



### **Airport / Overland Road Corridor Study**

### **Corridor Plan**



Project No. A009(990) Key No. 09990

July 2011

### In partnership with





### **Table of Contents**

| CHAF | PTER 1 INTRODUCTION   | 1-1  |
|------|---|------|
| 1    | What is the Corridor Study?   | 1-1  |
| 2    | Who is involved?  | 1-2  |
| 3    | What is the study area?   | 1-2  |
| 4    | Why is the Corridor Study needed?   | 1-4  |
| 5    | Is the corridor consistent with future plans for the area?                                    | 1-4  |
| 6    | What is the Corridor Study process?   | 1-5  |
| Снаг | PTER 2 EXISTING CONDITIONS  | 2-1  |
| 1    | What are existing land uses in the area?  | 2-1  |
| 2    | What is the existing transportation network?  | 2-2  |
| 3    | What are the existing traffic volumes?  | 2-3  |
| 4    | If there are no existing traffic congestion problems, why is a new corridor being considered? | 2-4  |
| 5    | What are the environmental constraints?   | 2-6  |
| СНАР | PTER 3 ALTERNATIVES EVALUATION & SCREENING  | 3-1  |
| 1    | What alternatives were considered?  | 3-1  |
| 2    | What evaluation criteria were developed?  | 3-2  |
| 3    | How were the alternatives evaluated?  | 3-8  |
| 4    | Which alternatives were eliminated and why?   | 3-11 |
| 5    | What alternatives remained after the initial screening process?                               | 3-12 |
| Снаг | PTER 4 STAKEHOLDER INVOLVEMENT  | 4-1  |
| 1    | Who was involved in making decisions during the study?  | 4-1  |
| 2    | What opportunities were provided for public input?  | 4-2  |

ACRONYMS AND KEY TERMS ......V

ii Table of Contents

| СНАР | PTER 5 PREFERRED ALTERNATIVE   | 5-1  |
|------|--|------|
| 1    | What is the preferred alternative?                                   | 5-1  |
| 2    | What level of traffic is the new corridor anticipated to carry?      | 5-2  |
| 3    | How wide will the roadway be?  | 5-9  |
| 4    | Could the roadway be wider in the future?                            | 5-10 |
| 5    | How will the alignment be preserved?                                 | 5-11 |
| 6    | How will access be managed?  | 5-12 |
| 7    | What would the intersections look like?                              | 5-12 |
| 8    | How is stormwater being addressed?                                   | 5-15 |
| 9    | Are there any unique physical characteristics along the alternative? | 5-15 |
| 10   | How much could the new roadway cost?                                 | 5-23 |
| СНАР | PTER 6 IMPLEMENTATION  | 6-1  |
| 1    | What are the next steps?   | 6-1  |
| 2    | What is the proposed alignment?                                      | 6-1  |
| 3    | When will the roadway be constructed?                                | 6-1  |
| 4    | How will the Corridor Plan be implemented?                           | 6-1  |

### LIST OF EXHIBITS

| 1-1 | Vicinity Map                                      | 1-3  |
|-----|---|------|
| 1-2 | Study Area  | 1-3  |
| 1-3 | Corridor Study Process                            | 1-6  |
| 2-1 | Existing Roadway Network                          | 2-3  |
| 3-1 | Preliminary Alignment Alternatives                | 3-3  |
| 3-2 | ROW and Setback                                   | 3-5  |
| 3-3 | Evaluation Matrix                                 | 3-9  |
| 3-4 | Alternatives Screening Process                    | 3-11 |
| 5-1 | 2035 Projected Traffic Volumes (vehicles per day) | 5-2  |
| 5-2 | Preferred Alternative (Section 1 of 3)            | 5-3  |
| 5-2 | Preferred Alternative (Section 2 of 3)            | 5-5  |
| 5-2 | Preferred Alternative (Section 3 of 3)            | 5-7  |
| 5-3 | Three-Lane Roadway Section                        | 5-9  |
| 5-4 | Expanded Roadway Section                          | 5-10 |
| 5-5 | Expanded Section Impact Analysis                  | 5-11 |
| 5-6 | Proposed Intersection Configurations              | 5-13 |
| 5-7 | Concept Drainage (Section 1 of 3)                 | 5-17 |
| 5-7 | Concept Drainage (Section 2 of 3)                 | 5-19 |
| 5-7 | Concept Drainage (Section 3 of 3)                 | 5-21 |
| 5-8 | Opinion of Probable Cost                          |      |

### LIST OF APPENDICES

APPENDIX A - Land Use Plan Summary Report

- APPENDIX B Traffic Analysis
- APPENDIX C Environmental Scan
- APPENDIX D Evaluation & Screening
- APPENDIX E Design Criteria
- APPENDIX F Concept Drainage
- APPENDIX G Cost Estimate
- APPENDIX H Public Involvement
- APPENDIX I Centerline Legal Description

### Acronyms and Key Terms

| ACHD | Ada County Highway District        |
|------|------------------------------------|
| ADT  | average daily traffic              |
| AWSC | all way stop control               |
| ITD  | Idaho Transportation Department    |
| LOS  | level of service                   |
| NHD1 | Nampa Highway District No. 1       |
| ROW  | Right-of-way                       |
| SHPO | State Historic Preservation Office |
| TAC  | Technical Advisory Committee       |
| TWSC | two way stop control               |

### **Chapter 1 Introduction**

### 1 What is the Corridor Study?

The Airport / Overland Road Corridor Study represents a multi-agency effort to identify a more direct east-west transportation route connecting the Nampa Airport and Garrity Road Interchange in Canyon County with the newly-realigned Overland Road/Ten Mile Road intersection in Ada County.

Several key goals were identified for the corridor, including:

a) Connect on the west to an existing arterial with sufficient capacity;

b) Integrate with a future SH-16/I-84/McDermott interchange as planned by ITD;

c) Serve as a detour route for the Interstate in case of closure or incident;

d) Function as an urban principal arterial, including curb/gutter/sidewalk and appropriate access management; and

e) Consider short term impacts to adjacent properties and existing uses, as well as long term impacts on future land use designations.

The purpose of the study is to review several possible alignment alternative options, select a preferred alternative, and establish a centerline. This is a long range roadway preservation and planning project, and is not currently funded for design, right-of-way, or construction.



Airport Road is an existing rural road serving the Nampa Municipal Airport and provides a connection between the Ada/Canyon county line (McDermott Road) and Garrity Boulevard.

### 2 Who is involved?

The corridor study is a collaborative effort led by the City of Nampa, with input from the Nampa Municipal Airport, Nampa Highway District No. 1 (NHD1), the City of Meridian, and the Ada County Highway District (ACHD). As the agency overseeing the expenditure of federal funds, the Idaho Transportation Department (ITD) is also involved. A Technical Advisory Committee (TAC) comprised of these agencies led the study efforts.

In addition, numerous stakeholders, including area property owners (commercial and residential), the Nampa School District, and public service providers have been engaged through a series of interviews, public meetings, and presentations. Input from these entities was utilized in the development of the Corridor Plan.

A Policy Committee was developed with representatives of each agency's elected officials to provide high-level recommendations on the project in areas in which decisions could not be based solely on technical data.

### 3 What is the study area?

The corridor study area is approximately four miles long and five miles wide. It extends from within the incorporated city limits of Nampa on the west through unincorporated Canyon and Ada counties, including portions of the impact areas of both Nampa and Meridian (see Exhibit 1-1 and Exhibit 1-2).

Terrain in the study area is primarily flat, generally sloping from west to east with more hilly terrain near Overland Road and within three gravel pits. Significant residential development exists in the western end of the study area, especially west of Robinson Road, becoming less dense to the east. Limited commercial development occurs throughout the study area.

The 242-acre Nampa Municipal Airport, a significant feature, at the western side of the study area, serves over 300 based aircraft and contains numerous commercial businesses.

Additional information on stakeholder invlolvement is included in Chapter 4.

#### When will the corridor be built?

The proposed alternative is anticipated to be constructed as adjoining properties develop, and as funding becomes available; it is quite possible that construction of the corridor is 20 years in the future.



### Exhibit 1-1 Vicinity Map

### Exhibit 1-2 Study Area



### 4 Why is the Corridor Study needed?

Future travel through the study area will, within the next 25 years, necessitate a significantly improved east-west continuous roadway connection between and parallel to I-84 on the north and Amity Road on the south.

The existing roadway network is comprised of a series of local and county roads, and is used by thousands of drivers despite the intermittent, disjointed roadway network and lack of direct connection. The 2035 regional travel demand model indicated traffic volumes along a future continuous east-west corridor could be as high as 28,200 vehicles per day – significantly higher than current volumes along Airport Road (see Chapter 2, Table 2-2, for current roadway traffic volumes in the study area).

Establishing a centerline today will ensure that a future continuous east-west roadway will be possible and that it will be well-coordinated among all local agencies responsible for its development.

## 5 Is the corridor consistent with future plans for the area?

It is important to ensure that new regional roadways are consistent with current and long range planning so that a future roadway will complement the future land use conditions and surrounding roadway network.

In the case of this corridor, several land use and transportation plans were reviewed and documented in a Plan Review Memorandum (Appendix A). Reviewed agency plans include:

- City of Nampa Comprehensive Plan
- Nampa Municipal Airport Master Plan Update
- City of Meridian Comprehensive Plan
- South Meridian Comprehensive Plan
- South Meridian Transportation Study

The study will establish a centerline for a direct future route that will facilitate east-west travel south of I-84, and accommodate traffic through 2035.



"Communities in Motion" is the long-range transportation plan for a six-county region in southwest Idaho.

- ACHD 2011 2015 Five-Year Work Plan
- Communities in Motion, FY 2010-2014 Regional Transportation Improvement Program

These planning documents include anticipated future land use and zoning, as well as planned roadway improvements within the project area. Both Meridian and Nampa assume additional growth to occur in the area served by the new corridor, with the majority of that growth expected to be residential. Traffic assumptions used in this study reflect those future land use projections. It should be noted, however, that both Nampa and Meridian are currently in the process of updating their Comprehensive Plans to evaluate different land uses in this area. Should land use assumptions within the study area change significantly, the traffic analysis may need to be revisited.

A significant transportation project within the study area boundary noted in these plans is the SH-16 (McDermott Road) interchange at I-84. This project is not funded, however, and is not part of the ITD SH-16 extension project which is currently under design. Therefore, it was not included in traffic analyses conducted for this study.

The Ten Mile Interchange opened in late May 2011. This connection to I-84 is anticipated to bring additional traffic to south Meridian and eastern Canyon County.

### 6 What is the Corridor Study process?

The study process incorporates several primary elements: stakeholder engagement and public outreach, a scan of environmental resources, traffic analysis, and alternatives development and evaluation. Based on the evaluation process, a preferred alternative is recommended and a centerline is defined. The process culminates in the selection of a preferred alternative, documented in a written Corridor Plan (Exhibit 1-3). A copy of the Plan Review Memo can be found in Appendix A.

What is the difference between a corridor "study" and a corridor "plan?"

The corridor study is the *process* of conducting the analysis to determine why and where a corridor is needed. The corridor plan is the final step in the study process - a written *document* that illustrates the decisions and findings of the study.

#### 1-6 Introduction

Upon completion of the Corridor Plan, participating agencies will request the plan be adopted by their elected officials, boards, and/or commissions. Formal adoption of the plan allows the agencies to evaluate future development for consistency with the preferred alternative.

The proposed corridor is anticipated to be constructed as adjoining properties develop, and funding becomes available. Although no money is currently dedicated to constructing the corridor, selection of a preferred alternative now is necessary in order to establish a centerline and begin to preserve right-ofway as development occurs.

### Exhibit 1-3 Corridor Study Process



### **Chapter 2 Existing Conditions**

### 1 What are existing land uses in the area?

The study area includes a mix of land uses ranging from lowdensity residential to agricultural land to commercial properties. The western portion of the study area is predominately residential housing. East of Robinson Road, the study area becomes significantly more rural - primarily agricultural land with some residential housing and an occasional commercial enterprise.

The Nampa Municipal Airport and three large gravel pit operations represent significant commercial uses within the study area. The Airport is a general aviation airport on 242 acres, with over 300 based aircraft and 72,000 operations annually. The three gravel pits comprise a substantial amount of acreage; all are nearing depletion and beginning to plan for reclamation.

There are several irrigation facilities within the study area, including the Ridenbaugh Canal, Mason Creek, Dewey Lateral, Duval Lateral, Point Lateral, and Calkins Lateral. The entire study area is under the jurisdiction of the Nampa & Meridian Irrigation District.

Future land use classifications for the area, per the current Comprehensive Plans of the cities of Nampa and Meridian, include agricultural, rural/low density residential, commercial, and industrial. Potential commercial nodes are planned along Robinson Road at the intersections with Amity, Victory, and Airport Roads.



Existing uses in the westernmost portion of the study area are primarily residential.

It is likely that future Comprehensive Plan updates for Nampa and/or Meridian will alter land use designations from those used for this study. Such changes, should they occur prior to the corridor being constructed, warrant revisiting the traffic analysis. This analysis may result in a need to preserve additional right-of-way for the corridor.

### 2-2 Existing Conditions

### 2 What is the existing transportation network?

The existing transportation network is comprised of Interstate 84 (I-84) and a series of state, local and county facilities. The roadways within the study area are described in Table 2-1 and shown in Exhibit 2-1.

I-84 and Garrity Boulevard are both state facilities, and are under jurisdiction of the Idaho Transportation Department (ITD). Garrity Boulevard is a principal arterial, serving as a connection between the Nampa downtown core and I-84.

In Ada County, all local roadways (including those in both the City of Meridian and unincorporated Ada County) are under jurisdiction of the Ada County Highway District (ACHD). In Canyon County, all local roadways within the City of Nampa limits are under the City's jurisdiction. Local roadways outside the city limits are under the jurisdiction of Nampa Highway District No. 1 (NHD1).



| Road Name         | Direction | No. of<br>Lanes <sup>2</sup> | Classification <sup>1</sup> | Posted Speed<br>Limit <sup>2</sup> |
|-------------------|-----------|------------------------------|-----------------------------|------------------------------------|
| Airport Road      | E-W       | 2                            | Minor Collector             | 35                                 |
| Amity Road        | E-W       | 3                            | Principal Arterial          | 35                                 |
| Black Cat Road    | N –S      | 2                            | Minor Collector             | 35                                 |
| Garrity Boulevard | NE – SW   | 5                            | Principal Arterial          | 35-45                              |
| Happy Valley Road | N – S     | 2                            | Minor Collector             | 35                                 |
| Kings Road        | N – S     | 2                            | Collector                   | 35                                 |
| McDermott Road    | N – S     | 2                            | Expressway                  | 30                                 |
| Robinson Road     | N – S     | 2                            | Minor Collector             | 45-50                              |
| Stamm Lane        | E - W     | 2                            | Minor Arterial              | 20                                 |
| Ten Mile Road     | N – S     | 2                            | Principal Arterial          | 35                                 |
| Victory Road      | E –W      | 2                            | Minor Collector             | 45                                 |

### Table 2-1. Existing Roadway Network

<sup>1</sup> Per the COMPASS 2035 Planning Functional Classification Map for Ada and Canyon Counties

<sup>2</sup> Information reflects current conditions



### Exhibit 2-1 Existing Roadway Network

### 3 What are the existing traffic volumes?

Understanding the existing traffic volumes within the area is important in order to evaluate how traffic is currently moving from west to east and north to south through the study area. Existing traffic volumes were provided by City of Nampa, NHD1 and ACHD, with future forecast modeling conducted by COMPASS.

Roadways within the study area currently experience an average daily traffic (ADT) volume ranging from 500 to 11,950 vehicles per day (Table 2-2). Due to low travel volumes, most of the study area network generally operates at an acceptable level of service. The Traffic Analysis for the corridor is included in Appendix B.

| Decelurer Comment | Loostian         | Daily County | Count Volume* |
|-------------------|------------------|--------------|---------------|
| Roadway Segment   | Location         | rear         |               |
| Airport Road      | e/o Kings Road   | 2007         | 2,100         |
| Airport Road      | e/o Happy Valley | 2007         | 2,200         |
| Airport Road      | e/o Robinson     | 2007         | 500           |
| Black Cat Road    | n/o Lamont       | 2009         | 2,350         |
| Black Cat Road    | n/o Victory      | 2009         | 2,200         |
| Happy Valley Road | n/o Airport      | 2007         | 8,500         |
| Happy Valley Road | s/o Airport      | 2007         | 7,850         |
| Kings Road        | s/o Airport      | 2008         | 11,950        |
| Lamont Road       | e/o Black Cat    | 2006         | 1,100         |
| McDermott Road    | s/o Airport      | 2007         | 500           |
| McDermott Road    | n/o Airport      | 2007         | 600           |
| Overland Road     | e/o McDermott    | 2010         | 1,600         |
| Robinson Road     | n/o Airport      | 2007         | 4,800         |
| Robinson Road     | s/o Airport      | 2007         | 4,450         |
| Stamm Lane        | w/o Robinson     | 2006         | 1,400         |
| Victory Road      | e/o Robinson     | 2007         | 3,450         |
| Victory Road      | e/o McDermott    | 2008         | 3,500         |
| Victory Road      | e/o Black Cat    | 2009         | 3,250         |

### Table 2-2. Existing Roadway Network

Source: NHD1 and ITD, 2011

\* Rounded Volumes

### 4 If there are no existing traffic congestion problems, why is a new corridor being considered?

The proposed Airport / Overland Road Corridor is not needed to relieve congestion on the existing east-west routes; the route is primarily intended to enhance future connectivity within the area. A future route would provide a continuous east-west connection and could serve up to 28,200 vehicles per day, according to the 2035 regional traffic demand model.

Additionally, the corridor would provide a second alternative route for incident management for I-84 – the only such route south of the interstate.

Though existing routes are not currently over capacity, vehicles are currently using a series of discontinuous roadways to travel eastwest between Ten Mile Road and Nampa Municipal Airport. There are 20 intersections located within the study area, which are identified in Table 2-3. Intersection control is defined based upon the stop signs and/or traffic signals at each intersection:

- AWSC All way stop control (stop signs on each leg of the intersection)
- Signal Traditional Stoplight
- Stop Stop sign at one leg of the intersection
- **TWSC** Two way stop control (stop signs on two legs of the intersection)

A detailed analysis on the existing performance of the intersections was not conducted as part of this study.

| Intersection                          | Existing Control             |
|---------------------------------------|------------------------------|
| Kings Road / Garrity Blvd             | Signal                       |
| Kings Road / Airport Road             | Stop - East Leg Only         |
| Kings Road / Victory Road             | AWSC                         |
| 39th / Municipal Drive / Airport Road | TWSC - N/S                   |
| Happy Valley Road / Stamm Lane        | Signal                       |
| Happy Valley Road / Airport Road      | TWSC w Flashing Beacon - E/W |
| Happy Valley Road / Victory Road      | TWSC - E/W                   |
| Pit Lane / Stamm Lane                 | Stop - East Leg Only         |
| Pit Lane / Airport Road               | Stop - South Leg Only        |
| Pit Lane / Victory Road               | TWSC - N/S                   |
| Robinson Road / Stamm Lane            | Stop - West Leg Only         |
| Robinson Road / Airport Road          | TWSC - E/W                   |
| Robinson Road / Victory Road          | TWSC - E/W                   |
| McDermott Road / Airport Road         | Stop - West Leg Only         |
| McDermott Road / Overland Road        | Stop - East Leg Only         |
| McDermott Road / Victory Road         | TWSC - N/S                   |
| Black Cat Road / Overland Road        | Stop - West Leg Only         |
| Black Cat Road / Lamont Road          | Stop - East Leg Only         |
| Black Cat Road / Victory              | AWSC                         |
| Overland Road / Ten Mile Road         | Signal                       |

### Table 2-3. Intersections and Existing Control

### 5 What are the environmental constraints?

The project team conducted an "environmental scan" in order to document existing environmental resources that may affect the development of roadway alternatives. An environmental scan is a planning level review of the area, primarily through on-line data research and field reviews. No scientific or technical analysis was prepared; based on the research and site visits, significant environmental impacts are not anticipated. However, no new roadway alignment is constructed without some effect, and there are several areas where the built and natural environment would be impacted.

Potential environmental impacts include topography related to the excavation of existing gravel pits, potential historic resources (including the irrigation canals), residential, commercial, and industrial displacements, unknown fill materials located within and near the gravel pits, and permitting required for crossing irrigation canals.

Coordination with the Idaho State Historic Preservation Office (SHPO) and the US Fish and Wildlife Service is recommended when preliminary roadway design begins. This will be necessary to avoid possible impacts to historic resources and threatened and endangered species in the project area.

New impervious surface would be created by constructing the five mile long corridor, resulting in the need for additional storm water transmission and storage facilities.

In addition to local agency requirements, the project is anticipated to require two federal permits prior to beginning construction. As more than one acre of ground-disturbing activities will occur, a National Pollutant Discharge Elimination System Construction General Permit will be required. If placement of fill and/or excavation is required below the ordinary high water mark of any of the canals, a Joint Application for Permits will need to be completed and submitted to the Army Corps of Engineers. The full Environmental Scan can be found in Appendix C.

### What other environmental analysis could be conducted in the future?

If federal funds are planned to be used for design or construction, this project would be subject to further detailed environmental documentation and impact analysis in accordance with the National Environmental Policy Act.

Additional information on stormwater can be found in Chapter 5 and Appendix F.

# Chapter 3 Alternatives Evaluation & Screening

### 1 What alternatives were considered?

Several initial alignment alternatives were developed by the Technical Advisory Committee (TAC) based on input from stakeholders, guidance from the cities and highway districts, and professional planning and engineering staff on the design team. Originally, seven possible alternatives were identified: one no-build, one along Victory Road, three along Airport Road, and two along Stamm Lane.

The "no-build" alternative would simply mean not constructing a connection between the Ten Mile interchange and the Nampa Airport. Though a no-build option was not analyzed in this study, if federal funding is acquired for design and/or construction, environmental regulations would require fully analyzing a no-build scenario.

The Victory Road alternative followed existing Victory Road from Black Cat Road to west of Kings Road. West of Kings Road, capacity on the roadway decreases to the extent that it becomes constrained and no longer provides sufficient capacity.

Both the no-build and the Victory Road alternatives were considered early in the study process but were not pursued as viable connections as they do not meet the project purpose statement. For purposes of this study, the "nobuild" condition means not pursuing a new connection at this time. Because that option does not meet the Purpose Statement for the corridor, it was not selected as an alternative for evaluation. Therefore, a total of five alternatives were selected to move forward through a formal evaluation process. The alternatives generally followed either Stamm Lane (Alternative 1) or Airport Road (Alternative 2). As the alternatives made their way west to east, there were four potential routes (lettered A, B, C, and D). These lettered routes made use of existing roadways where appropriate and new roadway where existing roadways were inadequate or unavailable. Alternative 1 can be "paired" with Route A, making a single continuous alternative from Garrity Boulevard on the west to Ten Mile Road on the east. Alternative 2 could follow any of the routes A through D, for a total of four possible Airport Road alignment alternatives (Exhibit 3-1).

### 2 What evaluation criteria were developed?

Evaluation criteria developed for this corridor included eighteen criteria separated into two tiers:

Tier 1 criteria addressed the ability of each proposed alignment alternative to meet the purpose statement (see sidebar), focusing primarily on land use and transportation.

Tier 2 criteria assessed the ability of local agencies to implement the given route, including environmental impacts and overall cost.

#### **Project Purpose Statement**

- a) Connect on the west to an existing arterial with sufficient capacity;
- b) Integrate with a future SH-16/I-84/McDermott interchange;
- c) Serve as a detour four for I-84;
- d) Function as an urban principal arterial; and
- e) Consider short and long term land use impacts

#### Tier 1

### Land Use

- •Residential Property Impacts
- •Commercial / Industrial Property Impacts
- Agricultural Property Impacts
- Neighborhood Impacts
- •Accommodates Airport Expansion
- •Accommodates Local, Regional and State Planning
- Transportation
- Connectivity
- Mobility
- Traffic Operations
- •Serves as a Detour Route to I-84

#### Tier 2

- Environment
- •Cultural and Historic Resources
- Hazardous Materials
- Noise Impacts
- •Irrigation and Drainage Resource Impacts
- •Cost
- Required right-of-way
- Irrigation Crossings
- Business and Residential Relocations
- •Construction of Retaining Walls





### Land Use

Land use impacts were evaluated in six categories. Three addressed direct property impacts:

- *Residential Impacts* Number of residential units and acres impacted within the determined setback area.
- *Commercial and Industrial Impacts* Number of commercial and industrial units and acres impacted within the determined setback area.
- *Agricultural Impacts* Acres of agricultural land impacted within the determined setback area.

All property impacts were evaluated based on an established right-of-way width (60' in Canyon County and 75' in Ada County) and setback (70' from centerline in Canyon County and 25' from back of curb in Ada County). The setback area is defined at the City level, and is subject to change based on local agency policy. More detailed information on roadway widths is presented in Chapter 5.



Land use evaluation criteria addressed direct property impacts, such as agricultural land along the corridor.

### Exhibit 3-2 ROW and Setback



#### 3-6 Alternatives Evaluation & Screening

The final three land use criteria assessed each alternative's ability to accommodate existing and planned land uses:

- *Neighborhood Impacts* Impacts to existing and planned schools, access routes, and walkways.
- Accommodates Airport Expansion Ability of the alternative to accommodate future airport expansion, including runway extensions, runway protection zone (RPZ), and access to commercial properties.
- Accommodates Local, State, and Regional Planning Extent to which the alternative is consistent with plans adopted by potentially impacted agencies. This included planning documents from the city of Nampa, city of Meridian, Nampa Highway District No. 1, and the Idaho Transportation Department.

### Transportation

The transportation portion of the evaluation matrix was grouped into four elements:

- *Connectivity* How the alternative provides linkages and closes network gaps and how well it integrates with a future interchange near McDermott Road and I-84.
- *Mobility* How well the alternative functions as an urban principal arterial, including ability to implement appropriate access management.
- *Traffic Operations* How the alternative functions in terms of total volume and travel delay (the length of delay one experiences when driving a particular route).
- *Serves as a Detour Route to the Interstate* Ability for the alternative to serve as a detour route for I-84 in event of closure or incident.



One of the evaluation criteria addressed how the alternatives accommodate the future Nampa Municipal Airport expansion.



To evaluate Cultural and Historic Resources along the corridor, any structure adjacent to the proposed right-of-way appearing 50 years or older was photographed. The number of structures was compared for each of the alternative alternatives.

### Environment

Four environmental impact elements were identified, each addressing an environmental constraint likely to occur within the study area:

- *Cultural and Historic Resources* Number of structures adjacent to the future ROW appearing to be 50 years or older.
- *Hazardous Materials* Number of sites with potential hazardous material impacts, utilizing the database of the Environmental Protection Agency (EPA). In addition, recommendations of the TAC were used to identify other possible sites, including the gravel pits.
- *Noise Impacts* Number of structures between the proposed centerline and 80' on either side. The 80' was established based on previous projects, as that is where a 15dB change in noise was likely to occur.
- *Irrigation and Drainage Resources* –Number of irrigation and drainage canal crossings.

### Cost

Cost impacts were evaluated from four different perspectives:

- *Required Right-of-Way (ROW)* Required ROW (in acres) based on costs that ITD has experienced in recent acquisitions.
- *Construction of Irrigation Crossings* Two crossing options were evaluated a 48" pipe crossing and a box culvert depending on the size of the canal.
- *Business and Residential Relocations* Relocating any residences and commercial businesses identified in the Land Use section of the matrix.
- *Construction of Retaining Walls* Retaining walls required to maintain the ROW footprint over areas of significant topographic constraints (i.e. gravel pits).



The number of irrigation and drainage canal crossings for each alternative was used during the evaluation and screening process.



Gravel pits, such as the operation pictured above, provide significant topographic constraints for the ability to construct the chosen alternative.

In order to organize and document the evaluation criteria, the project team utilized a table that summarized each criterion, how it was measured, and how an individual rating was applied. This table is included in Appendix D.

### 3 How were the alternatives evaluated?

Each alternative was "judged" against the 18 evaluation criteria and given a rating of either low (green), medium (yellow), or high (red). In general, the lower the impacts caused by an alternative, the better the alternative was assumed to be. In other words, lower impacts mean lower cost or fewer impacts (and would therefore be given a "green" rating). Higher impacts (higher cost or higher impacts) were given a "red" rating. Moderate impacts were indicated in yellow.

This was summarized in a colored evaluation matrix (Exhibit 3-2). Quantitative data used to generate green, yellow, and red ratings can be found in Appendix D.

The tools, tables, and documents used in the evaluation process are included in Appendix D of this document.

### Exhibit 3-3 Evaluation Matrix

|               |  |  |  |                                | TI                                       | ER 1   |                        |                                |           |   | TIER 2   |  |                                 |  |                                 |   |  |                                    |  |
|---------------|--|--|--|--------------------------------|--|--|------------------------|--------------------------------|-----------|---|--|--|---------------------------------|--|---------------------------------|---|--|------------------------------------|--|
|               | Addresses Purpose Statement                      |  |  |                                |  |  |                        | Addresses Ability to Implement |           |   |  |  |                                 |  |                                 |   |  |                                    |  |
|               |  |  | Land   | Use                            | <b>I</b>                                 |  |                        | Transp                         | oortation |   | Environment Cost   |  |                                 |  |                                 |   |  |                                    |  |
|               | Residential Propert<br>Impacts<br>(e)<br># Acres | y Commercial &<br>Industrial Property<br>Impacts<br>(e)<br># Acres | Agricultural Property<br>Impacts<br>(e)<br>Acres | Neighborhood<br>Impacts<br>(e) | Accommodates<br>Airport Expansion<br>(e) | Accommodates<br>Local, Regional and<br>State Planning<br>(b) | Connectivity<br>(a, b) | Mobility<br>(d, e)             | (c)       | Serves as a Detour<br>Route to the<br>Interstate<br>(c) | Cultural and<br>Historical<br>Resources Impacts<br>(# of properties) | Hazardous<br>Materials Impacts (#<br>of sites) | Noise Impacts (# of properties) | Irrigation and<br>Drainage Resource<br>Impacts (# of<br>crossings) | Required Right-of-<br>Way (ROW) | Construction of<br>Irrigation Crossings | Business and<br>Residential<br>Relocations | Construction of<br>Retaining Walls |  |
| Alternative 1 |  |  |  |                                |  |  |                        |                                |           |   |  |  |                                 |  |                                 |   |  |                                    |  |
| Route A       |  |  |  |                                |  |  |                        |                                |           |   |  |  |                                 |  |                                 |   |  |                                    |  |
| Alternative 2 |  |  |  |                                |  |  |                        |                                |           |   |  |  |                                 |  |                                 |   |  |                                    |  |
| Route A       |  |  |  |                                |  |  |                        |                                |           |   |  |  |                                 |  |                                 |   |  |                                    |  |
| Route B       |  |  |  |                                |  |  |                        |                                |           |   |  |  |                                 |  |                                 |   |  |                                    |  |
| Route C       |  |  |  |                                |  |  |                        |                                |           |   |  |  |                                 |  |                                 |   |  |                                    |  |
| Route D       |  |  |  |                                |  |  |                        |                                |           |   |  |  |                                 |  |                                 |   |  |                                    |  |

### 4 Which alternatives were eliminated and why?

Alternatives 1A, 2A, 2B, 2C, and 2D were "screened" for performance following completion of the evaluation matrix. The screening process was comprised of three tiers. Tier 1 and Tier 2 screening addressed how well each alternative met the goals of the purpose statement. Tier 3 screening was based on recommendations of the TAC. Public input was incorporated at the Tier 1 and Tier 3 levels.

Results of the evaluation and screening process, supplemented by professional judgment of TAC members, led to the elimination of Alternatives 1A, 2A, and 2D from further consideration (see Exhibit 3-3).

### Exhibit 3-4 Alternatives Screening Process



Alternative 1A was removed from further analysis as a result of discussions with the City of Nampa and the Nampa Highway District No. 1, primarily due to the inability of the Stamm Lane / Garrity Road intersection to operate at an acceptable level of service by 2025 (well before the 2035 planning horizon).

Alternative 2A was also eliminated during the evaluation and screening process. This alternative had the least number of Tier 2 "green" ratings of the remaining alternatives, with a higher cost and greater environmental impact than the other alternatives.

Alternative 2D was also dropped during the screening process, as it had significantly higher property displacements, and higher costs. It was the farthest alternative from I-84, making it the least desirable detour route.

# 5 What alternatives remained after the initial screening process?

Following the three-tier screening process, Alternatives 2B and 2C both remained as viable options, with very similar impacts, rating similarly on many of the eighteen evaluation criteria. Therefore, the TAC was unable to determine a single recommended or preferred alternative based upon technical analysis alone.

To assist in their decision, the TAC solicited public comment, asking the public to state their preference at the March 16, 2011 public meeting. Fifty-six percent of the public who submitted comments preferred Alternative 2B.

The TAC also convened an expanded Policy Committee meeting on April 18, 2011, inviting all elected officials and agency staff, in order to get additional input on a preferred alternative. Subsequently, taking all data, evaluation criteria, public comments and Policy Committee discussion into account, on April 18, 2011, the TAC recommended Alternative 2B as the preferred alternative. Additional information on the TAC recommended alternative is provided in Chapter 5 of this document, "Preferred Alternative."

### **Chapter 4 Stakeholder Involvement**

# 1 Who was involved in making decisions during the study?

A Technical Advisory Committee (TAC) was created to engage affected agencies in the collaborative corridor study process. The TAC was comprised of staff members representing the City of Nampa, Nampa Municipal Airport, Nampa Highway District No. 1, Ada County Highway District, City of Meridian, Idaho Transportation Department and the project design team. The group met monthly throughout the 16-month study.

TAC members presented regular updates to their elected officials, boards and commissions throughout the study process. The purpose of these updates was to keep elected officials informed on the progress of the study, to advise them of public and stakeholder input, and to seek input on alignment alternatives.

Several elected officials also served on the project Policy Committee. This group provided high-level recommendations in areas for which good decisions could not be based solely on technical data. The Policy Committee met three times during the course of the study. Several levels of stakeholders were engaged throughout the project, including:

- Affected Agencies
- Elected Officials and Commissioners
- Area business owners
- Residential property owners
- Public service providers such as school districts and emergency response
- Irrigation Districts



Presentation of the corridor study at the April 2011 Policy Committee Meeting.

### 4-2 Stakeholder Involvement

# 2 What opportunities were provided for public input?

A variety of forums was employed to ensure all interested parties had an opportunity to be involved. Community outreach included individual stakeholder interviews and public information meetings. Stakeholder interviews and public meetings were held in two stages – once early in the study process and again as it neared completion when alignment alternatives were evaluated and screened. A publicly-noticed expanded policy meeting was also held after the evaluation and screening process to obtain elected official input on the alignments.

### **Stakeholder Interviews**

A first round of one-on-one stakeholder interviews was conducted in April 2010. Key stakeholders were identified by the TAC and included representatives from the City of Nampa, COMPASS, Hawkins Companies Commercial Development, Idaho Transportation Department, Nampa Highway District No. 1, Nampa School District, Nampa & Meridian Irrigation District, and property owners in the study area, including local businesses and residents.

The purpose of the interviews was to introduce stakeholders to the project, listen to their issues, concerns and thoughts about the project, and answer questions. Eight in-person interviews were conducted and two electronic questionnaires were submitted. These were informal interviews, but helped the project team gather insightful background information. Copies of stakeholder interview summaries are available in Appendix H.

Follow-up interviews were conducted with the same group in February 2011. In the course of the second interviews, the project team updated stakeholders on progress of the project, presented alignment alternatives, discussed the evaluation process and solicited input on the final recommended alternatives. The purpose of stakeholder interviews was to introduce the project, listen to issues, concerns and thoughts about the project, and answer their questions.



The April 2011 Policy Committee Meeting was publicly noticed and various property owners within the study area attended.

#### **Civic Stakeholder Coordination**

The Meridian and Nampa police and fire departments were interviewed during the course of the study. Both agencies supported improved connectivity such an alternative would provide. Nampa Fire Department specifically supported Alternative 2B.

### Public Information Meeting #1

The first public information meeting was held on October 14, 2010. The purpose of the meeting was to introduce the project, provide context for why the corridor is needed, present preliminary alignment alternatives, and display evaluation criteria. The study team used the public meeting as an opportunity to gather input on each of these elements.

The public was notified of the October meeting through press releases, direct mailings to over 7,800 homes within and surrounding the study area, two notices in the Idaho Statesman, two notices in the Idaho Press Tribune and sandwich boards at key intersections within the study area.

Over 100 people signed in at the meeting and 66 comment sheets were received:

- Approximately 62% of respondents supported making the new connection.
- Alternatives 1A, 2B, and 2C were equally favored of the five preliminary alternatives presented (1A, 2A, 2B, 2C and 2D).
- Top three criteria voted most important were impacts to surrounding neighborhoods, impacts to property, and overall cost to construct. These three categories were subsequently used by the TAC as a basis for evaluating and screening alternatives.

### Public Information Meeting #2

A second public meeting was held on March 16, 2011. The purpose of the meeting was to present results from the screening process and technical analysis, obtain additional feedback on the overall process, and solicit specific feedback on the remaining two alternatives – 2B and 2C.

The second public information meeting was noticed in the same way as the first, with individual meeting announcements mailed to over 7,800 properties, two notices in the Idaho Statesman, two notices in the Idaho Press Tribune, and sandwich boards at key intersections within the study area. Over 100 people signed in at the first meeting, and 66 comment sheets were received. Of the comments received, approximately 62% supported making the new connection.

The information from both Public Information Meetings, including the mailers, sign-in sheets, comment forms, and meeting display boards are included in Appendix H.

Over 80 people signed in at the second meeting, and 56 comment sheets were received. Of the comments received, approximately 56% preferred Alternative 2B.

### 4-4 Stakeholder Involvement

At the second meeting, 82 attendees signed in and 56 written comments were received. General comments submitted at the meeting included:

- 2B appears to be more direct with less turns and curves
- 2B appears to have fewer residential impacts
- 2B appears to impact mostly farm ground
- 2C appears to be the least impact on farmland and residential dwellings
- Should consider allowing expansion to four lanes
- Widening Victory seems like a better idea

In addition to the general comments, 56% of the attendees preferred Alternative 2B over Alternative 2C.

### **Policy Meeting**

A multi-agency, publicly-noticed Policy Committee meeting was held on April 18, 2011 in the Meridian City Hall. This meeting was attended by elected officials and senior staff from the Cities of Nampa and Meridian, Nampa Highway District No. 1, Ada County Highway District and the Board of Canyon County Commissioners. A formal presentation provided attendees with project history, current status, public meeting summaries, and input on Alternatives 2B and 2C.

Policy meeting attendees generally supported both alternatives, but did not select a preferred alternative, and no vote was taken. The policy group indicated support for the alternative that was the least expensive, straightest, and had the least impacts.

The TAC utilized input from the Policy Committee, public comment, and preliminary screening to recommend Alternative 2B as the preferred alternative.



The policy meeting conducted in April 2011 was attended by representatives from the impacted agencies: City of Nampa, Nampa Highway District No. 1, City of Meridian, and Ada County Highway District.

### **Chapter 5 Preferred Alternative**

### 1 What is the preferred alternative?

Alternative 2B was recommended by the TAC as the preferred alternative. The route is approximately five miles long, connecting the Ten Mile/Overland intersection on the east to the Airport/Garrity intersection on the west. The corridor will create four new intersections as it traverses east-west: at Black Cat Road, McDermott Road, Robinson Road, and Happy Valley Road. The new roadway will likely be posted at 45 mph, and is anticipated to carry up to 28,000 vehicles per day by 2035.

Alternative 2B was refined to avoid property impacts and reduce costs at the east end of the corridor through the Busy Bee Gravel Pit at Black Cat Road and Lamont Road. The modified alternative avoids impacting the commercial structure west of Black Cat Road. Reclamation of the gravel pit is assumed to be complete by the time the alternative is constructed, and the pit filled with materials suitable for a roadway base.



Exhibit 5-2 graphically depicts the five-mile long Alternative 2B alignment.

Alternative 2B was slightly modified (to the north) to avoid the structure west of Black Cat Road.

5-2 Preferred Alternative

# 2 What level of traffic is the new corridor anticipated to carry?

2035 regional traffic forecast modeling was based upon adopted agency plans, and conducted jointly by COMPASS and ACHD. Results indicated by 2035 traffic volumes along the corridor could range from 19,000 to 28,000 vehicles per day (Figure 5-1).

Traffic projections indicate a 3-lane facility will be sufficient for the corridor, as long as access is well controlled. However, changes to land use designations in agency Comprehensive Plans may affect future traffic volumes. The traffic analysis should be revisited as those plans are revised and new updates are adopted. Although future traffic volume forecasts may change, the centerline of the preferred alternative should not.

Exhibit 5-1 2035 Projected Traffic Volumes (vehicles per day)

 19,300
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800
 21,800<

The Traffic Analysis is included as Appendix B.













### 3 How wide will the roadway be?

The alternative is planned to be classified as an arterial roadway in both Ada and Canyon Counties. However, the roadway itself (total width, number of travel lanes, bike lanes, and sidewalks) will differ to accommodate roadway standards for each county and anticipated traffic volumes.

The proposed right-of-way (ROW) width is 60 feet in Canyon County, and between 63 and 75 feet in Ada County. Land use decisions will determine appearance (width) of roadside features in Ada County. Final ROW width will be determined at that time. Proposed ROW widths will accommodate up to four lanes in Canyon County, and three lanes in Ada County (Exhibit 5-3).

The roadway will have continuous sidewalks along both sides. Roadside bike lanes are planned between Ten Mile and McDermott Roads. Because the Canyon County section of the corridor is so developed, bike lanes were not included to avoid increasing property impacts. However, the City of Nampa is in the process of finalizing their bicycle and pedestrian plan. The plan will address parallel bike routes that do not use principal arterials.



Roadside bike lanes are planned for the Ada County portion of the corridor. Due to space constraints, bike lanes are not planned west of McDermott Road.



Exhibit 5-3 Three-Lane Roadway Section

\*Width dependent upon agreements with local agencies

5-10 Preferred Alternative

### 4 Could the roadway be wider in the future?

Current land use designations and projected traffic volumes indicate a three-lane facility will be sufficient. However, if land use designations change and additional traffic is anticipated, a larger facility may be necessary. Adjusting the roadway width will not adjust the route itself, but could have increased impacts on adjacent properties.

In Canyon County, between Kings Road and Robinson Road, Airport Road is highly developed by residential uses and the City of Nampa has determined that the 60-foot right-of-way (ROW) could be re-striped to accommodate four travel lanes. This adjustment would create no additional impacts to adjacent properties as the roadway width would not change (Exhibit 5-4).

A five-lane roadway in Ada County would require additional ROW. The additional impacts associated with the wider section are not significant and summarized in Exhibit 5-5.



### Exhibit 5-4 Expanded Roadway Section

\*Width dependent upon agreements with local agencies

### Exhibit 5-5 Expanded Section Impact Analysis

|                         | ADA COUNTY |                    |                   |  |  |  |
|-------------------------|------------|--------------------|-------------------|--|--|--|
|                         |            | Three Lane Section | Five Lane Section |  |  |  |
|                         |            | 75' ROW            | 100' ROW          |  |  |  |
| Residential             | Units      | 2                  | 4                 |  |  |  |
| Commercial / Industrial | Units      | 1                  | 2                 |  |  |  |
| Agricultural            | Acres      | 18.5               | 24.5              |  |  |  |

|                         | CA    | NYON COUNTY        |  |
|-------------------------|-------|--------------------|--|
|                         |       | Three Lane Section | Four Lane Section  |
|                         |       | 60' ROW            | 60' ROW  |
| Residential             | Units | 8                  | The 60' ROW analyzed for the 3 lane                                    |
| Commercial / Industrial | Units | 6                  | section can be re-striped to   |
| Agricultural            | Acres | 0                  | accommodate a 4 lane section.<br>Therefore, the impacts do not change. |

|                         | CORRIDOR WIDE |                    |                   |  |  |  |
|-------------------------|---------------|--------------------|-------------------|--|--|--|
|                         |               | Three Lane Section | Five Lane Section |  |  |  |
| Residential             | Units         | 10                 | 12                |  |  |  |
| Commercial / Industrial | Units         | 7                  | 8                 |  |  |  |
| Agricultural            | Acres         | 18.5               | 24.5              |  |  |  |

Impacts are based upon existing GIS and aerial mapping, as well as CAD calculations.

### 5 How will the alignment be preserved?

The objective of this study was to determine a preferred alternative route to improve connectivity between the Nampa Airport and Ten Mile Road. To document the preferred alternative, and help plan for the future roadway as development occurs, a roadway centerline was established (Appendix I).

Should agencies determine the need to preserve additional right-of-way to accommodate the wider section, the centerline would stay as located, and the ROW width adjusted accordingly. However, since the roadway is planned to be constructed as development occurs, the centerline location may be slightly modified to accommodate development proposals as long as the mobility needs of the corridor are not compromised.

### 6 How will access be managed?

Access management along the corridor will be implemented as development occurs. This study identifies full access at the one-mile intersections but does not recommend any other strategy for managing existing or future access points. Existing access points along the corridor may be relocated and/or restricted in the future as land uses change or as development occurs. It will be left up to the approving agency's discretion and development policies to determine future access along the corridor.

### 7 What would the intersections look like?

Traffic was evaluated at six intersections along the corridor (Kings Road, Happy Valley Road, Robinson Road, McDermott Road, Black Cat Road, and Ten Mile Road). The configuration at the Airport Road / Kings Road intersection is addressed in a separate document, *Nampa Municipal Airport RPZ Shift Impact Analysis*. At each of the other five intersections, both traffic signals and roundabouts were considered.

Based upon the traffic analysis and agency input, signalized intersections are recommended at the east and west termini (Ten Mile Road and Kings Road). An existing signal is located at Ten Mile Road; it was recently constructed as part of the Ten Mile Interchange project. Roundabouts are recommended at Happy Valley Road, Robinson Road, McDermott Road, and Black Cat Road. Exhibit 5-6 displays the proposed intersections along the corridor.

It is important to note that the traffic analysis results provided the appropriate lane geometry for each intersection. It is likely that road widening would be necessary to accommodate the traffic signals/roundabouts at the intersections. However, specific impacts associated with intersection widening will not be addressed as part of this study. During final design, intersection geometry and associated impacts will be determined and any additional property impacts will be mitigated at that time.

#### What is Access Management?

Access management involves limiting the number of direct access points, like driveways and other roadways. In general, the more control there is on the number and types of accesses, the safer and more efficiently a corridor operates. Access can be controlled with medians and other physical barriers, and through land use permitting as new developments are proposed.

Because of the specific implications of FAA guidelines at the Nampa Airport, the configuration at the Airport Road / Kings Road intersection is addressed in a separate document, *Nampa Municipal Airport RPZ Shift Impact Analysis*.





INTERSECTION DELAY\* PM PEAK=LOS E PM PEAK=69.8 SEC \*ACHD TRAFFIC PROJECTIONS  $\uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow$ INTERSECTION DELAY PM PEAK=LOS B PM PEAK=13.3 SEC 44

### 8 How is stormwater being addressed?

The future corridor will be an urban roadway with enclosed stormwater drainage. Because this is different than the existing drainage facilities in the area, a conceptual drainage report was prepared to identify general pipe size and possible retention pond locations.

Eight retention basins were located along the corridor, based upon soil conditions and responsible agency requirements. Placement of retention basins is based on low points in the vertical alignment, canal crossings, major street crossings, and availability of land to construct a retention basin.

One infiltration seepage bed was identified at the Nampa Municipal Airport. A seepage bed is preferred over a retention basin near the airport to prevent standing water (and therefore control bird populations near the runway).

A stormwater trunk line, which ranges from 12" to 18" to 24" as it runs along the corridor, was conceptually designed in accordance with ACHD and City of Nampa Guidelines, and will be located in the roadway ROW, within the agencies' utility corridors. The concept drainage layout is shown in Figure 5-6 and depicts the pipe size, retention basin locations and identifies the infiltration seepage bed.

# 9 Are there any unique physical characteristics along the alternative?

There are several significant features within the study area that will impact design of the roadway. These include irrigation canals, topography, agriculture, and the Nampa Municipal Airport.

### **Irrigation Canals**

Alternative 2B crosses four irrigation/drainage resources. Structures anticipated for the crossings, and used in the Opinion of Probable Costs, were a combination of two minor 48" pipe crossings and two box culvert crossings. The crossing structure was dependent on the size of the canal or lateral. The Concept Drainage Technical Memorandum is located in Appendix G.



Alternative 2B will cross four irrigation canals.

### Topography

Alternative 2B traverses the Busy Bee Gravel Pit east of Black Cat Road. For purposes of constructing the road in this location, the pit is assumed to be back-filled to an appropriate grade and with materials suitable for a roadway base. Costs to reclaim the pit to grade would be borne by the land owner.

### Agriculture

The new roadway will cross existing irrigated farmland between McDermott Road and Ten Mile Road. However, the roadway is not proposed for construction until these properties re-develop. At that time, the land is assumed to be in non-farm use and would be served by city water facilities.

### Nampa Municipal Airport

The Nampa Municipal Airport is located at the west end of the corridor and significantly impacts how the corridor intersects with Garrity Boulevard and/or Kings Road. There are unique roadway and intersection design considerations near the Airport, due to FAA regulations. One regulation for development near an airport addresses impacts to the Airport's Runway Protection Zone (RPZ). Anything located within an RPZ must meet specific height restrictions. For the Airport / Overland Road corridor, the RPZ affects items such as light poles and traffic signals at Airport Road / Kings Road / Garrity Boulevard intersection.

The Nampa Municipal Airport is in the process of adopting an Airport Master Plan Update. The Nampa Municipal Airport is interested in looking at impacts associated with shifting the existing runway and RPZ approximately 1,200 feet southeast. A shift to the southeast would also shift the RPZ away from the Airport Road / Kings Road / Garrity Boulevard intersection which will need to be improved based on increased traffic volumes created by a direct connection to Ten Mile Road.

An analysis of the impacts of a runway shift is documented in the *Nampa Municipal Airport RPZ Shift Impact Analysis*, which will be available on the City of Nampa's website.



Existing irrigation facilities will likely transition to City water facilities as properties develop from current agriculture uses to non-farm activities.

### What is a Runway Protection Zone (RPZ)?

The RPZ is an area off the end of the runway set aside to enhance the protection of people and property on the ground. Trapezoidal in shape, overall dimensions of the RPZ are determined by runway approach type and aircraft approach speed. Airport Planning Guidelines require 15 feet of clearance above a public roadway to safely accommodate vehicles without interfering with the aircraft approach surface.

Exhibit 5-7 Concept Drainage (Section 1 of 3)





Exhibit 5-7 Concept Drainage (Section 2 of 3)





### 10 How much could the new roadway cost?

An Opinion of Probable Cost was prepared for Alternative 2B, and accounts for costs associated with the engineering, design, and construction of the roadway, including drainage infrastructure. The opinion does not include any costs for ROW acquisition, as construction is planned as development occurs. The planning-level opinion of costs will be updated as agencies move into ROW acquisition, preliminary and final design, and construction.

Based on the high-level analysis used in an opinion of cost, construction of the five mile Airport Road / Overland Road Corridor could range from \$14 - \$17 million dollars. All costs are shown in 2011 construction dollars. Construction costs are assumed to be primarily, if not all, developer borne when development occurs.

### Exhibit 5-8 Opinion of Probable Cost

|                                       | ITEM         |   |              |  |  |  |  |
|---------------------------------------|--------------|---|--------------|--|--|--|--|
| ITEM DES CRIPTION                     | TOTAL RANGE  |   |              |  |  |  |  |
| EXCAVATION                            | \$330,000    | - | \$382,000    |  |  |  |  |
| STANDARD 6" VERTICAL CURB AND GUTTER  | \$503,000    | - | \$582,000    |  |  |  |  |
| 6" MINUS UNCRUSHED AGGREGATE BASE     | \$827,000    | - | \$957,000    |  |  |  |  |
| CRUSHED A GGREGATE FOR BASE TYPE I    | \$703,000    | - | \$814,000    |  |  |  |  |
| PLANT MIX PAVEMENT                    | \$1,797,000  | - | \$2,081,000  |  |  |  |  |
| CONCRETE SIDEWALK                     | \$699,000    | - | \$809,000    |  |  |  |  |
| PLANTER                               | \$55,000     | - | \$63,000     |  |  |  |  |
| MINOR IRRIGATION CROSSINGS (48" pipe) | \$59,000     | - | \$68,000     |  |  |  |  |
| BOX CULVERT REPLACEMENTS              | \$399,000    | - | \$462,000    |  |  |  |  |
| IRRIGATION EXCAVATION (REALIGN CANAL) | \$2,000      | - | \$2,000      |  |  |  |  |
| DRAINAGE BASINS                       | \$60,000     | - | \$69,000     |  |  |  |  |
| STORMWATER PIPE (12")                 | \$706,000    | - | \$817,000    |  |  |  |  |
| STORMWATER PIPE (18")                 | \$760,000    | - | \$880,000    |  |  |  |  |
| CATCH BASIN INLETS                    | \$99,000     | - | \$115,000    |  |  |  |  |
| SWPPP                                 | \$333,000    | - | \$446,000    |  |  |  |  |
| REMOVALS                              | \$349,000    | - | \$471,000    |  |  |  |  |
| TRAFFIC CONTROL                       | \$365,000    | - | \$496,000    |  |  |  |  |
| ROADWAY TRAFFIC ITEMS                 | \$153,000    | - | \$210,000    |  |  |  |  |
| MISCELLANEOUS                         | \$390,000    | - | \$535,000    |  |  |  |  |
| CONTINGENCY                           | \$2,040,000  | - | \$2,822,000  |  |  |  |  |
| MOBILIZATION                          | \$1,010,000  | - | \$1,439,000  |  |  |  |  |
| SUBTOTAL                              | \$11,639,000 | - | \$14,520,000 |  |  |  |  |
| ENGINEERING                           | \$2,328,000  | - | \$2,904,000  |  |  |  |  |
|                                       | \$13,967,000 | - | \$17,424,000 |  |  |  |  |

### How will the roadway be funded?

The roadway will be constructed as adjoining properties develop and as funding becomes available. By identifying an alignment now, ROW can be preserved as development occurs.

However, local funding may be used to fill in gaps between developments to ensure a continuous route is built.

### **Chapter 6 Implementation**

### 1 What are the next steps?

Through the Corridor Study process, several possible alignment options were reviewed, a preferred alternative was selected, and a centerline was established. Participating agencies will request the completed Corridor Plan be adopted by their respective elected officials, boards, and commissions. Formal adoption of the plan allows the agencies to evaluate future development for consistency with the preferred alternative.

### 2 What is the proposed alignment?

A roadway centerline, generally following Alternative 2B, was defined and documented in a metes and bounds legal description. The complete legal description is included in Appendix I.

### 3 When will the roadway be constructed?

The proposed corridor is anticipated to be constructed as adjoining properties develop, and funding becomes available. Although no money is currently dedicated to constructing the corridor, selection of a preferred alternative now is necessary in order to establish a centerline and begin to preserve right-ofway as development occurs.

### 4 How will the Corridor Plan be implemented?

The Plan will be implemented during the land use approval process as development applications are received by the impacted agencies. Canyon County and Ada County have

### 6-2 Implementation

different ways to achieve implementation, and are described below.

### **Canyon County**

Nampa Highway District No. 1 and City of Nampa will continue to work collaboratively to achieve the intended outcomes of the plan. Together, NHD1 and City of Nampa will request application of Canyon County Ordinance 07-10-21 to prepare for declared future ROW. A ROW width of 70' from centerline will apply to the portion of the centerline alignment west of Robinson Road per section 1.A.4. East of Robinson Road, section 1.A.5 will apply and overlay 130' from proposed centerline.

Right-of-way acquisition will be determined as development occurs. NHD1 and City of Nampa will make decisions specific to each particular development in terms of precise location and width.

### Ada County

ACHD and the City of Meridian recognize that a plan is never finished; continual assessment of the area around the Airport Road/Overland Road alignment is necessary to ensure that the goals of the plan remain valid and the purpose for the corridor is achieved. Going forward, the ability for implementing agencies to be adaptive to change is required so that the intended outcome of the plan – an arterial connection between the Nampa Airport and Ten Mile Road - is realized.

The first implementation steps of the plan will be carried out concurrently with the planning of the Southwest Meridian area, which is anticipated to contain some modified future land use designations and a detailed roadway network. Many improvements, including construction of the subject corridor, will be realized by means of development project(s). Because corridor construction is based on new development, a strong coordinating and communication effort between Meridian and ACHD, and the private sector, is vital.

Through their respective Planning and Development divisions, ACHD and the City of Meridian will maintain an effective relationship and a consistent focus to achieve the intended outcomes of the plan. To this end, together ACHD and the City will:

- Be available to discuss projected outcomes relative to any suggested/proposed land use or roadway modifications to the adopted plan;
- Will review proposed development in the subject area for conformance with the adopted plan;
- Maintain communications with land users, property owners, government, non-governmental organizations, and developers participating in or affected by the plan;
- Work with existing property owners to monitor traffic volumes in this area; includes potential installation of traffic mitigation measures that may be warranted on Lamont Road and other existing roadways;
- Assist in coordinating activities to implement the plan, and to aid in more detailed land, transportation and infrastructure planning of the area, to ensure that the goals of the plan are correctly understood and put into practice;
- Assist in strengthening cooperation by informing and educating the public and partners in order to maintain an informed opinion of the plan and to advise decisionmakers on the range of options and the consequences of decisions;
- Coordinate with Ada County on development review and implementation of the plan outside of City limits;
- Jointly create a protocol to maintain a standard development review procedure specific to this plan.
   Protocol items requiring additional agency coordination include: increased communication before and during development review; joint use and updating of GIS layers including the Master Street Map; consistency in conditions of approval for projects in the study area;

### 6-4 Implementation

defining reasonable temporary roadway termini during incremental development; procedure to address separated roadway segments and ways to potentially infill gaps; avoidance of land-locked properties; phasing of segments; procedure to require dedication and construction of roadway through development review and approval; and,

• Jointly explore alternative funding sources to have in place a remedy for shortfalls that may occur to be able to maintain the integrity (function) of the roadway.

In their own capacities, each entity will have separate efforts that will forward the expected goals and outcomes of the plan:

### ACHD will:

- Continue to monitor traffic data for impacts in the area, particularly on Lamont Road, and implement traffic mitigation measures as deemed necessary; and,
- Maintain the Master Street Map to delineate the adopted alignment and update roadway details as development or planning changes occur.

### Meridian will:

- Adopt the study by reference in the City's Comprehensive Plan; and,
- Make appropriate amendments to city code to ensure consistent development of the roadway and intended outcomes.

The responsibility for putting the plan into effect rests with agency staff, decision-makers, and the property owners and developers in the area working together.