes to current 1st Street accesses that would increase the volume of traffic would require a State access permit and could be more restrictive and could incur costs to meet the current access code.
- Users of the convention center are primarily local residents and could easily be redirected to use Colorado Avenue, 2nd and 3rd Streets as the primary access to Two Rivers.
- Acquisition of additional property to the south for parking at Two Rivers would allow the center to have exposure on Ute Avenue and utilize 2nd Street between Ute and Colorado as a primary entrance. The current surface parking is poorly designed and poorly maintained. Lighting in the lot is limited.
- The underground parking is under-utilized. This could be remedied in part by better signing and improved lighting. Painting the concrete a light color may also help.
- The signalized intersection at 3rd Street and Main Street does not meet the warrants for a signal with current traffic. Assignment of traffic from the new hotels added to the intersection will also not meet any warrants once the hotels are open.

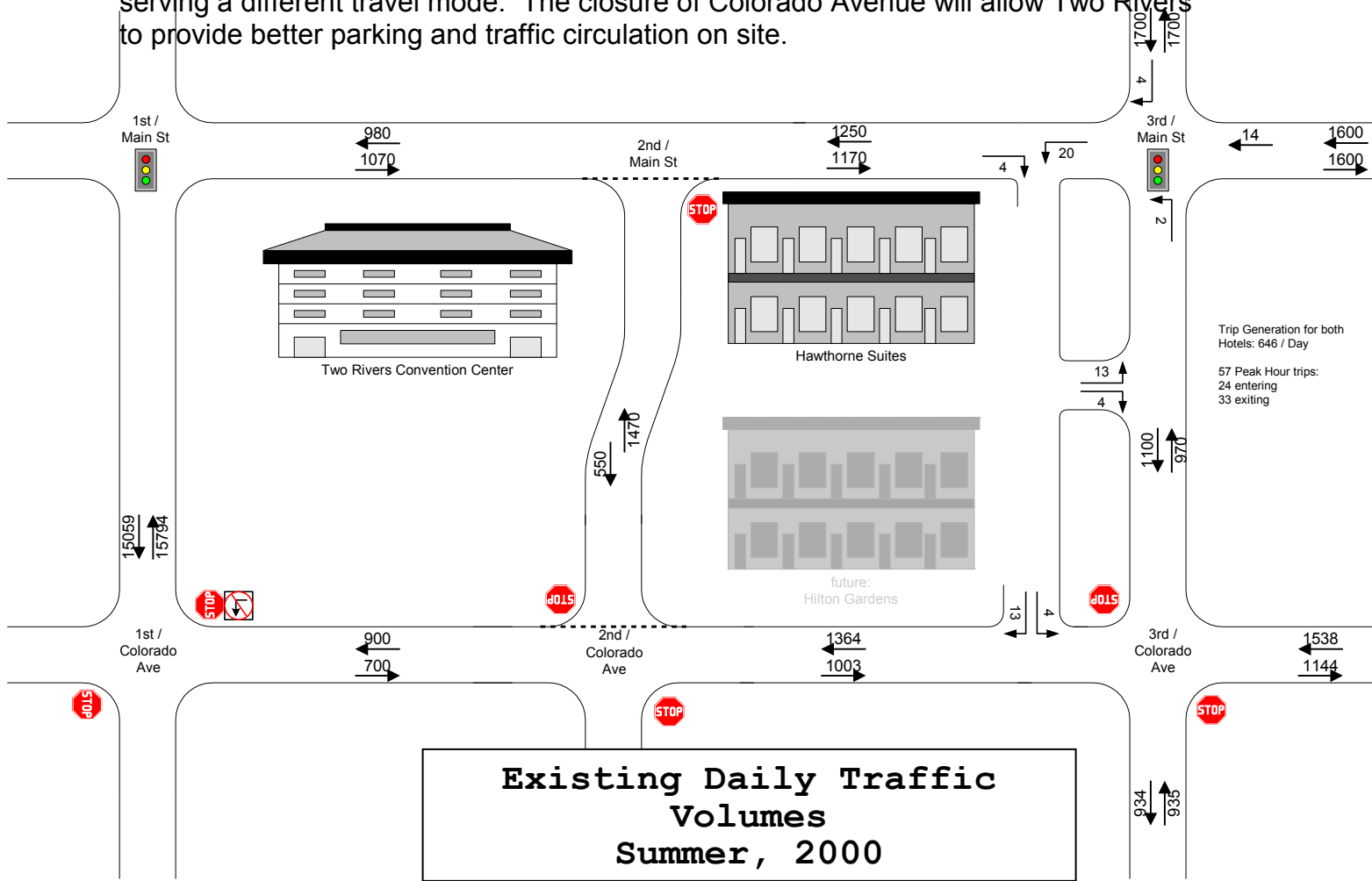
Recommendations:

- Street closures need to be undertaken as part of a complete package in concert with improving the Two Rivers Convention Center, including parking improvements, to be effective. Closure of 2nd Street alone can only be partial to allow access to Two Rivers parking. Closure of Colorado Avenue alone will only encourage drivers to continue to use 2nd Street as a shortcut to City Market. Improvements to Two Rivers need to include the re-orientation of the front door and changes and improvements to the parking lot.
- Underground parking needs to be improved for better utilization.

Conclusions

The attached drawing shows the existing traffic volumes for the area around the Two Rivers Plaza. Traffic volumes on Colorado Avenue decrease from east to west, and the closure is anticipated to divert those volumes to adjacent streets. Because the volumes are low, no adverse impacts are anticipated. Traffic volumes on 2nd Street are anticipated to divert to 1st Street, also with no adverse impacts. Future traffic projects for the area show small amounts of growth, as the downtown area is already built-out.

One of the benefits to the grid system downtown is that it provides a variety of choices for travel paths. Although the closure of these two streets appears to narrow the choices for vehicular movement, the volumes of displaced traffic are low and alternate paths still exist. The closure of 2nd Street is intended to create a pedestrian area, thus serving a different travel mode. The closure of Colorado Avenue will allow Two Rivers to provide better parking and traffic circulation on site.



**Attach W-3
24 Road Transportation Study**

**CITY COUNCIL AGENDA
CITY OF GRAND JUNCTION**

| CITY COUNCIL | | |
|------------------------|-------------------------------------|-----------------------------|
| Subject: | 24 Road Transportation Study | |
| Meeting Date: | January 15th 2001 | |
| Date Prepared: | January 5th 2001 | |
| Author: | Tim Moore | Public Works Manager |
| Presenter Name: | Tim Moore | Public Works Manager |
| X | Workshop | Formal Agenda |

Subject: 24 Road Area Transportation Plan.

Summary: Staff will update City Council on the progress of the 24 Road Area Transportation Planning project including the results of the December 12th open house and survey. Staff will also summarize the existing and forecasted network deficiencies for the area and present several improvement scenarios for Council's consideration. Additionally, examples of potential funding options for the needed improvements will be presented for discussion.

Background Information:

Open House

On December 12th City staff and representatives from Kimley-Horn, our transportation consultant, hosted an open house to solicit input from area business and property owners. Information at the open house included potential development scenarios based on the newly adopted land use plan for the area. Projected traffic volumes and the existing street plans were also displayed. Although over 400 information brochures were mailed out and a newspaper add purchased two weeks prior to the open house inviting public comment, 27 people attended the open house. The survey results from this open house indicated a majority of the respondents felt the City should take an active role in facilitating improvements for new development in the area. Additionally, most felt the City's current policy of requiring the first developer to pay for and construct all of the necessary improvements should be modified. The first attachment includes a copy of the survey and a summation of the responses.

Network Deficiencies

The next attachment is a copy of Technical Memorandum #1 provided by Kimley-Horn, which forecasts future traffic conditions for the area based on the new zoning and land

24 ROAD SUB-AREA TRANSPORTATION PLAN

uses. This analysis indicates that even with the implementation of our 10-year CIP, including improvements to 24 Road, the interchange at I-70 and G Road improvements, that 2020 predict 24 Road and the commercial areas to be operating beyond their capacities. Additionally, within the area, 24 Road, highway 6 & 50 and Patterson Road show the greatest forecasted deficiencies, with G and 23 Roads also failing by the predicted build-out year 2050.

Proposed Improvement Scenarios

Three scenarios for mitigating the forecasted deficiencies will be presented at the Workshop for Council’s review.

Funding Options

The last attachment includes a description of the six funding options (with pro and con statements) that were presented at the open house for comment. Staff will review the funding alternatives and continue to peruse them with local property owners unless City Council should direct otherwise. These options represent some of the most common ways other areas fund these types of improvements. Staff’s goal is to add additional “tools” to the existing methods available to developers for the funding of public improvements. In researching alternative funding options other communities like Olympia WA and Overland Park KS use, it appears likely our current practices may need to be modified. Specifically, the total reliance on LOS as the measure of acceptable traffic levels and the current method of calculating a Transportation Capacity payment (TCP) may need to be re-evaluated. Staff will continue to research these issues and report back to Council with more details at a later date.

Budget: N/A

Action Requested/Recommendation: No formal action required

| | | | | | |
|------------------------------|--|-------------|--|------------|----------------|
| Citizen Presentation: | | No X | | Yes | If Yes, |
| Name: | | | | | |
| Purpose: | | | | | |

| | | | | | |
|--|-----------|--|------------|--------------|--|
| Report results back to Council: | No | | Yes | When: | |
|--|-----------|--|------------|--------------|--|

24 ROAD SUB-AREA TRANSPORTATION PLAN

| | | | | | |
|---------------------------------|--|---------------------|---------------------------------|----------|----------------------|
| Placement on Agenda: | | Conse nt | Indiv. Consideration | X | Worksho p |
|---------------------------------|--|---------------------|---------------------------------|----------|----------------------|

24 ROAD SUB-AREA
TRANSPORTATION PLAN

NETWORK DEFICIENCIES
DRAFT TECHNICAL MEMO #1

JANUARY 8, 2001

PREPARED FOR:
CITY OF GRAND JUNCTION
PUBLIC WORKS DEPARTMENT
250 NORTH 5TH STREET
GRAND JUNCTION, COLORADO

PREPARED BY:
KIMLEY-HORN & ASSOCIATES
TOWER 1, SUITE 500
1515 ARAPAHOE STREET
DENVER, COLORADO

Kimley-Horn and Associates, Inc.
January 8, 2001

H:\Word2PDF\Work\010115wa.DOC

24 ROAD SUB-AREA TRANSPORTATION PLAN

Table of Contents

| | |
|-------------------------------------|---|
| Introduction..... | 1 |
| Existing Conditions..... | 1 |
| Existing Roadway Network | |
| Existing Land Use | |
| Accident History | |
| Forecasted Conditions | 3 |
| Build-out Land Use | |
| Forecasted Traffic Volumes | |
| Network Deficiencies | 6 |
| Roadway Levels of Service | |
| Additional Project Activities | 8 |
| References | 8 |

Figures

| | |
|--|---|
| Figure 1 - 24 Road Sub-Area and Vicinity | 4 |
|--|---|

Tables

| | |
|---|---|
| Table 1 - Existing Land Uses | 3 |
| Table 2 - Build-out Land Uses | 5 |
| Table 3 - Generalized Capacity Criteria | 6 |
| Table 4 - Roadway Levels of Service | 7 |

Appendix

| | |
|--|--|
| Average Daily Traffic (ADT) Figure, City of Grand Junction | |
| Existing Land Use Figure, 24 Road Corridor Sub-Area Plan | |
| Accident Volumes, City of Grand Junction | |
| Proposed Land Use Figure, 24 Road Corridor Sub-Area Plan | |
| Generalized Capacity Criteria, <i>U.S. 31 Major Investment Study</i> | |

24 ROAD SUB-AREA TRANSPORTATION PLAN

Introduction

The recently adopted *24 Road Corridor Sub-Area Plan*¹ proposes tremendous growth in the 24 Road sub-area, composed of approximately 1,000 acres between Interstate 70 and US-6/50. To accommodate this growth, the transportation needs in the area need to be examined and addressed. Kimley-Horn developed a six-step process to aid the City of Grand Junction with this task:

- Initiate Project
- Identify Network Deficiencies
- Determine Improvement Scenarios
- Evaluate Improvement Scenarios
- Develop Preferred Alternative
- Document Plan

Public involvement opportunities occur at three critical points—December 12, 2000, during the project initiation, January 29, 2001, after determining the improvement scenarios, and February 19, 2001, to present the preferred alternative. This Technical Memorandum describes the existing and forecasted network deficiencies in the 24 Road sub-area, step 2, and will serve as the basis for the project from which all improvement scenarios will be identified.

In a project initiation meeting, the draft project goal was discussed: Provide a transportation system at a reasonable Level of Service (LOS) standard at an equitable cost to all parties (State, County, City, and Private Developers). Primary objectives to aid in meeting the goal are:

- Identify new transportation facilities to accommodate projected land development.
- Identify improvements to existing transportation facilities.
- Identify an acceptable LOS standard (see appendix).
- Identify equitable funding mechanisms for implementing plan.
- Develop a plan acceptable to all affected parties.

Potential performance measures identified to determine which improvement scenario meets the goal best are a Level of Service standard, benefit/cost analyses (BCA) based on cost (route, time saved, and the prevailing wage rate), and project prioritization within the scenario. A brief description of Level of Service is located in deficiency section of this memo.

Existing Conditions

24 ROAD SUB-AREA TRANSPORTATION PLAN

Existing Roadway Network

24 Road enters the project area in an interchange with Interstate 70. It continues south past a city park, agricultural land, an industrial area, and the Mesa Mall north of an interchange with US-6/50, where it becomes Redlands Parkway. Classified as a principal arterial in the area, it has one lane in each direction between I-70 and F Road with a center turn lane, and two lanes in each direction south of F. At the intersection with F, southbound 24 Road has two left-turn lanes and two through lanes. Northbound 24 Road has a left-turn lane, a through lane and a dedicated right-turn lane. North of G Road, the average daily traffic (ADT) on 24 Road is 6,900 vehicles, and the ADT south of G Road is 8,500 vehicles.

24½ Road enters the area by crossing over I-70, with no access to the interstate. The road abuts the east side of Canyon View Park, agricultural land and Mesa Mall, and ends in a T-intersection with US-6/50. Classified as an urban collector, it has one lane in each direction between I-70 and Patterson Road, and two lanes in each direction with a raised median south of Patterson Road. At the intersections with Patterson Road and US-6/50, there is one left-turn lane in each direction. Median openings exist to allow access to Mesa Mall on the west and businesses on the east. The ADT between I-70 and G Road is 1,050 vehicles, 2,250 vehicles between G Road and F Road, 3,060 vehicles between F Road and Patterson Road, and 10,000 vehicles south of Patterson.

U.S. Highways 6 and 50 (I-70 Business) enters the area from the southeast at the intersection with 25 Road, and exits the area at an interchange with I-70 in the northwest. As a principal arterial, it has two through lanes in each direction with a center two-way left turn lane and right-turn lanes at signalized intersections. The ADT to the east of I-70 is 22,800 vehicles, 18,300 vehicles to the west of Patterson, and 25,850 vehicles between 24 Road and 24½ Road.

Patterson Road (Patterson Road is F Road) runs primarily east-west, curving to the north at Mesa Mall, and ends at an intersection with US-6/50. As a principal arterial, it has two lanes in each direction with left-turn lanes at the intersections, and the ADT is 14,350 vehicles north of Mesa Mall.

G Road is a two-lane road that travels east-west through agricultural land with industrial in the west. It is classified as a minor arterial, with an ADT that varies from 1,070 vehicles in the west to 2,450 vehicles in the east part of the project area.

24 ROAD SUB-AREA TRANSPORTATION PLAN

Interstate 70 borders the study area to the north. It has two lanes in each direction, separated by a grass median. The two interchanges in the study area are at 24 Road and at US-6/50. The present average daily traffic volume along Interstate 70 is 15,000 vehicles.

The project area is illustrated in Figure 1, and the ADT information provided by the City of Grand Junction is included in the Appendix.

Existing Land Use

The existing land uses are listed in Table 1, taken from the recently adopted *24 Road Corridor Sub-Area Plan*¹. The table excludes the area south of Patterson Road encompassing the Mesa Mall, as well as the area west of 23 Road. The corresponding figure from the *Sub-Area Plan* is located in the Appendix.

| TABLE 1 Existing Land Uses 24 Road Sub-Area Transportation Plan | |
|---|--------------|
| Category | Area (acres) |
| Residential | 52.80 |
| Commercial | 9.57 |
| Industrial | 71.40 |
| Agricultural | 43.86 |
| Institutional | 26.70 |
| Undeveloped | 47.60 |
| Undeveloped/Agricultural | 651.27 |
| Public | 114.70 |
| Total | 1,018 |

Source: 24 Road Corridor Subarea Plan, November 2000, p. 20. The above land uses are for the area is generally bounded by Interstate 70 on the north, 24½ Road on the east, Patterson Road and US-6/50 on the south, and 23 Road and 23½ Road on the west.

Accident History

The roads and intersections in the area show low accident rates, though the number of left-turn accidents at the intersection of 24½ Road and the east Mesa Mall driveway is a high percentage of the accidents at that intersection. A summary of accident volumes is located in the Appendix.

Forecasted Conditions

24 ROAD SUB-AREA TRANSPORTATION PLAN

Build-out Land Use

The build-out land uses are listed in Table 2, taken from the preferred plan in the recently adopted *24 Road Corridor Sub-Area Plan*¹. The table excludes the area south of Patterson Road, and the area west of 23 Road. The corresponding figure from the *Sub-Area Plan* is located in the Appendix.

24 ROAD SUB-AREA TRANSPORTATION PLAN

24 ROAD SUB-AREA TRANSPORTATION PLAN

Table 2
Build-Out Land Uses
24 Road Sub-Area Transportation Plan

| Category | Area (acres) |
|--------------------------|--------------|
| Rural Residential | 44 |
| Commercial | 260 |
| Mixed-Use | 423 |
| Community Recreation | 114 |
| Residential Multi-Family | 116 |
| Industrial | 61 |
| Total | 1,018 |

Source: 24 Road Corridor Subarea Plan, November 2000, p. 43. The above land uses are for the area is generally bounded by Interstate 70 on the north, 24½ Road on the east, Patterson Road and US-6/50 on the south, and 23 Road and 23½ Road on the west.

Forecasted Traffic Volumes

The build-out land uses will generate much higher traffic volumes than currently exists on the street network. Using the MPO's Mesa County/City of Grand Junction area MinUTP model, land use forecasts were modeled for 2020, and for a projected build-out of the study area in 2050. Forecast volumes and projected levels of service are shown in Table 4.

The traffic forecasts for 2020 and 2050 include street improvements shown in the City CIP such as the Riverside Bypass and assume F½ Road is constructed from US-6/50 to 25 Road.

24 ROAD SUB-AREA TRANSPORTATION PLAN

Network Deficiencies

Table 3 summarizes generalized capacity criteria (ADT) for urban arterials, based on the *Highway Capacity Manual*². Additional information regarding the development of this criterion is contained in the appendix. **It should be noted that this table is useful in evaluating LOS for planning purposes, only.** Arterial street capacity is measured based on travel time rather than volume and can be measured using the methods in Chapter 11 of the *Highway Capacity Manual*.

| TABLE 3 Generalized Capacity Criteria 24 Road Sub-Area Transportation Plan | | | | | | | | | | |
|--|----------------------------------|--------|--------|--------|----------------------------------|--------|--------|--------|-------------|--------------|
| Level of Service | Urban Arterials (45 mph Flow) | | | | Urban Arterials (35 mph Flow) | | | | Rural State | Rural County |
| | 2-Lane | 3-Lane | 4-Lane | 5-Lane | 2-Lane | 3-Lane | 4-Lane | 5-Lane | 2-Lane | 2-Lane |
| A | 4,900 | 5,900 | 9,700 | 11,800 | 3,600 | 4,300 | 7,200 | 8,800 | 5,500 | 4,000 |
| B | 8,300 | 10,000 | 16,600 | 19,800 | 6,200 | 7,600 | 12,500 | 15,000 | 7,800 | 6,500 |
| C | 11,600 | 13,900 | 23,300 | 28,000 | 9,000 | 10,800 | 18,000 | 21,600 | 10,700 | 9,000 |
| D | 13,900 | 16,700 | 27,700 | 33,400 | 10,900 | 13,100 | 21,700 | 26,200 | 12,600 | 10,600 |
| E | 16,700 | 19,900 | 33,200 | 40,000 | 13,300 | 16,100 | 26,800 | 32,200 | 14,800 | 12,400 |
| F | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Level of Service criteria developed from the current edition of the *Highway Capacity Manual*. The basis for the criteria is Table 8-10 on page 8-14 for two-lane highways and Table 7-11 on page 7-20 for multi-lane highways. The criteria have been generalized and assume a peak hour percentage (K) of 8%, directional factor (D) of 0.6, 15% commercial vehicle percentage, and level/rolling terrain conditions.

Based on volume data taken from the MPO's MinUTP model, the operations of the roadways in the project area under existing and forecasted conditions are listed in Table 4.

24 ROAD SUB-AREA TRANSPORTATION PLAN

Table 4
Roadway Segment Levels of Service
24 Road Sub-Area Transportation Plan

| Segments | Geometrics | | 2000 Existing Conditions | | 2020 Forecasted Conditions | | 2050 Forecasted Conditions | |
|--|--------------|-------------|--------------------------|--------|----------------------------|---------|----------------------------|---------|
| | No. of Lanes | Speed (mph) | Daily Volume | LOS | Daily Volume | LOS | Daily Volume | LOS |
| 24 Road, North of G Rd | 3 5* | 35 | 6,900 | B | 25,400 | F D* | 43,900 | F F* |
| 24 Road, between F and G Rds | 3 5* | 35 | 8,500 | C | 24,200 | F D* | 38,800 | F F* |
| 24½ Road, North of G Rd | 2 | 35 | 1,050 | A | 800 | A | 4,100 | B |
| 24½ Road, between Patterson Ave and G Rd | 2 | 35 | 2,250 | A | 4,000 | B | 4,800 | B |
| 24½ Road, South of Patterson Ave | 5 | 35 | 10,000 | B | 16,300 | C | 15,900 | C |
| US-6/50, between 24 and 24½ Rds | 5 | 45 | 25,850 | C | 34,900 | C | 55,200 | F |
| US-6/50, between Patterson Ave and G Rd | 5 | 45 | 18,300 | B | 26,400 | C | 64,800 | F |
| US-6/50, west of G Rd | 5 | 45 | 22,800 | C | 23,700 | C | 54,900 | F |
| Patterson Ave, between 24 and 24½ Rds | 5 | 35 | 14,350 | B | 22,200 | D | 33,600 | F |
| F½ Rd, east of 24½ Rd | 2 | 35 | -- | A est. | 1,000 | A | 16,100 | F |
| F½ Rd, between 24½ and 24 Rds | 2 | 35 | -- | A est. | 8,000 | C | 20,000 | F |
| F½ Rd, between 24 and 23½ Rds | 2 | 35 | -- | A est. | 4,700 | B | 26,000 | F |
| G Road, east of 24 Rd | 2 3* | 35 | 2,450 | A | 7,000 | C B* | 13,600 | F E* |
| G Road, between 23 and 24 Rds | 2 3* | 35 | 1,220 | A | 2,400 | A A* | 28,600 | F F* |
| G Road, west of 23 Rd | 2 3* | 35 | 1,070 | A | 2,600 | A A* | 17,700 | F F* |
| 23 Road, North of G Rd | 2 | 35 | 2,100 | A | 4,000 | B | 9,500 | D |
| 23 Road, South of G Rd | 2 | 35 | 1,795 | A | 4,600 | B | 12,500 | E |

***Denotes Lanes and Estimated LOS after improvements identified 10-Year CIP have been constructed.**
Source: Kimley-Horn and Associates, Inc. analysis, January 2001.

In 2020 the forecasted traffic volumes indicate that most of the street network will operate at acceptable level of service. One notable exception is US-6/50, with projected volumes dropping the level of service to E.

By 2050, the projected build-out of the study area, the street network will fail.

Additional Project Activities

Kimley-Horn participated in a public meeting held by the City of Grand Junction on December 12, 2000. The City collected a survey requesting the public's opinion on funding options and general comments. Concerns were expressed over effects of the development on the area to the north, access control measures along 24 Road, for and against roundabouts, Leach Creek options, possible alternatives, and funding options. (We didn't show any deficiencies at the open house) The City has prepared the results of this survey separate from this memorandum.

References

24 Road Corridor Sub-Area Plan, BRW, Inc., and Leland Consulting Group, Denver, CO, 2000.

Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington, DC, 1994.

APPENDIX

Funding Options Presented at Open House

Option #1 **Current Practice** – The first development builds and pays for 100% of the cost to construct what's needed.

Pros

Common practice throughout country.
Easy to understand and administer over time.
Matches development with impacts.

Cons

Discourages development when improvement costs are high.
Unfair distribution of costs.

Option #2 – **Developer Reimbursed** – The first developer pays for and constructs what's needed and subsequent developers who will also benefit from the improvements reimburse the first developer for a proportionate share of the cost.

Pros

More equitable distribution of costs.
Minimizes impact on first developer.
City may participate where existing deficiencies exist or there is community benefit to the improvements.
Improvements are in place when demand occurs.

Cons

First developer fronts costs.
Complicated to calculate when allocating inflation.
Limited time for reimbursement, may not be fully reimbursed.
May discourage development after initial development occurs.

Option #3 – **City Reimbursement** – The first Developer pays a proportionate share of the cost of the needed improvements to the city, and the city constructs the improvements. Subsequent developments in the area that benefit from these improvements are assessed a proportionate share of the cost, as they develop, thereby reimbursing the city.

Pros

More equitable distribution of costs.
Minimizes impact on first developer.
City may participate where existing deficiencies exist or there is community benefit to the improvements.
Improvements are in place when demand occurs.

Cons

City must identify a funding source and funding could be limited to first-come, first-serve.
Complicated to calculate when allocating inflation.
Limited time for reimbursement, may not be fully reimbursed.
Limited funds-10 year plan exists to correct current deficiencies.
Limited funds available limits the size of projects.
May discourage development after initial development occurs.

Option #4 – **New Sales/Property Tax Rebate** – The first developer, or first group of developers, pay for and build the needed improvements. An agreement between those who paid for the

improvements and the city is reached providing for reimbursement over time from any new increase to the sales/property tax base of the city as a result of their developments.

Pros

Improvements are ultimately paid for by consumers.
Could reduce or eliminate developers cost of public improvements.

Cons

Only additional sales/property taxes are applicable.
Incremental increases in sales tax are difficult to determine.
Property tax to City is small and would fund only small projects.
Most retail creates no additional City sales tax revenue.

Option #5 – Special Improvement District – City Resources – Each property benefiting from the improvements agree to form a Special Improvement District to pay for these needed improvements. Each parcel is assessed a proportionate share of the cost which could be financed over a period of up to 10 years. These districts, much like our current alley or sewer improvement districts, would be financed using City resources.

Pros

Fairest way to distribute costs for small projects.
Reduces impacts on first developer.
City may participate where existing deficiencies exist or there is community benefit to the improvements.
Flexibility to phase improvements over time.
Flexibility to define district.
Encourages development

Cons

A determination of the viability of the district must be made.
City must identify a funding source because debt cannot be incurred without a city-wide vote.
Funding limited to small projects.
Community funds replace developers up front costs.
Some existing developments may also be required to contribute.
Requires agreement on equitable form of cost allocation.
Requires assumptions on future land use and densities.
Developers/property owners begin paying for improvements whether they develop the site or not.
Cost of owning property goes up.
Requires a majority vote of property owners affected.

Option #6 – Special Improvement District – Funded with Public Debt – each property benefiting from the improvements agree to form a Special Improvement District to pay for the needed improvements. Each parcel is assessed a proportionate share of the cost which could be financed over a period of up to 10 years. In this case, some form of public debt would be incurred to provide financing for the improvements. Again, where the existing street system is deficient prior to any development, the City would also share in the improvement costs.

Pros

Fairest way to distribute costs for large projects.
Reduces impacts on first developer.
Encourages development.
Flexibility to phase improvements over time.
Flexibility to define the district.
Public improvements are funded with tax exempt debt.
City may participate where existing deficiencies exist or there is community benefit to the improvements.

Cons

Some existing developments may also be required to contribute.
Requires agreement on equitable form of cost allocation.
Requires assumptions on future land use and densities.
Developers/property owners begin paying for improvements whether they develop the site or not.
Cost of owning property goes up.
Requires a majority vote of property owners affected.
A determination of the viability of the district must be made.
Debt replaces developer funds up front.

Options #2 through #6 also assume that in a case where the existing street system is deficient prior to any development, the City would also share in the improvement costs.

Current Practice

The first developer should pay for the full cost of needed improvements

| | |
|------------------|--------------------------|
| | Strongly Agree |
| Responses | 1 |
| | Agree |
| Responses | 4 |
| | No Opinion |
| Responses | 1 |
| | Disagree |
| Responses | 7 |
| | Strongly Disagree |
| Responses | 5 |

Developer

The first developers should pay the full cost of needed improvements and be re-imbursed from future developers

| | |
|------------------|--------------------------|
| | Strongly Agree |
| Responses | 4 |
| | Agree |
| Responses | 4 |
| | No Opinion |
| Responses | 2 |
| | Disagree |
| Responses | 5 |
| | Strongly Disagree |
| Responses | 3 |

City Reimbursement

Developers should pay their share and the City should fund the remainder and collect re-imbusement from future developers

Strongly Agree
Responses 4

Agree
Responses 7

No Opinion
Responses 4

Disagree
Responses 1

Strongly Disagree
Responses 2

New Sales/Property Tax

Property tax owners should be reimbursed over time for any new increase to the sales/property tax base as a result of their development

Strongly Agree
Responses 2

Agree
Responses 5

No Opinion
Responses 1

Disagree
Responses 8

Strongly Disagree
Responses 2

Special Improvement District - Funded with City Resources

Property owner agrees to form a Special Improvement District to pay for the needed improvements. Each parcel is assessed a proportionate share of the cost which could be financed by the City over a period of up to 10 years

| | |
|------------------|--------------------------|
| | Strongly Agree |
| Responses | 2 |
| | Agree |
| Responses | 5 |
| | No Opinion |
| Responses | 2 |
| | Disagree |
| Responses | 7 |
| | Strongly Disagree |
| Responses | 2 |

Special Improvement District Funded with Public Debt

Property owners agree to form a Special Improvement District to pay for the needed improvements. Each parcel is assessed a proportionate share of the cost which could be financed by the public over a period of 10 years

| | |
|------------------|--------------------------|
| | Strongly Agree |
| Responses | 2 |
| | Agree |
| Responses | 6 |
| | No Opinion |
| Responses | 2 |
| | Disagree |
| Responses | 5 |
| | Strongly Disagree |
| Responses | 3 |

