City of Middleton
Transportation Plan
November 2016

T-O ENGINEERS

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Chapter 1 - Introduction

The City of Middleton (City) is located in northeast Canyon County, Idaho. The 2010 U.S. Census estimated the population of Middleton to be 5,524 people. Currently, the City of Middleton ranks 29th in population in the State of Idaho and is similar in size to the neighboring communities of Emmett and Star.

The regional transportation network serving the City of Middleton is primarily State Highway 44 (SH-44), an east-west route that connects the cities of Boise/Eagle/Star to the east and Caldwell to the west. The primary north-south route connecting Middleton to Nampa is Middleton Road. Emmett Road connects Middleton and the City of Emmett, and is a major route for agricultural products between the Emmett Valley and Canyon County. Old Highway 30 runs through the eastern portion of the City of Middleton's impact area and connects northern Canyon County to the City of Caldwell. This roadway functioning as a frontage road to Interstate 84 and in doing so always has the potential to become an emergency detour for interstate traffic.

The City of Middleton and the surrounding areas of impact are served by three roadway maintenance jurisdictions: Middleton City Public Works Department, Canyon Highway District No.4 (CHD4), and the Idaho Transportation Department (ITD).

Reason for the Plan

The reason and primary focus of the City of Middleton Transportation Plan is to examine the transportation needs through the year 2035 and to lay out a course of action to improve the transportation system to meet anticipated needs and growth. This plan defines both short and long term transportation strategies and investments to improve the area's transportation system and discusses how to finance transportation improvements.

The Transportation Plan is intended to be a living document that the City of Middleton can use to continually identify and prioritize transportation deficiencies within and around the City. It is used to help the City track and maintain their current and future transportation infrastructure improvements.

Introduction to Transportation Planning

The purpose and scope of a Transportation Plan varies significantly based on the study area, study participants, and the goals of the study. The study area of a Transportation Plan is often determined by the jurisdictional boundaries and/or areas of impact of participants. These boundaries typically establish the geographic limits for data collection, transportation system evaluation, and future projections for transportation needs. The types of transportation facilities within the study area also influence the purpose and scope of a Transportation Plan. Large cities with several modes of transportation (light rail, public transit, commuter ride programs, and private vehicles) may require extensive data collection to establish traffic patterns and ultimately generate a detailed traffic model for use in traffic management. However, a Transportation Plan for small rural communities may be geared more toward roadway system management to accommodate existing traffic and future traffic volume increases.

Study Area and Participants

The study area for the City of Middleton Transportation Plan is, for the most part, a low traffic volume, rural roadway system, with a few notable exceptions. This study area lends itself to a Transportation Plan that focuses primarily on roadway system management, implementation of a project priority list, and the development of a Capital Improvement Plan (CIP) that maintains the existing transportation infrastructure and accommodates for future transportation needs within the study limits.

The City of Middleton Transportation Plan study area includes transportation routes within the area of impact for the City of Middleton. The study area covers approximately 32 square miles containing approximately 117 miles of roadway under the jurisdictions of the City of Middleton, Canyon Highway District No.4, and Idaho Transportation Department.

Population

Historic and forecasted populations for City of Middleton are shown in the following two Figures. Based on the annual growth dynamic from 1990 to 2010 (5.6% annually) and from 2010 to 2014 (3.8% annually). No reason has been identified to expect any significant change in population growth trends, so these projections are considered realistic long-range projections for Middleton as shown if Figure 1. Figure 2 shows the breakdown of the population by age.

Using data from the United States Census Bureau the following two figures were created.

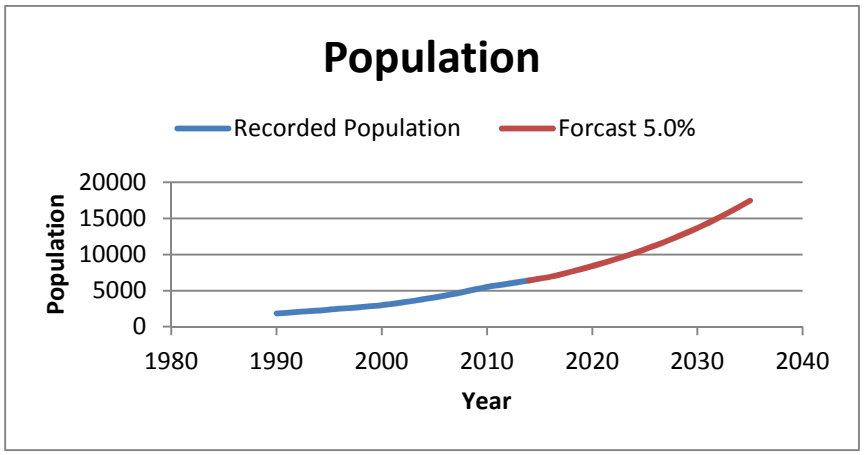

Figure 1: City of Middleton Population

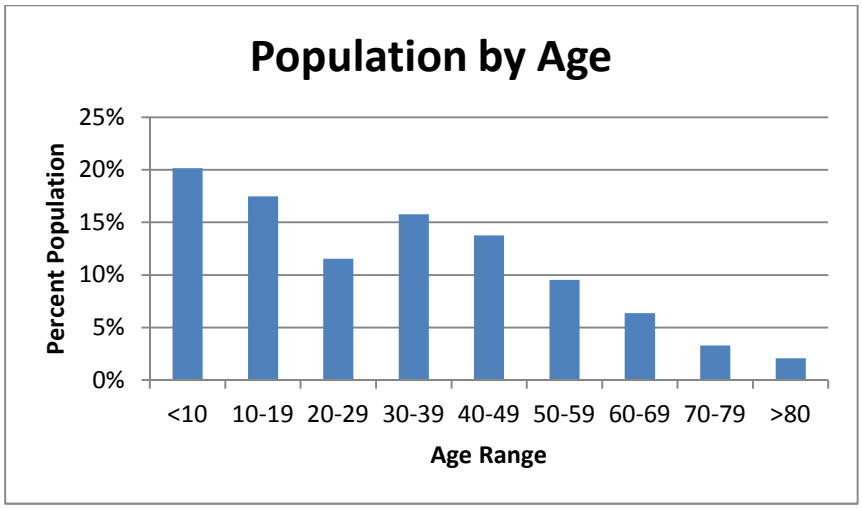

Figure 2: City of Middleton Population Age Distribution 2014

As shown in Figure 2, the population of Middleton is fairly uniform and has a slightly higher percentage of the population younger than 20 and a slightly lower percentage of people in their 20's. This puts the median age at 30 for the population of Middleton, a lower age then the State of Idaho at 35 years, and 37 years for the United States.

Related Documents

This Transportation Plan addresses the local transportation needs in the City of Middleton. Several other related documents also address transportation issues within the study area. These documents were utilized to various extents during the planning process to ensure that the Transportation Plan is consistent with other transportation policies and plans already in effect. The following list of documents was consulted during the development of this plan:

- Communities in Motion 2040 (COMPASS - July 2014)
- Middleton Comprehensive Plan (City of Middleton - December 2009)
- Middleton Connects Plan (City of Middleton - January 2016)
- City of Middleton Master Transportation Plan (Holladay Engineering - September 2007)
- Pavement Management Plan (Keller Associates - December 2013)

Goals of the Transportation Plan

Goal 1 – is to determine the City's transportation system deficiencies, both current and projected, and identify the necessary improvements to the existing transportation system through the collection of data pertaining to the transportation network. Data collection required includes; roadway system inventory (road surface type, road surface condition, etc.), traffic volume data, bridge and culvert inventory, and an inventory of traffic generators within the study area.

Goal 2 –is developing a Roadway Surface Management Program and an Asset Management System. Within the study area, roadway surface types include; gravel roads, Bituminous Surface Treated (BST) roads, and cold-mix or hot-mix asphalt roads. With varying traffic volumes and traffic types (passenger vehicles, farm equipment, commercial trucks, etc.), each

roadway surface type requires different maintenance methods and effort based on functional classification and traffic loading.

Goal 3 –is to prioritize the required improvements, from the above goals, and then identify potential funding sources for the maintenance and capital improvement projects identified.

Plan Development

Development of this Transportation Plan began with the original City of Middleton Comprehensive Plan date July 21, 2004. This Comprehensive Plan set forth guide lines for a transportation plan. The Comprehensive Plan has been updated and maintained by the City of Middleton with the latest update occurring on September 21, 2016. The original City of Middleton Transportation Master Plan was complete in September 2007. This Transportation Plan updates the original Transportation Plan and establishes a course of action for future growth.

Existing Conditions

Transportation in Middleton is primarily centered on the City's surrounding resource mining, residents, local businesses, and agriculture. The highway and local road network is intended to provide access for the daily operations of the region's economy and residents.

Current Land Usage

Land use within the city limits of Middleton can be broken into four major categories: residential, parks and public facilities, commercial, and industrial. Table 1 shows the percentage of land use in Middleton in each of those four categories. The majority of the land within City limits is used for residential purposes.

Table 1: Land Use within the City of Middleton

Land Use	
Residential	75%
Commercial	9%
Parks and Public Facilities	14%
Industrial	2%

The County's Comprehensive Plan encourages protection of prime agricultural lands for the production of food and supports Idaho's "Right to Farm" law. The City of Middleton has an agreement in place with Canyon County for land use decisions within the area of impact boundary shown in the Comprehensive Plan.

The City and its surrounding area is prime real estate for growth and development, some of this real estate is being converted from agriculture to development. The City's Comprehensive Plan encourages residential development from low densities to high densities near downtown, mixed use land development, and industrial and commercial developments. The City of Middleton is planning for growth management as an orderly, logical expansion of the City's services.

Roadway System

The responsibility for maintenance, operational improvements and capacity expansion of local roadways resides with Canyon County Highway District No.4 and the City of Middleton. Two types of roadways exist: public roadways that are publicly owned and maintained and private roadways that are privately owned and maintained. The City of Middleton is to perform all public road responsibilities within their City limits. Canyon County Highway District No.4 performs all public road responsibilities within their jurisdictional boundaries. Table 2 shows the breakdown of road mileage for each local jurisdiction by surface type within the City of Middleton impact area.

Table 2: Road Miles within the Area of Impact

Jurisdiction	Improved & Paved (miles)	Improved Gravel (miles)	Total Miles
City of Middleton	48.47	0.36	48.83
CHD4	63.72	0.39	64.11
ITD	7.83	0	7.83

Existing System Data

Many local roadways in Canyon County were developed for residential traffic and farm equipment. These roads are now experiencing the stresses of increased loads from population growth, concrete and gravel trucks, and heavier machinery. Substandard pavement conditions, narrow roads, limited rights-of-way, uncontrolled intersections and poor intersection geometry result in an existing system that will not meet future travel needs.

Existing transportation system information collected within the study area includes:

- Inventory of the existing roadway, specifically:
  - Surface types
  - Surface widths
- Collection of traffic volumes at key locations along with bridge and culvert inventory within the study area
- Identification of existing and potential traffic generators within the study area
- Pavement Condition Inventory(PCI)

This existing transportation system information was collected from ITD, Local Highway Technical Assistance Council (LHTAC), Canyon County, CHD4, Hughes Engineering, traffic counts, and meetings with local officials.

Data collected for the existing roadway transportation network was used to evaluate the existing conditions, establish functional classifications, develop roadway section design standards, and analyze maintenance recommendations.

The City of Middleton has developed a roadway surface type map with functional classifications, based on the definitions established by the American Association of State Highway and Transportation Officials (AASHTO), a Policy on Geometric Design of Highways and Streets and by the AASHTO, Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400). The functional classification of the roads includes principal and minor arterials, major

collectors, and local roads. These classifications are further explained in Chapter 2 of this Transportation Plan.

Public Transit and Pedestrian Pathway

The City of Middleton is an active member of Valley Regional Transit, the regional public transportation authority of Ada and Canyon counties. The City encourages public transit to help reduce vehicular traffic and provide transportation access to jobs and services for all residents and employees, including the young, elderly, physically challenged, and those who do not have access to a private vehicle.

The City also encourages safe pedestrian and bicycle travel by promoting sidewalks and pathways, especially around schools, parks, and downtown. The City has adopted a parks, pathways, and greenbelt plan in the Comprehensive Plan. This plan helps the City achieve goals and objects in developing a safe pedestrian and bicycle travel system. The latest edition of this plan can be found in Appendix E.

Plan Elements

The primary goals of the Transportation Plan are to maintain the current transportation system, improve operations, and make the system more efficient. Thus, the Transportation Plan includes the following elements.

Transportation Projects

Provide a transportation system that focuses on meeting operational and maintenance needs, and provides for mobility by including alternative transportation. The Transportation Plan meets these needs by identifying a list of transportation projects including; committed projects, needs assessment, and major capital investments.

Financial Enhancement

Develop a financial strategy to allow local officials to pursue funding remedies to meet the needs identified in the plan.

Work cooperatively with local governments, the Idaho Transportation Department, state legislators, business leaders, and residents to identify and implement enhanced revenue sources based on community values and priorities.

Chapter 2 - Transportation Plan Elements

Traffic Count Data

Traffic volumes on key roads were collected in 2015. Class counters were used to collect the traffic volume data, they group vehicles based on the number of axles and vehicle configuration into different classes. This allows for a more accurate count, especially on roads with a significant amount of truck traffic.

The goal of the traffic volume data collection is to determine Average Daily Traffic (ADT) volumes at key locations in the study area. The traffic counters recorded information for different lengths of time at different locations.

This data was used to evaluate the existing transportation system within the study area. Traffic volumes are also used to understand travel behavior and patterns, providing information for decision-makers for current and future planning of the transportation system. See page 8 for a map showing roadway use by ADT. A traffic generator map for the City of Middleton is on page 9. Table 3 on the following page shows the traffic volumes at several locations along with the projected traffic counts, based on the five percent population growth mentioned earlier in Chapter 1, over the next 20 years within the City of Middleton.

Table 3: Average Daily Traffic on City Streets

Street Name	Location	ADT 2015	ADT 2035	% Trucks
Cemetery Rd.	Between Main St. & Concord St.	2,804	7,439	1.8
Concord St.	Between Cemetery Rd. & Hawthorn Dr.	131	347	5.7
Hawthorne Dr.	Between Main St. & Minot St.	1,623	4,306	1.6
N Middleton Rd.	Between Main St. & Valley St.	653	1,732	Unknown
S Middleton Rd.	Between Idaho St. & Boise St.	10,185	27,023	4.2

ADT Ratings
City of Middleton
Transportation Plan

N

0 1 2

Miles

Legend

- 1 - 500
- 500-1000
- 1000-2500
- 2500-5000
- 5000+
- State Highway
- City of Middleton Road
- Canyon Highway Dist. #4 Road
- Middleton City Limits
- Middleton Impact Area
- County Boundary

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Traffic Generator
City of Middleton
Transportation Plan

N

0 1 2

Miles

Legend

- State Highway
- City of Middleton Road
- Canyon Highway Dist. #4 Road
- Middleton City Limits
- Middleton Impact Area
- County Boundary

Middleton High School

Middleton Heights Elementary School

Middleton Middle School

Mills Creek Elementary School

Ridley's

Rule Steel

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Crash Data

The Idaho Transportation Department, Office of Highway Safety Crash Analysis Reporting System, known as WebCARS, was used to evaluate crash history within the City of Middleton from January 2010 through December 2014. WebCARS reported 144 crashes in this evaluation period with 2 fatalities and 53 total injuries. The crash data was evaluated to identify fatality and high crash locations where five or more crashes were reported within 0.10 miles of each other. During the evaluation period, two fatal crash sites were reported and seven high crash locations were identified within the study area. Table 4 & 5 summarize the crash information for the City of Middleton.

Table 4: Fatal Crash Locations

Roadway	Nearest Intersection	Crash Location	Number of Fatalities
SH-44	Highland Dr.	Intersection	1
SH-44	Driveway (1/4 West of Emmett Rd.)	Non Intersection	1

Table 5: High Crash Locations

Roadway	Nearest Intersection	Number of Crashes	Number of Injuries
SH-44	N Middleton Rd/ Murphy St.*	22	6
Main St.	N Middleton Rd.	6	2
SH-44	S Middleton Rd.	6	2
SH-44	1st East Ave.	6	2
SH-44	4th West Ave.	6	1
SH-44	Hawthorne Dr.	6	3
SH-44	Skyline Dr.*	6	3

*City closed Murphy Street and Skyline Drive in 2015.

The summary of crash data provided in the above tables identifies locations where additional analysis is needed to reveal possible corrective actions that may reduce the potential for serious accidents. The detailed crash reports are available from WebCARS for each location, and can be reviewed to determine if the crashes could have possibly been reduced if some change to the roadway system were to be made. This information can be used to identify possible future improvement projects.

Pavement Condition Summary

The City of Middleton has multiple roadway surface conditions within its jurisdictions, including graveled roads and paved roads (hot-mix, cold-mix and BST pavement). Typical surface maintenance of graveled roadways includes rolling and grading. Typical maintenance of paved roadways includes pothole patching and chip sealing.

The City of Middleton has adopted an asset management program to track the condition of the pavement. The program utilizes the Asphalt Institute's Pavement Condition Index (PCI). This system can provide users information to analyze treatments and cost estimates for proposed projects. The PCI is based on pavement condition ratings, and ratings are recommended to be completed every three years by the City. These ratings are used to establish an overall

condition for each road segment, and the guidelines in the following table can be used as treatment recommendations.

Table 6: Pavement Condition Index Maintenance Guidelines

PCI	Recommendation
100-85	Limited Maintenance Required
85-70	Crack Seal, Chip Seal, Normal Maintenance
70-40	Surface Overlay, Rehabilitation
Under 40	Full Depth Reconstruction

As discussed earlier, pavement deteriorates over time due to traffic and the environment. A pavement deteriorates slowly during the first years after construction and very rapidly when not maintained and allowed to oxidize. Aged pavement without treatments tends to fail quickly. Therefore, certain treatments and maintenance techniques should be adopted to increase the pavement life. The following Figure 3 shows an example of a deterioration curve of pavement versus age, without maintenance and with maintenance.

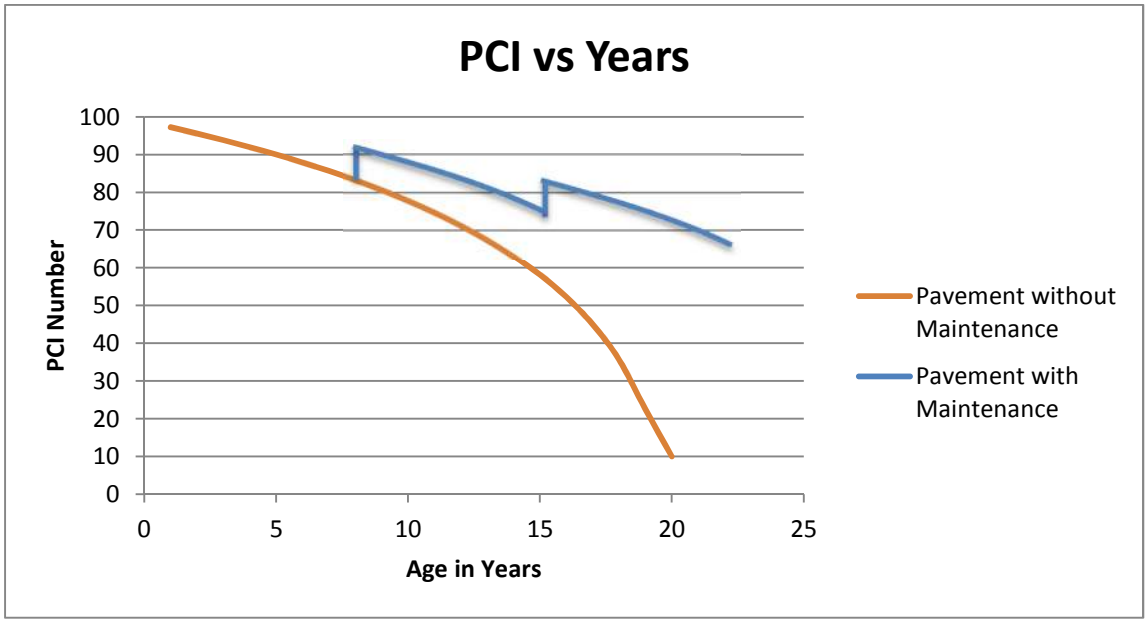

Figure 3: Pavement Condition Index vs. Age

It is evident from the above Figure 3 that the overall life span of the pavement is increased with early treatment applications. However, the pavement should be inspected even with treatment to ensure it is structurally adequate to carry the traffic load. Please note that Figure 5 is not to scale and does not represent an exact degradation curve of pavement or how much improved pavement will be after maintenance.

Based on the pavement condition and the collected PCI values, the City should focus funding on pavement maintenance sections needing repair or treatment and determine the source of funding, so that the street sections can be restored. These sections should be prioritized for funding as pavement maintenance is most cost effective. The goal of prioritization of projects is to provide the greatest benefit to the community with the funds available for City projects.

There are a large number of project prioritization approaches. A simple ranking procedure often ranks those with the worst condition street section at the highest priority. However, this procedure is limited in the number of available parameters. Generally, pavements with poor PCI require substantial repair or treatment, which requires significant funds to restore the streets to the desired level of serviceability. Hence, prioritization of projects should be done based on good engineering judgement and the most positive impact on the community. A typical guideline is to keep high PCI rated roads high with regular pavement maintenance in order to save funds for lower PCI rated roads that cost a significant amount more to rebuild. In doing so will help prevent the good PCI rated roads from being more expensive low PCI rated roads.

Maintenance activities on asphalt surfaces preserve the existing pavement surface and prevent further deterioration. Maintenance activities can be divided into four separate categories (as presented in The Asphalt Handbook, Asphalt Institute, 1989):

- Routine Maintenance – the day-to-day work that is necessary to preserve and keep a pavement as close to an as-constructed condition as possible. This may include crack sealing (frequently), pothole patching (as soon as identified) and drainage maintenance (annual). This maintenance technique should be applied to pavements with a PCI ranging between 70 and 100.

- Preventative maintenance – work that is done to prevent deterioration of a pavement, thus reducing the need for more substantial maintenance work. This may include drainage (street side) maintenance and fog or chip seals (every eight years). This maintenance technique should be applied to pavements with a PCI ranging between 85 and not less than 70.

- Major maintenance (rehabilitation) – work which is needed to restore a pavement to an acceptable serviceability condition. It includes surface treatments, surface recycling and thin overlays. This maintenance treatment should be applied to pavements when the PCI rating is less than 70 and not less than 40

- Reconstruction – work includes reconstruction of sub-base, base and asphalt surface to restore a pavement to its as-constructed condition. This maintenance technique should be applied to pavements with a PCI less than 40.

In addition to the above listed routine maintenance, other road maintenance work like pavement marking, upgrading traffic control devices (sign boards), and re-grading borrow ditches for proper draining should be applied to all City streets.

This information will be helpful to the City to select appropriate treatment to retain and enhance the service life of the City streets. Good maintenance practices will prolong the life of the wearing surface of gravel and paved streets, thus reducing the capital expenditure on City streets. A PCI rating of each road in the City of Middleton is shown on page 13.

PCI Ratings
City of Middleton
Transportation Plan

N

0 0.5 1

Miles

Legend

- 0 - 30
- 30 - 58
- 58 - 70
- 70 - 85
- 85 - 100
- State Highway
- Canyon Highway Dist. #4 Road
- Middleton City Limits
- Middleton Impact Area
- County Boundary

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**USDA-FSA Arial Photography Field Basemap
***CHD No. 4 provided data for roads in area of impact

Roundabouts

The City of Middleton is considering adding roundabouts on many of its intersecting roads. Doing so could increase traffic flow and decrease travel time. However, roundabouts may not be appropriate for every intersection. Therefore, good planning will be needed to determine if a roundabout is appropriate to accommodate an adequate level of service.

Roundabouts control intersecting traffic by merging approaching traffic into a free-flowing circle. Depending on the size and design, roundabouts can provide a wide range of capacities. However, due to their size of footprint, roundabouts typically require more right-of-way than a standard intersection. In addition, because pedestrians (and bicycles) must go around the periphery of the roundabout, crossing the approach legs at least a car's length from the roundabout itself, roundabouts make for longer walking distances. However, roundabouts can reduce delay times for pedestrian compared to traffic signals, because crossings only require a safe gap in traffic rather than waiting for a traffic signal cycle.

Proper roundabout design reduces approach speeds by curving the approaches to the intersection which improves safety by reducing impact angles, crash velocity, and number of conflict points. Unlike the other intersection control types, roundabouts can also be used for urban design, landscaping, and/or amenities.

Bridges and Culverts

Bridges must meet the "clear-span measurement of 20 feet" to be included in the National Bridge Inventory (NBI). Bridges that do not meet this requirement are not on the inspection program administered by ITD. Bridges included on the NBI are routinely inspected (every 1 to 2 years, depending on the condition). A map showing all identified bridges within the study area is on page 17.

Even if a structure is not listed on NBI, it still needs to be maintained and inspected routinely. For this reason, condition and locations of culverts were inspected by Hughes Engineering in 2015 and 2016. A map showing all identified culverts within City limits is on page 18.

Note that for both maps no structures are shown on State Highway 44, due to those structures being regularly checked and maintained by ITD. More information about each bridge and culvert can be found in Appendices B & C.

Bridge Locations
City of Middleton
Transportation Plan

N

0 1 2

Miles

Legend

- Structure Eligible for Rehabilitation
- Adequate Structure
- State Highway
- City of Middleton Road
- Canyon Highway Dist. #4 Road
- Middleton City Limits
- Middleton Impact Area
- County Boundary

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Culvert Locations
City of Middleton
Transportation Plan

N

0 0.5 1

Miles

Legend

- Not Deficient
- Structurally Deficient
- State Highway
- City of Middleton Road
- Canyon Highway Dist. #4 Road
- Middleton City Limits
- Middleton Impact Area
- County Boundary

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***Culvert details can be found in appendices
****CHD No. 4 provided data for roads in area of impac

Functional Classification

The City should develop and adopt an official Functional Street Classification Map and update as appropriate. The Functional Street Classification Map is based on classifying roadways in accordance with the American Association of State Highway and Transportation Officials (AASHTO) "A Policy on Geometric Design of Highways and Streets" for roads over 400 ADT and the AASHTO "Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)" for roads under 400 ADT.

Roadway functions provide both mobility, for the traveling public, and accessibility to adjacent properties. Both functions are essential, but roadways are designed with different emphasis on each function as shown in Figure 4. For example, access is the primary function of local roads. A local road is more important to provide access than for providing mobility. Travel speeds are low and access points are typically more densely permitted.

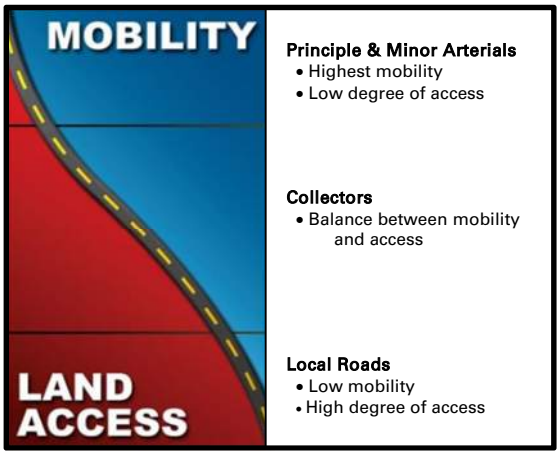

Figure 4: Access vs Mobility

An arterial is designed to carry more traffic at higher speeds. Mobility is paramount, while the roadways access function is minimized. This emphasis necessitates a design for higher speeds and restricts access of intersecting road along arterials.

Collectors provide the bridge between local roads and arterials. A collector road should allow controlled access under specific conditions. Speeds on collectors should range from 35 to 50 mph, depending on the surrounding land uses. A collector road should be continuous between arterials, collectors, traffic generators, and provide intercity travel corridors.

The City of Middleton has balanced City mobility and land access needs and has developed the Functional Classification map on the following page.

Function Classification City of Middleton Transportation Plan

N

0 1 2

Miles

Legend

- State Highway
- Principal Arterial
- Minor Arterial
- Major Collector
- Local Road
- Proposed Principle Arterial
- Proposed Minor Arterial
- Proposed Collector
- Proposed State Highway
- Canyon Highway Dist. #4 Road
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Public Involvement

A large part of this transportation plan is the analysis of the existing infrastructure (roads, bridges, pathways, etc.); the inventory and classifying of the status of these assets. Likewise, part of this plan is used for forecasting into the future and examining where expansion of infrastructure will be needed. However, there is another part to a transportation plan which is just as important. This is presenting the plan to the public, gathering their feedback and incorporating their priorities into this plan.

In an attempt to determine the priorities the residents of Middleton have for their transportation system, a survey was conducted and advertised. The 20-question survey was placed on the City of Middleton's website. A draft version of this report was also placed on the City of Middleton's website for public review and comment. The survey and draft report remained on the City's website for over a month (from August 25 to September 27, 2016).

Additionally, a public open-house was conducted on September 20, 2016 at the Trolley Center in Middleton. This open house was conducted in conjunction with two other City of Middleton projects in order to maximize the response from the community. This public meeting was advertised in the local paper twice, and over 40 people attended the open house. The draft version of this report was available, as was the survey. Transportation engineers and City employees were also available to answer questions and take public comment.

The questions on the survey focused on a number of areas: roadways, bridges/culverts, intersections, pathways, transit and funding. The survey also provided a number of locations where citizens could provide input in their own words. We received a total of 61 responses. The full survey is provided in Appendix F, along with a breakdown of answers received and all comment responses.

There were four questions in the survey related to Middleton's streets. In general, the public felt the roadways in Middleton are adequate in condition and width, but stated there are locations where improvements should be made. The most common responses centered around improvements to Main Street (State Highway 44) in a number of locations. Cemetery Road was also mentioned as a candidate for widening and/or sidewalks.

The next set of questions dealt with intersections and options for intersection control. The majority of respondents stated that the safety of existing intersections was average. When asked what kind of intersection control was preferred, responses were split between signals and roundabouts. Nearly all respondents agreed that the existing roundabouts, signals and stop signs are working adequately.

Existing and future pathways were examined in six questions of the survey. 65% of responses stated they utilize Middleton's existing pathway system, and an overwhelming majority of respondents (90%) stated that the City should expand the pathway system.

Other questions revealed transit is not used by many in Middleton, and there are many ideas on how to maintain and improve the City's infrastructure. Each of these responses is contained in the attached appendix.

Chapter 3 – System Improvement Needs

This section of the Middleton Transportation Plan discusses future and current transportation needs and transportation system improvements to meet these demands. The City has experienced a significant increase in construction of residential and industrial developments in the last several years. The need for coordination between the transportation system and the increasing demand is more important than ever in the community. The future transportation demands of the community depend on the land use distribution and the City's growth principles provided in the Comprehensive Plan. Current needs are data driven from information in Chapter 2 and information provided by City officials.

Drainage

Drainage is an important part of road construction maintenance. The following drainage issues should be addressed in a timely manner by maintenance crews:

- Drain base and sub-grade to prevent reduced pavement section strength and failure.
- Drainage parallel to the roadway should be conveyed to infiltration facilities to prevent localized flooding.
- Adequate cross-drainage to minimize the risk of roadway fill failure and prevent flooding of adjacent upstream lands.
- Erosion protection to prevent loss of lateral support and degradation of water quality.

Alternate State Highway 44 Planning

State Highway 44 is an important east-west corridor that connects Ada County and Canyon County. In March of 2000, the City, with assistance of the Community Planning Association of Southwest Idaho (COMPASS) and ITD, undertook a long range plan to identify an alternate route for highway traffic from SH 44 around the downtown core. This is due in large part to significant local peak hour congestion caused by the dense number of access points along this principle arterial.

Advantages of the proposed alternate SH-44 route:

- Reduces congestion between Emmett Road and Duff Lane.
- Enhances safety to pedestrians and students of schools located along SH-44.
- Reduces truck and through traffic through the City's central business district.
- Increases mobility and reduces vehicle delay.
- Encourages commercial developments along the corridor, increasing the City's economy.

ITD and COMPASS identified the need to protect SH-44 as a regional transportation corridor between I-84 and the City of Eagle and identified a corridor for the proposed alternate SH-44 route. This route is between the developed portion of the City of Middleton and the Boise River, connecting between Emmett Road and Duff Lane. The purpose of an alternate corridor is to preserve mobility of SH-44. This is achieved by limiting access points to the highway. The proposed alternate SH-44 route corridor is included in ITD's ongoing SH-44 Corridor Preservation Study. The scope of work of this study includes analysis of an alternate SH-44 in Middleton from an alignment and environmental perspective. The purpose of this study is to

evaluate the future highway improvements and potential environmental issues along the corridor.

Project Rating Criteria

The table below contains the rating criteria, weighting factor and scoring description used for developing a project priority list for prioritizing the transportation projects. The purpose of the priority lists is to be the basis for developing the Capital Improvement Plan.

Table 7: Rating Criteria

Criteria	Criteria Weighting Factor	Scoring Description
Safety	4	Score 1-3 for minimal safety concerns (up to 1 crash in the last five years and/or up to 1 safety deficiency), 4-7 for moderate safety concerns (1 crash in the last five years and/or up to 3 safety deficiencies), and 8-10 for extreme safety concerns (1 or more crashes in the last five years and/or more than 3 safety deficiencies).
Traffic Volume	3	Score 1-3 for extremely low traffic volumes (less than 100 ADT), 4-7 for low traffic volumes (100 to 500 ADT), 8 for moderate traffic volumes (500 to 1000 ADT), 9 for high traffic volumes (1000 to 1500 ADT), and 10 for extremely high traffic volumes (ADT over 1500).
Condition	3	Pavements; score 1-4 for poor surface conditions (PCI under 30), 5-7 for fair surface conditions (PCI 30-65) and 8-10 for good surface conditions (PCI over 65). Bridges; score 1-4 for good conditions (SR over 75), 5-6 for fair condition (SR 50 to 75), 7-8 for poor condition (SR 35 to 50), and 9-10 for critical structures (SR under 35). Other Infrastructure; score 1-2 for good condition, score 3-4 for fair condition, score 5-7 for poor condition, score 8-10 for critical condition.
Anticipated Cost	2	Score 1-2 for extremely large projects (over $1,000,000), 3 for large projects ($1,000,000 - $700,000), 4 for moderately large projects ($700,000 - $400,000), 5-6 for moderately small projects ($400,000 - $200,000), 7-8 for small projects ($200,000 - $100,000), and 9-10 for extremely small projects (under $100,000).
Roadway Classification	2	Score 3 for local roads, 5 for minor collectors, 7 for major collector, 9 for minor arterials, and 10 for principal arterial.
Surface Type	2	Score 1 for graded & drained (G&D) surfaces, 2 for improving G&D to Gravel, 3 for gravel, 4 for improving gravel to treated gravel, 5 for treated gravel, 6 for improving treated gravel to coldmix (CMX), 7 for improving treated gravel to hotmix (HMX), 8 for CMX, 9 for improving CMX to HMX, and 10 for HMX.
Right of Way Issues	1	Score 1 for R-O-W acquisition width of more than 100 feet, 2 for R-O-W acquisition width of more than 75 feet, 3-4 for R-O-W acquisition width of more than 50 feet, 5-6 for R-O-W acquisition width of more than 30 feet, 7-8 for R-O-W acquisition width less than 10 or equal to 5 feet, 9 for R-O-W acquisition width of less than 5 feet, 10 for no R-O-W acquisitions.

Chapter 4 - Capital Improvement Planning

The development of a Capital Improvement Plan (CIP) starts with the prioritized system needs described in Chapter 3. These system needs are the basis for project selection and the pursuit of grant funding. These needs are evaluated to determine if they are currently deficient. Needs that are not currently deficient are identified, and may be eligible for impact fee funds. A Capital Improvement Plan is a working document that is used to project capital expenditures for a five year period.

There are several benefits for developing and adopting a Capital Improvement Plan. The CIP is a management tool for City council and staff, which provides valuable information to the planning commission, citizens, developers, and businesses who are interested in the development of the community. The CIP document will assist in planning for the expenditure of City transportation funds and the coordination of City projects.

A CIP is a living document and serves as a guideline for project planning. Changes can be made to projects for various reasons such as funding, time, and environmental impact. Estimated costs for projects and available funding can fluctuate as a result of changing economic conditions or shift in public policy. This is why CIP projects should be reviewed and updated annually. Project priorities may be adjusted depending on funding availability.

For major reconstruction of streets or large projects, the City would benefit in seeking federal funding; and for minor repairs/reconstruction of small segments or small projects, the City would typically use local funding. A CIP listing proposed projects for the City for the next five years is included in the appendix.

For planning purposes, the City of Middleton uses an eight year chip seal rotation with anticipated reconstruction every 20 years, depending on degradation and use of the transportation system.

A general description of existing roadway facilities and their existing deficiencies within the City limits can be found in the 2013 Pavement Management Plan written by Keller Associates. This plan includes reasonable estimates of costs and a plan to develop the resources related to addressing the existing roadway deficiencies.

Based on information collected from Average Daily Traffic counts, traffic flow patterns, and the rural location of the City of Middleton, it has been assumed that roadways within the study area currently operate at an adequate capacity. For a specific detailed analysis of capacity and level of service, the City should consider traffic studies for roadway and intersections of concern in accordance with the 2010 Highway Capacity Manual.

Chapter 5 - Project Funding Opportunities

There are several funding possibilities available from the state and federal government. There are possible funds available through agencies such as the Idaho Commerce and Labor Department and Economic Development, Idaho Transportation Department, Local Highway Technical Assistance Council and Idaho Parks & Recreation. Most funding agencies require the City to identify projects and list them in their CIP to be eligible. Most of these funding agencies

also require the City to provide a percentage of local funds to match the total funding. The matching funds for capital improvement projects may be funded through local tax revenues and development fees. Following is a list of funding programs that provide funds for transportation systems:

- Local Highway Safety Improvement Program
- Surface Transportation Program - Urban (STP-U)
- Surface Transportation Grant Block Program (STGB) *formerly Surface Transportation Program Safety*
- Transportation Alternatives Program (TAP) *formerly Safe Routes to Schools*

Federal-aid for capital improvements is available to arterials (principle and minor) and major collectors by City application to the State. Federal-aid funds are not available for local streets, so the street classification is an important element in planning and funding construction projects. Below is the available funding by year and source of the funding for the City of Middleton. Please note that the City of Middleton has not received any federal funding over the last five years, refer to Appendix D for budget analysis.

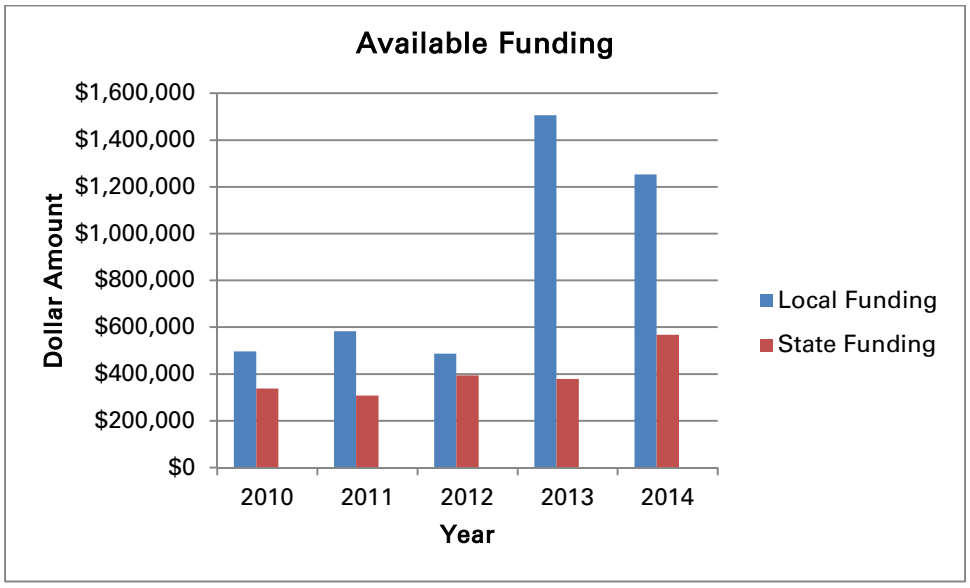


Figure 5: Available source of funding

A brief description of each funding program is included below. The information provided is a summary of the information provided by the managing government agency. For more information, please contact the managing government agency. Some of these programs are prioritized by COMPASS and the City of Middleton will need to coordinate and participate with COMPASS in order to be eligible for the funds.

Long and short term planning is critical for growing communities like Middleton. State and federal funds, matched with local funds, will aid the City in meeting their transportation needs. It is recommended that the City adopt a plan to procure local funds annually to match state and federal funds for local projects. It is also recommended that the City start planning toward

construction of projects listed on the Capital Improvement Plan. The funds listed below are available from the State and Federal government.

Local Highway Safety Improvement Program (LHSIP)

LHSIP is a federally funded program aimed at reducing fatal and serious injury (Type A) crashes on the local roadway system. Local Highway Technical Assistance Council LHTAC receives approximately $3.7M of the state of Idaho's Highway Safety Improvement Program funds. LHTAC determines eligibility for LHSIP based on the number of fatal and serious injury crashes per jurisdiction using five years of crash data. Each local highway jurisdiction with a minimum of three fatal and/or serious injury crashes qualify to apply. Qualifying jurisdictions are identified by LHTAC and notified in the fall to begin the application process. This federally funded program usually requires a local match of 7.34%.

Surface Transportation Block Grant Program (STBG)

The Fixing America's Surface Transportation (FAST) Act converts the long-standing Surface Transportation Program (STP) into the Surface Transportation Block Grant Program (STBG). This program has the most flexible eligibilities among all Federal-aid highway programs and aligning the program's name with how the Federal Highway Administration (FHWA) has historically administered it. The STBG promotes flexibility in State and local transportation decisions and provides flexible funding to best address State and local transportation needs. (FAST Act § 1109(a)).

STBG funding is allocated for projects in urban areas with populations greater than 5,000 people, as determined by the U.S. Census Bureau. These funds may be used for new construction, reconstruction, or rehabilitation of roadways functionally classified by Federal Highway Administration (FHWA) as collectors or arterials. The local matching requirement for these funds is 7.34%.

The FHWA program dedicates funds to urban areas throughout the State of Idaho. The Traffic Management Area, Northern Ada County, has dedicated funds since the population is over 200,000. The other urban fund allocation, for urban areas between 5,000 and 200,000, is divided using population data between the five metropolitan planning organizations (MPO's) and all other urban areas. These funds are balanced throughout the state by the Urban Balancing Committee which consist of the 5 MPO's, and LHTAC, representing the smaller urban areas between 5,000 and 50,000 in population not within a MPO.

STBG projects may not be undertaken on a road functionally classified as a local road or a rural minor collector unless the road was on a Federal-aid highway system on January 1, 1991, except- For a bridge or tunnel project (other than the construction of a new bridge or tunnel at a new location).

Examples of STBG projects include, installation of safety barriers and nets on bridges, bicycle transportation projects, and intersections having disproportionately high accident rates and levels of congestion. For more information on eligibilities and requirements please visit the Federal-aid Programs under U.S. Department of Transportation Federal Highway Administration.

Transportation Alternatives Program (TAP)

The purpose of the Transportation Alternatives Program is to provide for a variety of alternative transportation projects and to advance ITD's strategic goals for mobility, safety and economic opportunity while maximizing the use of federal funds. All TAP projects are determined by ITD board.

Examples of TAP projects include:

- Off road trail facilities for pedestrians.
- Bicyclists and non-motorized forms of transportation.
- Sidewalks
- Pedestrian signals and lighting, and other safety related infrastructure.

TAP projects shall be limited to a maximum of $500,000 in Federal transportation funding. Non-infrastructure projects shall be limited to a maximum of $60,000 in Federal funding. The minimum local match required for either project is 7.34%. For more information on eligibilities and requirements can be found in ITD 2016 Transportation Alternatives Program Manual.

ADA Curb Ramp Program

The Idaho Americans with Disabilities Act (ADA) Curb Ramp Program is a state-administered program that provides funding for projects to address curb ramps on the state highway system. The goal of the program is to provide accessible facilities for pedestrians with disabilities while allowing local jurisdiction flexibility in meeting the required standards. The Idaho Transportation Department (ITD) is allocating $500,000 of state funds annually for this program. Applicants can qualify for up to $60,000 in state funding to construct new, or alter existing curb ramps on the state highway system to meet the requirements of the ADA. Funds can only be used for construction purposes. This program provides local communities more control over the design of pedestrian facilities in their communities and make better economical use of dollars through the use of state funds while addressing accessibility on the state highway system. Applicants applying in 2016 should be prepared to begin construction in May 2017.

The Recreational Trails Program (RTP)

The Recreational Trails Program of 1998 establishes a program for allocating funds to the States for recreational trails and trail-related projects. Projects must be from trail plans included, or referenced, in a Statewide Comprehensive Outdoor Recreation Plan required by the Land and Water Conservation Fund Act (Section 1302 (a)(b)). The typical grant funding level for the program is approximately $1.5 million annually.

Permissible uses of the funds are: maintenance and restoration of existing recreational trails; development and rehabilitation of trailside and trailhead facilities and trail linkages for recreational trails; purchase and lease of recreational trail construction and maintenance equipment; and construction of new recreational trails (with restrictions for new trails on Federal lands).

At least 30 percent of funds received annually by the State must be reserved for uses relating to motorized recreation. At least 30 percent must be reserved for non-motorized recreation.

The remaining 40 percent must give preference to projects that provide for innovative recreational trails corridor sharing by motorized and non-motorized use.
The Idaho Department of Parks and Recreation is responsible for the administration of the Recreational Trails Program in the State of Idaho.

You can learn more about Recreational Trails Program, including dates, deadlines, Advisory Committee Members, additional funding provisions and grant submission rules by visiting the *Grants and Funding* page under the U.S. Department of Transportation.

The Recreational Road & Bridge Fund

The 1993 session of the legislature passed HB 185 which authorized the Idaho Department of Parks and Recreation to administer 0.44% of State gas tax revenues to "be used solely to develop, construct, maintain and repair roads, bridges and parking areas within and leading to parks and recreation areas of the state." The typical grant funding level for the program is approximately $300,000 annually. Currently all road and bridge applications are reviewed by IDPR staff and recommendations are presented to the Idaho Park and Recreation Board for final approval.

You can learn more about the Recreational Road & Bridge Fund, including dates, deadlines, Advisory Committee Members and grant submission rules by visiting the *Grants and Funding* page under the U.S. Department of Transportation.

Congestion Mitigation Air Quality (CMAQ)

The FAST Act continued the CMAQ program to provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).

These funds are available statewide through a competitive program, which provides federal transportation funding for air quality projects, planning and programs. Projects under this program fall into two categories: construction and non-construction. These funds are available for projects which provide significant air quality benefits, and projects directed toward solving a transportation related air quality problem. The local match requirement is 7.34%. Projects such as dust control and prevention (sweeper/flusher trucks, unpaved road stabilization, and deicing equipment/supplies), special studies for air quality monitoring, alternative transportation education etc., are eligible under this program. For more information on eligibilities and requirements visit the Federal-aid Programs under U.S. Department of Transportation Federal Highway Administration.

Local Improvement Districts

Local improvement districts are another way to fund projects. Under this option, a district of property owners that benefit from the proposal improvements is created by the City. The project costs are divided between each of the property owners in the district based on lot front footage, area of lot, benefits derived, or a combination thereof. Bonds are sold up to 20 years for payback of the project.

Appendix

Appendix A	Capital Improvement Plan
Appendix B	Bridge Information & Ratings
Appendix C	Culvert Information & Ratings
Appendix D	Budget Analysis
Appendix E	Comprehensive Plan/Land Acquisition Map/Pedestrian Plan
Appendix F	Public Involvement Survey

Appendix A

Capital Improvement Plan

City of Middleton
Capital Improvement Plan FY-16
Date: November 7, 2016

Project	Funding Year	Cost Per Unit	Quantity	Units	City Estimated Total Cost	Estimated Total Cost	CIP Funding Year					
							2016	2017	2018	2019	2020	PD
Hartley Lane & SH-44-westbound right turn lane (Design)[3,11]	2016	$50,000	1	LS	$0	$50,000	$50,000					
Hartley Lane & SH-44-eastbound left turn lane(Construction)[6,11]	2017	$1,150,000	1	LS	$0	$1,150,000		$1,150,000				
Cemetery Road Sidewalk West Side, Concord to West Highland Sub.(Construction)[9,10]	2017	$850,000	0.4	MI	$130,000	$340,000		$340,000				
SH-44 Sidewalk North Side, W. 4th Ave. to Highland Ct. (8' Paved)[10]	2017	$400,000	0.2	MI	$80,000	$80,000		$80,000				
Sawtooth Lake Drive - Connection to S. Cemetery (Design)[3]	2017	$55,000	1	LS	$55,000	$55,000		$55,000				
Sawtooth Lake Drive - Connection to S. Cemetery (New Construction)[4]	2018	$1,500,000	0.7	MI	$1,050,000	$1,050,000			$1,050,000			
Middleton Road Realignment (Design)[3]	2018	$100,000	1	LS	$100,000	$100,000			$100,000			
Middleton Road Realignment Part 1 (New Construction)[4]	2019	$1,500,000	0.4	MI	$600,000	$600,000				$600,000		
Sawtooth Lake Drive & Middleton Road (Roundabout Design)[3]	2019	$50,000	1	LS	$12,500	$50,000				$50,000		
Willis Road & Hartley (Roundabout Design)[3]	2019	$50,000	1	LS	$50,000	$50,000				$50,000		
Willis Road & Hartley (Roundabout Construction)[5]	2020	$950,000	1	LS	$950,000	$950,000					$950,000	
Sawtooth Lake Drive & Middleton Road (Roundabout Construction)[5]	2020	$950,000	1	LS	$237,500	$950,000					$950,000	
Middleton Road & Bass Lane (Roundabout Design)[3,8]	2020	$50,000	1	LS	$50,000	$50,000					$50,000	
Middleton Road & Bass Lane (Roundabout Construction)[5,8]	2021	$950,000	1	LS	$950,000	$950,000						$950,000
Middleton Road Realignment Part 2 (New Construction)[4]	2022	$1,500,000	0.5	MI	$750,000	$750,000						$750,000
Cemetery & 9th (Design)[3]	2024	$50,000	1	LS	$50,000	$50,000						$50,000
Cemetery & 9th (Roundabout Construction)[5]	2025	$950,000	1	LS	$950,000	$950,000						$950,000
Willis Road & Cemetery Road (Roundabout Design)[3]	2024	$50,000	1	LS	$50,000	$50,000						$50,000
Willis Road & Cemetery Road (Roundabout Construction)[5]	2025	$950,000	1	LS	$950,000	$950,000						$950,000
Hartley & 9th (Roundabout Design)[3]	2025	$50,000	1	LS	$50,000	$50,000						$50,000
Hartley & 9th (Roundabout Construction)[5]	2026	$950,000	1	LS	$950,000	$950,000						$950,000
Willow Creek Bridge Rehabilitation[7]	2026	$50	646	SF	$32,300	$32,300						$32,300
			Total Est. Cost =		**$8,047,300**	**$10,207,300**	**$50,000**	**$1,625,000**	**$1,150,000**	**$700,000**	**$1,950,000**	**$4,732,300**
						Annual Budget =	$475,000	$475,000	$475,000	$475,000	$475,000	
						Grant Funding =	$50,000	$1,360,000	$0	$37,500	$712,500	
						Ending Balance =	$475,000	$210,000	-$675,000	-$187,500	-$762,500	
					CIP Carry Over =	**$350,000**	**$825,000**	**$1,035,000**	**$360,000**	**$172,500**	**-$590,000**	

[1] Values based on Keller's 2013 Pavement Management Plan.
[2] Assumed design and construction cost for roadway reconstruction.
[3] Assumed design engineering costs for project.
[4] Assumed new roadway construction cost.
[5] Assumed construction costs for roundabout.
[6] Assumed construction costs for signalized intersection.
[7] Assumed design and construction costs for bridge rehabilitation.
[8] City responsible for 25% of project cost.
[9] Project funded by the Transportation Alternative Program.
[10] Assumed design and construction cost for sidewalk project.
[11] Project funded by the Idaho Transportation Department

Appendix B

Bridge Information & Ratings

City of Middleton Transportation Plan

T-O ENGINEERS

Bridge Information & Ratings

Bridge Key	Structure No.	Feature	Route	Milepost	Length	Width	Sq. Ft.	Location	Year Built	Material Type	Design Type	NBI Rating	Sufficiency Rating	Jurisdiction	Inspection Date
Structures Eligible for Rehabilitation															
27395	93720A 101.65	WILLOW CREEK	STC 3720;MIDDLETON	101.647	23	28	646	1.3 N. 0.3 E. MIDDLETON	1978	Prestressed Concrete	Tee Beam	Not Deficient	55.2	Canyon Highway District	20-NOV-15
Adequate Structures															
27465	X993140 7.31	LAWRENCE KENNEDY CANAL	EEL LANE	100.177	30	24	710	0.7 S. 2.9 E. MIDDLETON	1974	Prestressed Concrete	Tee Beam	Not Deficient	74.9	Canyon Highway District	24-MAR-15
27295	X993140 4.11	WILLOW CREEK	CONCORD STREET	100.351	26	29	753	MIDDLETON NCL	1987	Concrete	Slab	Not Deficient	77.6	City of Middleton	30-SEP-14
27310	X993140 4.17	MILL SLOUGH	S. DEWEY AVE	99.899	28	40	1,119	AT MIDDLETON SCL	1980	Prestressed Concrete	Tee Beam	Not Deficient	83.2	City of Middleton	18-NOV-14
27240	93718A 111.36	WILLOW CREEK	STC3718;PRPLE SAGE	111.360	26	28	721	2.1 N. 0.9 E. MIDDLETON	1975	Prestressed Concrete	Tee Beam	Not Deficient	84.6	Canyon Highway District	20-NOV-15
27420	X993140 5.99	MILL SLOUGH	DUFF LANE	106.661	27	36	969	0.3 N. 1.3 E. MIDDLETON	1957	Steel	Stringer/Girder	Not Deficient	89.4	Canyon Highway District	18-NOV-13
27325	X993140 4.23	MILL SLOUGH	BOISE STREET	100.023	25	40	1,001	AT MIDDLETON SCL	1981	Prestressed Concrete	Tee Beam	Not Deficient	91	City of Middleton	20-NOV-15
19721	93750A 5.75	FIFTEEN MILE CREEK	STC 3750;MIDDLETON	5.619	92	53	4,885	0.8 S. 0.3 E. MIDDLETON	2004	Prestressed Concrete	Stringer/Girder	Not Deficient	92.4	Canyon Highway District	18-NOV-14
19726	93750A 5.94	BOISE RIVER	STC 3750;MIDDLETON	5.785	433	53	22,992	0.6 S. 0.3 E. MIDDLETON	2004	Prestressed Concrete	Stringer/Girder	Not Deficient	92.4	Canyon Highway District	18-NOV-14
27400	X993140 5.54	CANYON CANAL	DUFF LANE	106.952	27	36	980	0.3 S. 1.3 E. MIDDLETON	1956	Steel	Stringer/Girder	Not Deficient	92.9	Canyon Highway District	24-MAR-15
27096	93719A 7.62	MILL SLOUGH	STC3719;LANSING RD	7.752	28	34	1,023	0.6 N. 2.4 E. MIDDLETON	1995	Concrete Continuous	Frame	Not Deficient	96.8	Canyon Highway District	20-NOV-15
19674	93720A 100.34	MILL SLOUGH	STC 3720;MIDDLETON	100.332	32	64	2,056	MIDDLETON NE CITY LIMITS	1999	Prestressed Concrete	Stringer/Girder	Not Deficient	97.8	City of Middleton	30-APR-15
27031	X993140 6.85	CANYON CANAL	LANSING ROAD	7.147	26	50	1,350	2.4 E. MIDDLETON	2003	Concrete	Frame	Not Deficient	97.8	Canyon Highway District	17-APR-13

Appendix C

Culvert Information & Ratings

City of Middleton Transportation Plan

Culvert Information & Ratings

T-O ENGINEERS

Structure No	Roadway	Waterway	Lat (dd)	Long (dd)	Span (ft)	Material	Maintenance Recommendations	Sufficiency	Deficiency	Est Life	Last Inspect
MCC01	Providence Ave	Canyon Canal	43.7115	-116.6083	5	cmp galv	Estimated remaining life:12 years None at this time.	87.0	Not Deficient	12	4-4-2016
MCC02	Middleton Rd	Canyon Canal	43.7118	-116.6129	5	cmp galv	Estimated remaining life:2 years 1) Plan for future culvert replacement. 2) Fill voids with expanding foam to prevent further scouring of perforations	67.7	Structurally Deficient	2	4-4-2016
MCC03	Dewey Ave	Canyon Canal	43.7080	-116.6196	6.5	cmp galv	Estimated remaining life:3 years 1)Plan for future replacement. 2)Maintain wearing surface. 3) Repair embankment erosion at NW corner.	67.9	Structurally Deficient	3	4-4-2016
MCC03a	alley between E 1st and 2nd St N	Canyon Canal	43.7078	-116.6203	6.5	cmp galv	Estimated remaining life:25 years 1)Add additional cover; below manufacturers recommended 12 inch minimum.	68.0	Functionally Deficient	25	4-4-2016
MCC04	S 1st St N	Canyon Canal	43.7074	-116.6202	7.8	conc box culvert	Estimated remaining life: 30 years 1) Seal cracking at approaches.	87.0	Not Deficient	30	1-31-2014
MCC04a	alley between Main & E 1st St N	Canyon Canal	43.7069	-116.6203	9.2	conc slab	Estimated remaining life:25 years None at this time.	70.0	Not Deficient	25	4-4-2016
MCC05	S 1st Ave E	Canyon Canal	43.7058	-116.6218	8	conc box culvert	Estimated remaining life: 65 years None at this time.	87.0	Not Deficient	65	3-21-2014
MCC06	Hawthorne Dr	Canyon Canal	43.7055	-116.6230	5.7	cmp galv	Estimated remaining life:13 years None at this time.	87.0	Not Deficient	13	4-5-2016
MCC07	Highland Dr	Canyon Canal	43.7034	-116.6328	5.8	cmp galv	Estimated remaining life:17 years None at this time.	86.8	Not Deficient	17	4-5-2016
MCC08	Whiffin Ln	Canyon Canal	43.7048	-116.6378	7.8	conc box culvert	Estimated remaining life:25 years 1)Clean and coat exposed rusting rebar with rust inhibiting coating to slow deterioration.	86.0	Not Deficient	25	4-5-2016
MCC09	Main St	Canyon Canal	43.7064	-116.6398	3	cmp galv	Estimated remaining life: 0 year 1)Culvert needs to be replaced or rehabbed - High Priority. Culvert may be a good candidate for slip lining.	9.9	Structurally Deficient	0	4-6-2016
MCC10	Hartley	Canyon Canal	43.7076	-116.6428	3	conc pipe	Estimated remaining life: 75 years None at this time.	86.9	Not Deficient	75	3-12-2013
MCH01	Cemetary Rd	Canyon Hill Canal	43.7113	-116.6326	7.8	conc box culvert	Estimated remaining life: 45 years 1) Remove debris trapped under structure.	87.0	Not Deficient	45	2-4-2014
MDR01	Providence Ave	drain	43.7128	-116.6079	4	conc pipe	Estimated remaining life: 50 years 1) Seal cracking in asphalt.	87.0	Not Deficient	50	2-3-2014
MDR02	Middleton Rd	drain	43.7126	-116.6129	5	cmp galv	Estimated remaining life:12 years None at this time.	86.8	Not Deficient	12	4-5-2016
MDR03	Triumph Drive	drain	43.7119	-116.6165	5.3	cmp galv arch	Estimated remaining life: 25 years None at this time.	87.0	Not Deficient	25	3-16-2015
MDR04	Whiffin Ln	drain	43.7017	-116.6378	2	conc pipe	Estimated remaining life:25 years None at this time.	85.0	Not Deficient	25	4-5-2016
MFD01	Middleton Rd	Front Ditch	43.7042	-116.6131		hdpe	Estimated remaining life:50 years None at this time.	76.8	Not Deficient	50	4-5-2016
MFD02	S Skyline Dr	Front Ditch	43.7054	-116.6166	3	cmp galv	Estimated remaining life:1 years 1)Replace/rehab culvert due to extensive deterioration. Culvert is a good candidate for slip lining. 2) Inspections no longer required due to road closure.	40.3	Structurally Deficient	1	4-5-2016
MFD03	E Main St	Front Ditch	43.7065	-116.6176		conc pipe	Estimated remaining life:50 years None at this time.	81.1	Not Deficient	50	4-5-2016
MLK01	King Ave	Lawrence Kennedy Canal	43.7023	-116.6154	9.9	cmp galv	Estimated remaining life:13 years None at this time.	87.0	Not Deficient	13	4-5-2016
MLK02	Middleton Rd	Lawrence Kennedy Canal	43.7023	-116.6178	15.9	conc frame	Estimated remaining life: 60 years None at this time.	86.1	Not Deficient	60	3-21-2014
MMM01	Triumph Drive	Middelton Mill Ditch	43.7124	-116.6173	9.8	conc box culvert	Estimated remaining life: 60 years None at this time.	87.0	Not Deficient	60	2-3-2014
MMM02	Dewey Ave	Middelton Mill Ditch	43.7106	-116.6196	9.9	conc box culvert	Estimated remaining life: 55 years None at this time.	87.0	Not Deficient	55	2-3-2014
MMM03	Minot St	Middelton Mill Ditch	43.7121	-116.6204	9.9	conc box culvert	Estimated remaining life:25 years 1)Clean and epoxy coat exposed rebar to slow deterioration.	80.9	Not Deficient	25	4-6-2016
MMM04	Willow Drive	Middleton Mill Ditch	43.7137	-116.6266	5.6	cmp galv arch	Estimated remaining life: 1 years 1)Plan for future rehab or replacement. 2)Repair embankment erosion encroaching into roadway edge.	36.9	Structurally Deficient	1	4-6-2016
MWD01	King Ave	Watkins Ditch	43.7011	-116.6147	2	conc pipe	Estimated remaining life: 75 years None at this time.	87.0	Not Deficient	75	3-21-2014
MWD02	Middleton Rd	Watkins Ditch	43.7009	-116.6158	2	conc pipe	Estimated remaining life: 75 years None at this time.	86.1	Not Deficient	75	3-21-2014

Appendix D

Budget Analysis

City of Middleton
Capital Improvement Plan - Available Funding
September 19, 2015
Prepared By: Chanc A. Meyer, P.E.

T-O ENGINEERS

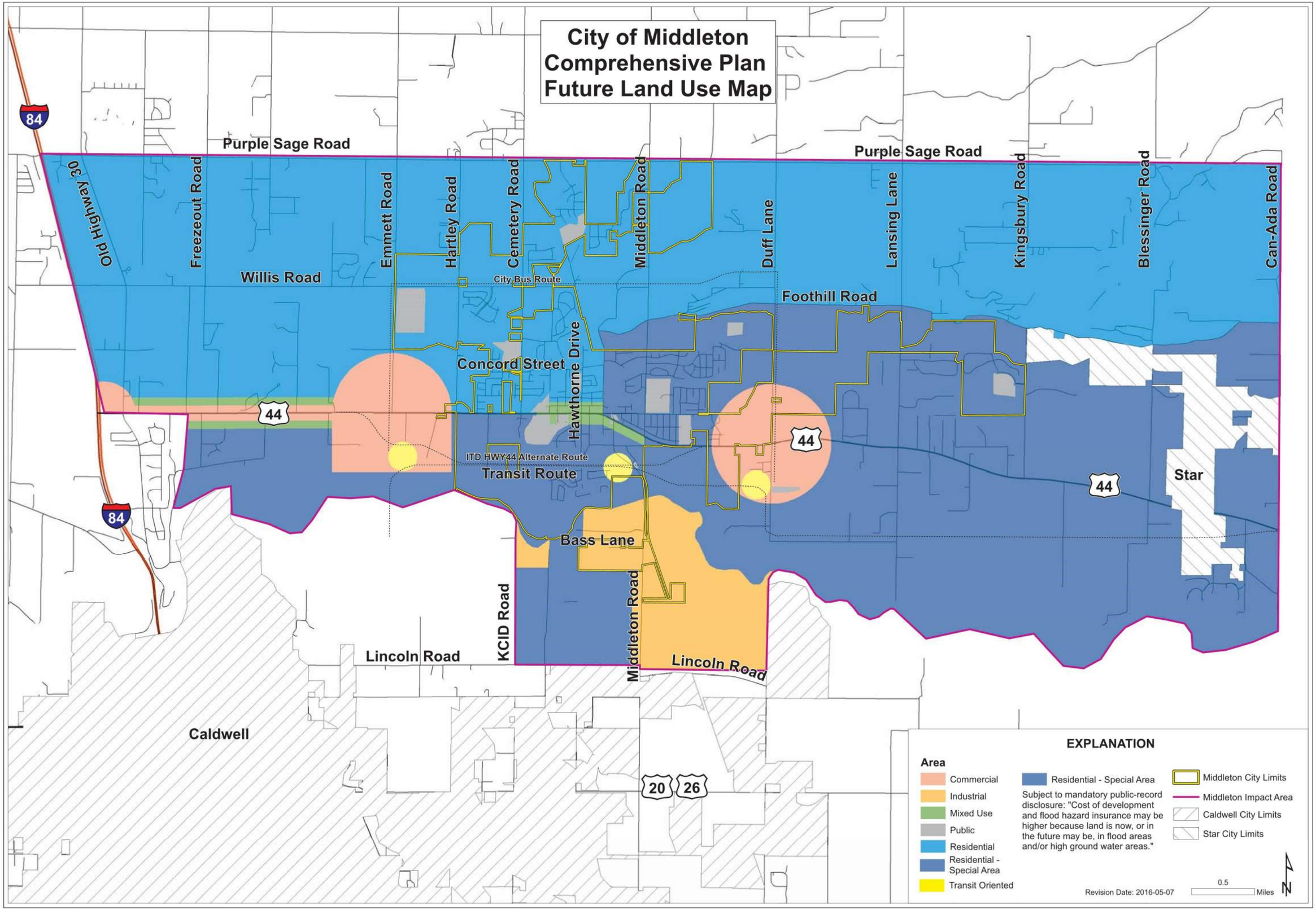
Funding Year	2010	2011	2012	2013	2014	2015	2016	2017*		
Beginning Balance	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**		
Local Funding										
Property Tax	$347,772	$403,666	$340,817	$497,092	$511,081	$612,021	$642,090	$681,459		
Sale of Assets	$0	$0	$0	$0	$0	$24,618	$24,708	$0		
Interest Income	$3,977	$3,518	$2,287	$2,542	$1,070	$1,321	$850	$800		
Fund Transfers from Non-highway Accounts	$0	$0		$0	$0	$102,631	$15,494	$0		
Local Impact Fees	$29,450	$36,987	$22	$0	$0	$0	$0	$0		
Local Option Registration Fee	$45,670	$64,874	$0	$0	$0	$0	$0	$0		
All Other Local Funds	$69,906	$73,417	$144,385	$1,007,105	$740,666	$886,409	$300,369	$210,347		
Total Local Funding	**$496,775**	**$582,462**	**$487,511**	**$1,506,739**	**$1,252,817**	**$1,627,000**	**$983,511**	**$892,606**		
State Funding										
Highway User Revenue	$187,791	$195,044	$188,117	$184,791	$189,692	$203,128	$254,505	$280,869		
Sales Tax/Inventory Replacement Tax	$25,791	$18,150	$26,113	$25,760	$22,231	$106,373	$0	$0		
Sales Tax/Revenue Sharing	$73,215	$66,660	$59,003	$78,830	$84,556	$91,819	$94,458	$111,882		
Other State Funds (Specify)	$51,376	$27,361	$120,941	$88,826	$271,494	$0	$0	$0		
All Other Federal Funds	$0	$0	$0	$0	$0	$101,196	$361,246	$281,000		
Total State Funding	**$338,173**	**$307,215**	**$394,174**	**$378,207**	**$567,973**	**$502,516**	**$710,209**	**$673,751**		
Federal Funding										
National Forest Reserve Apportionment	$0	$0	$0	$0	$0	$0	$0	$0		
STP Urban	$0	$0	$0	$0	$0	$0	$0	$0		
All Other Federal Funds	$0	$0	$0	$0	$0	$214,223	$0	$12,084		
Total Federal Funding	**$0**	**$0**	**$0**	**$0**	**$0**	**$214,223**	**$0**	**$12,084**	Funding Ave.	
Total Funding =	**$834,948**	**$889,677**	**$881,685**	**$1,884,946**	**$1,820,790**	**$2,343,739**	**$1,693,720**	**$1,578,441**	**$1,490,993**	
Construction										
Roads (New)	$102,644	$0	$0	$158,537	$176,826	$192,826				
Bridges (New)	$0	$0	$0	$0	$0	$0				
Other (New)	$0	$0	$0	$67,352	$0	$902				Funds Available
Roads (Reconstruction)	$182,127	$90,286	$0	$443,805	$113,819	$747,825				Based on 6 Year
Bridges (Reconstruction)	$0	$0	$0	$0	$27,849	$0				Average for
Other (Reconstruction)	$0	$73,187	$26,422	$26,176	$7,582	$0				Capital Projects
Total Construction	**$284,771**	**$163,473**	**$26,422**	**$695,870**	**$326,076**	**$941,553**	**$0**	**$0**		$406,361
Preventative Maintenance										
Chip Seal	$37,589	$37,631	$29,290	$36,688	$112,061	$179,074				
Patching	$86,361	$97,139	$0	$1,683	$74	$12,293				
Total Preventative Maintenance	**$123,950**	**$134,770**	**$29,290**	**$38,371**	**$112,135**	**$191,367**	**$0**	**$0**		$104,981
Routine Maintenance										
Snow Removal	$0	$0	$0	$0	$704	$3,707				
Grading/Blading	$1,542	$2,184	$4,881	$0	$523	$0				$1,522
Other	$0	$0	$141,018	$130,475	$0	$79,769				
Total Routine Maintenance	**$1,542**	**$2,184**	**$145,899**	**$130,475**	**$1,227**	**$83,476**	**$0**	**$0**		
Equipment										
New Equipment	$49,616	$96,674	$179,134	$300,026	$24,295	$28,862				
Equipment Lease	$170	$549	$898	$0	$0	$0				
Equipment Maintenance	$8,130	$8,310	$5,593	$4,383	$6,446	$17,020				
Other	$0	$0	$0	$0	$0	$14,989				
Total Equipment	**$57,916**	**$105,533**	**$185,625**	**$304,409**	**$30,741**	**$60,871**	**$0**	**$0**		$124,183
Administration										
Administrative Salaries & Expenses	**$137,117**	**$132,668**	**$67,343**	**$75,198**	**$98,070**	**$151,708**				$110,351
Other										
Right of Way and Property Purchases	$7,614	$1,500	$57,010	$4,167	$5,199	$206,092				
Property Lease	$0	$1,505	$0	$0	$0	$0				
Street Lighting	$22,985	$28,171	$26,116	$26,018	$33,286	$38,036				
Professional Services (Audit, Clerical, and Legal)	$9,193	$11,344	$10,656	$10,145	$4,785	$3,067				
Professional Services (Engineering)	$30,093	$97,407	$50,631	$453,163	$503,377	$322,300				
Interest - Notes (Loans)	$0	$0	$0	$0	$0	$0				
Payments to Other Local Government	$0	$0	$0	$0	$0	$0				
All Other Local Expenditures	$22,407	$42,347	$48,263	$42,149	$190,474	$74,716				
Total Other	**$92,292**	**$182,274**	**$192,676**	**$535,642**	**$737,121**	**$644,211**	**$0**	**$0**	Disbursement Ave.	
Total Disbursements =	**$697,588**	**$720,902**	**$647,255**	**$1,779,965**	**$1,305,370**	**$2,073,186**	**$0**	**$0**	**$1,204,044.37**	
Receipts Over Disbursements	**$137,360**	**$168,775**	**$234,430**	**$104,981**	**$515,420**	**$270,553**	**$1,693,720**	**$1,578,441**	**CIP Total =**	**$747,396**

*Proposed funding for fiscal year 2017.

Appendix E

Comprehensive Plan/Land Acquisition Map/Pedestrian Plan

City of Middleton Comprehensive Plan Future Land Use Map



City of Middleton
Transportation, Schools and Recreation Map

Purple Sage Rd
Freezeout Rd
Canyon Ln
Emmett Rd
Hartley Rd
Cemetery Rd
Middleton Rd
Duff Ln
Lansing Ln
Kingsbury Rd
Blessinger Rd
Can-Ada Rd
Old Highway 30
Meadow Park St
Willis Rd
W 9th St
Concord St
Main St
E 9th St
Foothill Rd
Cornell St
Sawtooth Lake Dr
Landruff Ln
Bass Ln
KCID Rd
Lincoln Rd
ITD HWY44 Alternate Route
Transit Route
Future Park (City)
Future Elementary
Middleton High School
Heights Elementary
Mill Creek Elementary
Middleton Middle School
Meadow Park
Hawthorne Park (GMPRD)
Piccadilly Park
Roadside Park
Foote Park (GMPRD)
Middleton Place Park
Centennial Grove Park
Duff Pond
Curtis Park (City of Caldwell)
44
84
20
26

EXPLANATION

Facilities
- School
- Future School
- Park
- Future Park

Roads and Trails
- Future Condition 6' Bike Lane and 8' Pedestrian Detached Trail
- Concept ITD State Hwy 44 Alternate Route
- Transit Route
- CHD4 Arterial
- City Bus Route
- Existing Pedestrian/Bicycle
- Future Pedestrian/Bicycle

Plats
- Final Plat (Authorized for Building)
- Preliminary Plat (Authorized for Infrastructure)
- Expired Preliminary Plat (Expired Authorization for Infrastructure)

Revision Date: 2016-06-13

Symbols
- Museum
- Existing Bridge
- Future Bridge
- Future Roundabout 100% Designed
- Future Roundabout 30% Designed
- Future Roundabout
- Pathway-Trailhead Sign
- Middleton City Boundary
- Middleton City Impact Area
- City Boundaries
- Nampa City Impact Area
- Caldwell City Impact Area
- Float Take-Out
- Transit Station
- Bus Route
- Power/Natural Gas Substation

Civil Dynamics

0 0.25 0.5 Miles

N

City of Middleton Transit Map

Purple Sage Rd
Freezeout Rd
Canyon Ln
Emmett Rd
Hartley Rd
Cemetery Rd
Middleton Rd
Duff Ln
Lansing Ln
Kingsbury Rd
Blessinger Rd
Can-Ada Rd
Old Highway 30
Meadow Park St
Willis Rd
W 9th St
Concord St
City Bus Route
E 9th St
Foothill Rd
Main St
Cornell St
Sawtooth Lake Dr
Landruff Ln
TR 1
TR 2
TR 3
TR 3 Alternate
44
84
20
26
KCID Rd
Lincoln Rd

EXPLANATION

- Transit Station
- Transit Route
- Middleton City Boundary
- Middleton City Impact Area
- City Boundaries
- Nampa City Impact Area
- Caldwell City Impact Area

Revision Date: 2016-05-07

Civil Dynamics

0 0.25 0.5 Miles

N

Appendix F

Public Involvement Survey

MIDDLETON TRANSPORTATION PLAN

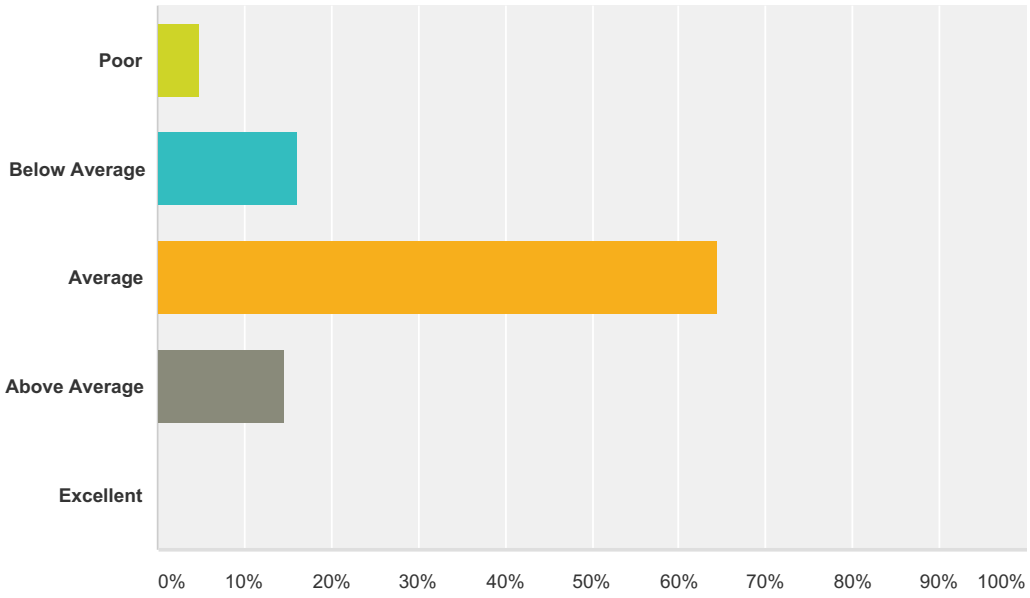
2016 SURVEY RESULTS

T-O ENGINEERS

MERIDIAN | NAMPA | SPOKANE | COEUR D'ALENE

Q1 How would you rate the condition of the roads in Middleton?

Answered: 62 Skipped: 0



Answer Choices	Responses	
Poor	4.84%	3
Below Average	16.13%	10
Average	64.52%	40
Above Average	14.52%	9
Excellent	0.00%	0
Total		62

Other Please Specify:

1. There is a wide variety of road conditions. I live on N 2nd Ave W which was recently paved, however in front of our house the pavement is very poor.

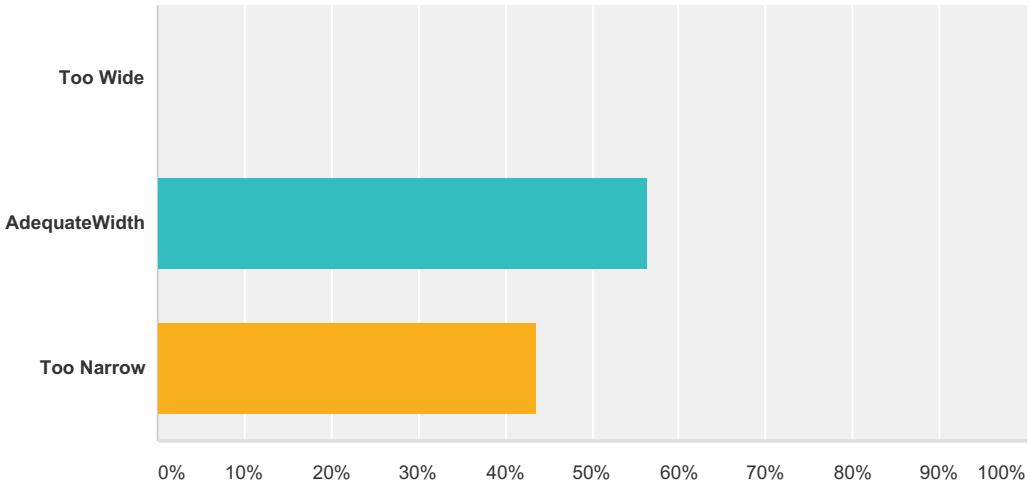
2. Main road through town is so busy. During school times it is so unsafe with people pulling out every which way.

3. Some are better than others, but none of the streets I drive on are below average.

4. There not horrible but the quick fix spots are actually worse before they were fixed. Guy

Q2 How would you rate the width of the roads in Middleton?

Answered: 62 Skipped: 0



Answer Choices	Responses	
Too Wide	**0.00%**	0
AdequateWidth	**56.45%**	35
Too Narrow	**43.55%**	27
Total		**62**

Other Please Specify:

1. Concord Road is narrow when people park on the street in front of their homes.

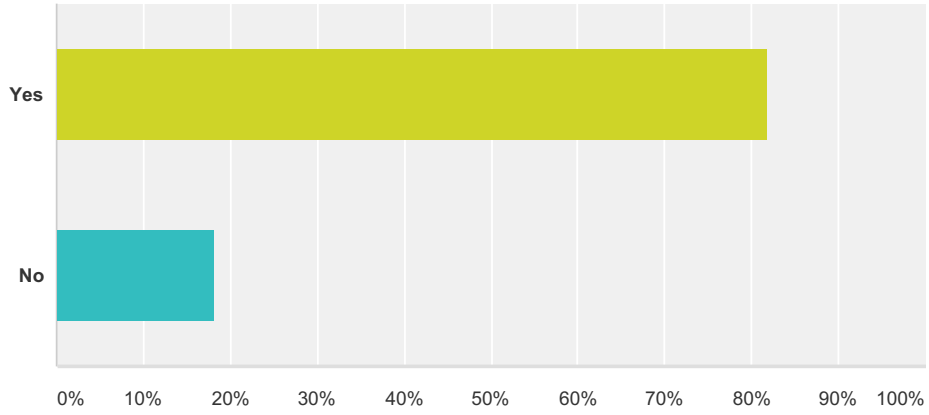
2. Not wide enough for center turn lane

3. Middleton is a small town yes, but our schools are huge! We are a 4A school and last checked a couple hundred students shy of moving to 5A! Its just inadequate

4. arterial routs for school buses and pedestrian traffic need wider pathways.

Q3 Are there roads in Middleton that you believe need to be improved?

Answered: 55 Skipped: 7



Answer Choices	Responses	
Yes	**81.82%**	45
No	**18.18%**	10
Total		**55**

See following page for responses.

Question #3 If yes which ones?

1. Middleton Road & HW 44

2. Cemetery Road Middleton Road Highway 44 Minot St.

3. N 2nd Ave W

4. cemetary

5. Duff Lane turns off of highway 44. There needs to be a dedicated turn lane so there would need to be some width added to highway 44 at that area.

6. The ones in old downtown

7. 44, through town

8. Main road. State highway 44. So hard to pull out from emmett rd to state during school hours!

9. Another speed bump on 2nd Avenue

10. Hwy 44

11. Foothills road between Middleton and Star!!! Hwy 44 between Middleton and Star has a dip which is dangerous for motorcycles.

12. Traffic around the Middle School..., There is one way in one way out of town

13. Highway 44, South Middleton Road, North Middleton Road, Foothill Road, Purple Sage Road, Highland/Cemetery

14. State st

15. Having a bike lane on more roads would be excellent.

16. Main street and cemetery

17. HWY 44 and Middleton RD

18. Main Street.

19. The numbered streets in town

20. Many neighborhood side streets.

21. Cemetery needs sidewalks. Willis and Hartley intersection always has potholes.

22. Just the downtown streets...curb gutter sidewalk

23. Most of the main roads that are around the schools need curbing and sidewalks and need to be longer to account for further growth.

24. Cemetery needs to be wider with more parking for the heights.

25. I live in the West Highlands . I would love if our roads were finished. The chip seal.

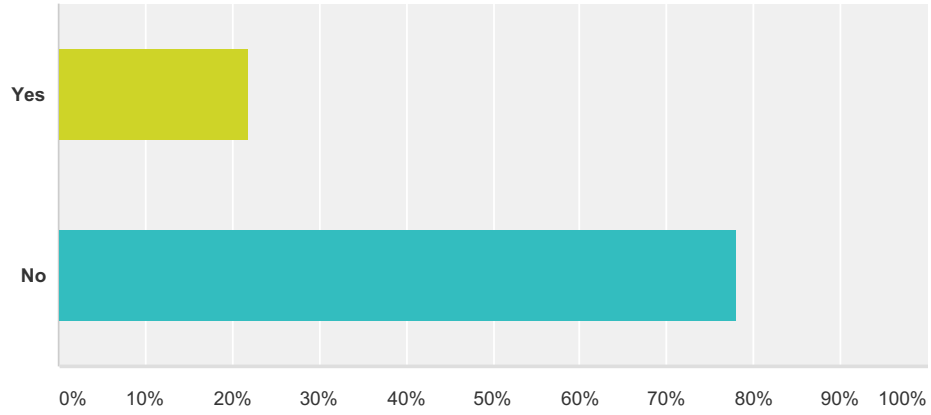
26. Cemetery road at Willis road and Hartley and Willis. I'd also like to see Willis road connect all the way to Middleton road or at least Dewey

27. Intersection of Hawthorne and main.

28. Dewey Ave, W 4th Ave. S, W 3rd Ave. S, Cornell St.

Q4 Are there bridges/culverts in Middleton that you believe need to be improved?

Answered: 50 Skipped: 12



Answer Choices	Responses	
Yes	22.00%	11
No	78.00%	39
Total		50

If yes, which ones?

1. I understand the bridge over Willow Creek by the Middle School on Hwy 44 is too small.

2. not sure of this

3. I'm sure there are, just not aware of them.

4. Middleton road, Boise River. Better Recreation access.

5. There needs to be another bridge connecting State to Lincoln

6. near middle school, on hwy 44

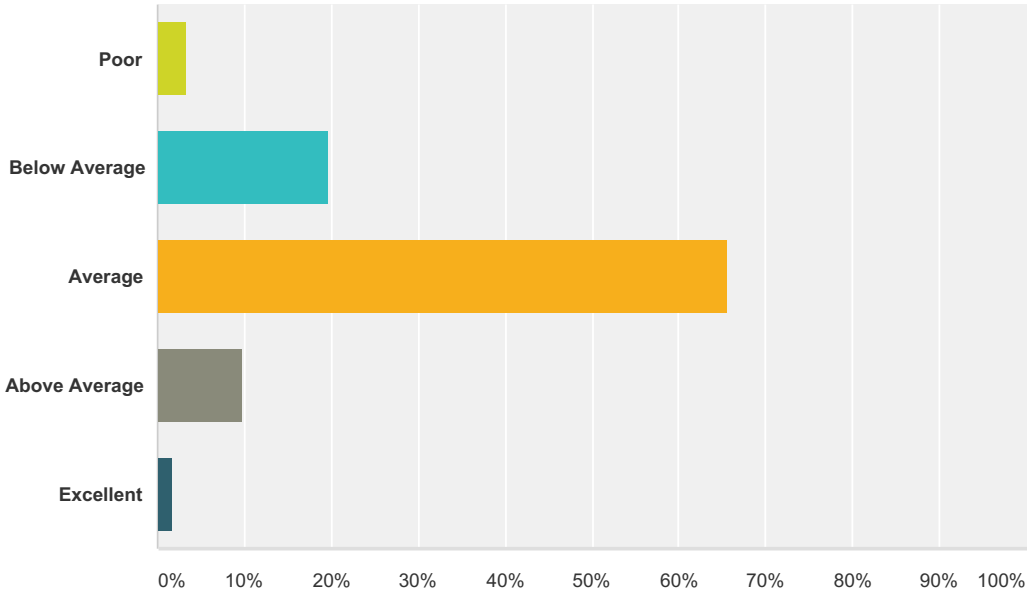
7. Don't know, but everyone is yelling, "Yes!" (We're doing a family survey) :)

8. South Middleton Road

9. In town

Q5 Do the roads in Middleton drive well (smooth, good signage, safe corners, safe grades)?

Answered: 61 Skipped: 1



Answer Choices	Responses	
Poor	3.28%	2
Below Average	19.67%	12
Average	65.57%	40
Above Average	9.84%	6
Excellent	1.64%	1
Total		61

Add Comments Below:

1. HW 44 @ City Hall

2. The speed bumps are difficult to manuvoure even going the speed limit or substantially slower. They are too tall and cause the car to bottom out and scrape if going even an acceptable speed.

3. Speed limits keep changing

4. Need wider turns, more turnouts so traffic can still move if someone is turning.

5. When they chip-sealed our neighborhood roads (Middleton Lakes), there was a lot of loose gravel - and still is on some roads.

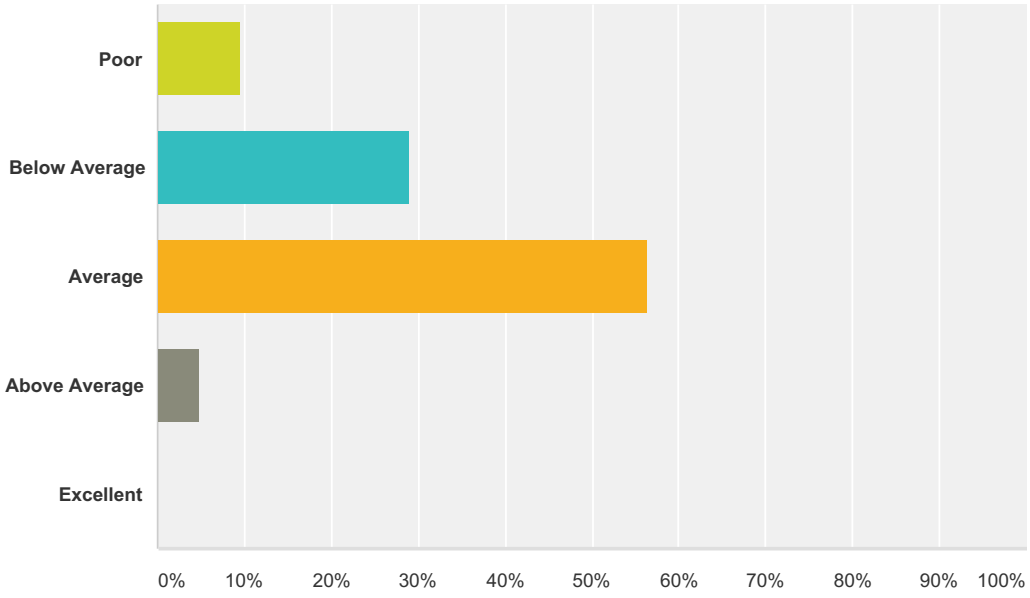
6. The intersection of Willis and Harkey is dangerous. The area where Middleton Road meets HWY 44 is as well. There should be a stop light at Cemetery and HWY 44.

7. Most of the deficiencies have to do with safety and traffic volume. The corner of state hwy 44 and hawthorn is ridiculous some peak hours of the day. 7-9am 2:30-4 and 5-6. I really think there should be no left turns during certain parts of the day. It's completely insane. 20 minutes to drive two miles durin school rush Monday am. No Bueno!

8. Especially by the High School. Signs, and fresh paint

Q6 Are the intersections in Middleton safe (adequate sight distance, adequate intersection control)?

Answered: 62 Skipped: 0



Answer Choices	Responses	
Poor	**9.68%**	6
Below Average	**29.03%**	18
Average	**56.45%**	35
Above Average	**4.84%**	3
Excellent	**0.00%**	0
Total		**62**

See following page for responses.

Question #6 Add Comments Below:

1. I would like to see a signal light at the corner by the gas station on Hawthorn.

2. HW 44 & Middleton Rd

3. Sometimes it is impossible to get on to Hwy 44 from Hawthorne.

4. Main Street is a nightmare if trying to get onto it by turning left from a side road

5. Vehicles do not yield to pedestrians

6. The turn of state onto Hartley is a little scary when traffic is heavy. No turn lane and cars coming up beind you at 50mph

7. Middleton rd and hwy 44 will need intersect improvements sooner rather than later

8. North Middleton Road and Highway 44 is a death trap, there is poor visibility to traffic going westbound from southbound Middleton Road; it's impossible to turn left (east) from Middleton Road on to Highway 44 during peak hours; it's difficult to turn left (north) from Highway 44 on to Middleton Road during peak hours. Highway 44 and South Middleton Rd traffic signal timing is off and doesn't allow enough traffic to turn often blocking the emergency exit of the fire station.

9. See answer to above.

10. More stop lights are needed at schools

11. The intersection of Hwy 44 and Cemetery is very dangerous in the morning and afternoon hours. People take way too many chances to make a left hand turn.

12. Some trees/bushes need to be trimmed in neighborhoods but most are good.

13. I believe there should be a stop light system at the end of cemetery and main. That is a cluster of vehicles most times of the day.

14. The intersection at Willis and Hartley scares me. Visibility east and west is difficult and the cross drains there indicate the traffic should stop going the other direction. A four way would be good there.

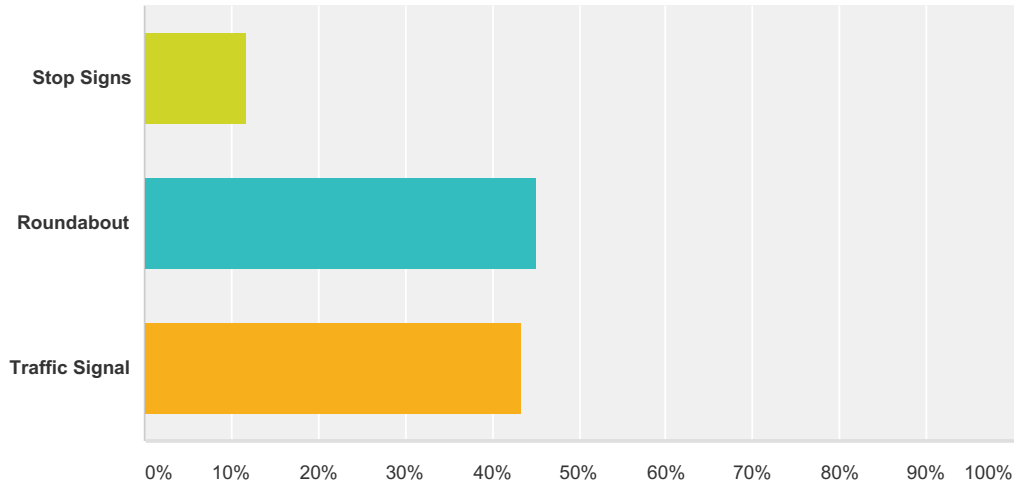
15. More stops needed at Hartley, cemetery and middleton north along. 44. Probably Lansing and Duff but I don't use those on a frequent basis.

16. I believe the intersection at HWY 44 and North Middleton road can be difficult and hard to get out of when needing to turn left from Middleton Road onto HWY 44 I feel it should have a light to keep it safe and hoping they do so when the plan to connect Middleton road is in place

17. N Middleton Rd and State Highway 44 is a terrible intersection when trying to get onto the highway! I cannot get onto the highway from Hartley Lane either, it needs a left turn lane and right turn lane so I do not have to wait for cars turning left.

Q7 In general, what kind of intersection control do you prefer at intersections?

Answered: 60 Skipped: 2



Answer Choices	Responses	
Stop Signs	**11.67%**	7
Roundabout	**45.00%**	27
Traffic Signal	**43.33%**	26
Total		**60**

See following page for responses.

Question #7 Add Comments Below:

1. If they are designed correctly

2. Too many drivers just do not know what to do at a 4-way stop. Lights are better.

3. Not sure what the safest way is to get onto the highway from side streets. I do like the round abouts by the high school. People are pulling out in front of each other because their is no time and no spaces to get in otherwise.

4. Depends on the place. Lol, someone said "free for all".

5. Actually all three but definitely a stop sign at Hawthorne and Main Street.

6. Or Traffic signals. Traffic gets really congested when school gets out

7. It depends on the intersection. Although I like roundabouts, they aren't good for HWY.

8. Cemetery Rd needs a tragic signal. It is a dangerous intersection during the morning and afternoon because of school traffic.

9. People avoid roundabouts. The traffic has increased significantly on Hartley rather than people traveling down to Emmett Road.

10. Roundabouts work well in higher traffic areas where people know how to drive them. I don't think they are necessary in Middleton. and we definitely don't need more!

11. If there were roundabouts off the highway at both ends of town...it would make right turn only easier...as it is everyone just uses side streets or parking lots to turn around. :(

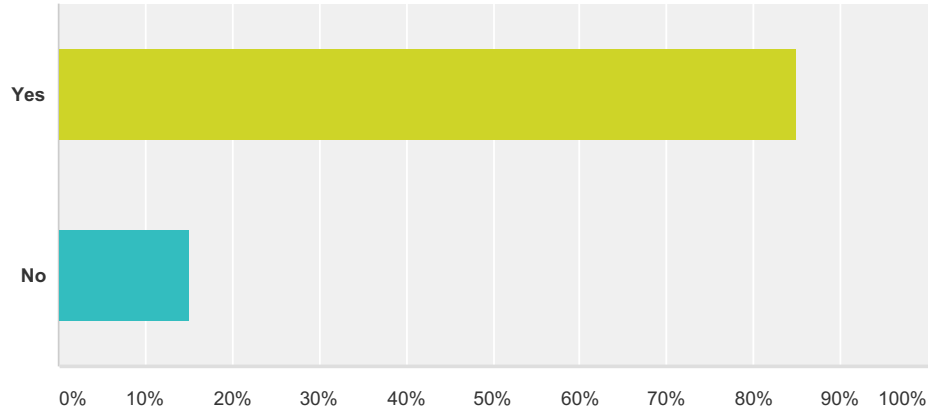
12. Traffic signals needed at the busy intersections but I think most roads can handle round abouts. In the past I have used the happy valley roundabouts in Nampa and they did wonders at rush hour traffic.

13. Traffic signal if a hi volume. Roundabouts are still unsafe, most people don't know how to use them.

14. roundabouts seem to keep traffic moving and I prefer those. But i do feel it depends on the intersection in question as a simple stop sign might be good enough. I'd like to see roundabouts at Cemetery road and Willis Road and also Hartley Road and Willis road before any other street are repaired. There are some trees on cemetery road just pasted Willis that could be trimmed so people can see oncoming traffic better

Q8 Do the existing roundabouts in Middleton work adequately?

Answered: 60 Skipped: 2



Answer Choices	Responses	
Yes	**85.00%**	51
No	**15.00%**	9
Total		**60**

See following page for responses.

Question #8 Add Comments Below:

1. Lakes of Talaga are a total joke

2. not aware of any roundabouts in Middleton

3. Only when people know how to drive them. The majority don't and cause problems.

4. Emmett road is great

5. I only know of three located in Middleton, and they're GREAT!

6. I hate them, but they work

7. The buses clutter all the other intersections to avoid the roundabouts.

8. Most I have seen are in sub divisions and many of those are small and poorly placed making them mostly useless.

9. people in Idaho haven't been taught the correct way to drive a roundabout. They either don't yield at all or they stop in the middle of the roundabout which defeats the purpose. We also don't need that many roundabouts, or any at all in my opinion. It's not necessary in more rural areas.

10. I love the roundabouts by the high school. I know people who don't....but change is just a pain for some.

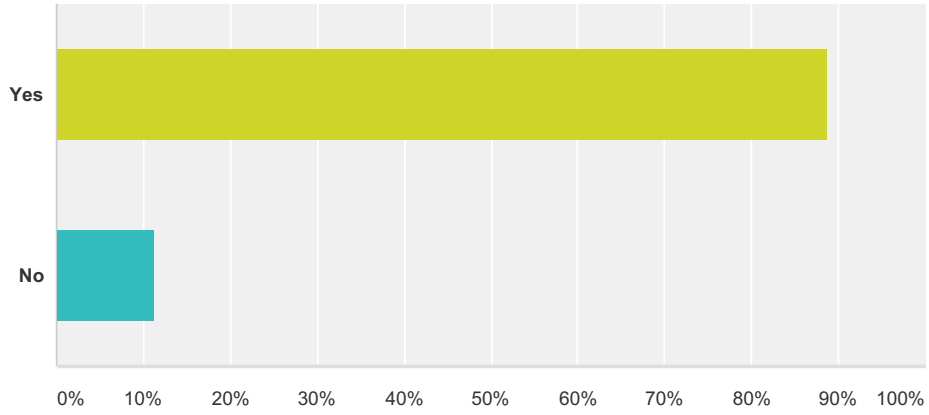
11. For safety the center sidewalks need to be narrower than car widths. I see tire marks on those sidewalks all the time. It could be high school kids trying to have fun.

12. I'd like to see roundabouts at Cemetery road and Willis Road and also Hartley Road and Willis road before any other street are repaired

13. Love the roundabout at the intersection of emmett and Willis rd!!

Q9 Do the existing signals in Middleton work adequately?

Answered: 62 Skipped: 0



Answer Choices	Responses	
Yes	88.71%	55
No	11.29%	7
Total		62

Add Comments Below:

1. But we need more, especially by the middle school

2. We only have 1 stop light.

3. may need traffic light for middle school access entry and exit

4. Just need more... Emmett Road since HS

5. I was under the impression that HAWK lights are intended to be mid-block and across from the place people ate trying to access. This means it should be directly across from middle scool and skate park. There should be a regular stop light at Cemetery Road and HWY 44

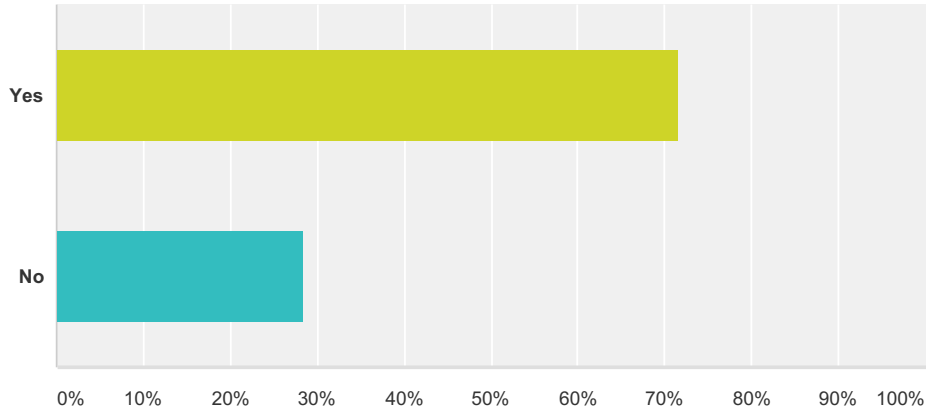
6. Getting onto HWY 44 can be difficult during peak hours.

7. There needs to be more light signals at Cemetery & Hwy 44 as well as Emmett and Hwy 44 to help traffic. Traffic is way backed up at these intersections.

8. We need a signal at Cemetery and Hwy 44. Something bad will happen there one day.

Q10 Do the existing stop-controlled intersections in Middleton work adequately?

Answered: 60 Skipped: 2



Answer Choices	Responses	
Yes	**71.67%**	43
No	**28.33%**	17
Total		**60**

See following page for responses.

Question #10 Add Comments Below:

1. Hawthorne & Hwy 44

2. I actually live outside middleton in the country and people blow through the stop signs all the time.

3. Vehicles do not stop our of Highlands subdivision onto Willis.

4. Traffic backs up to far

5. Traffic gets too backed up near middle school.

6. Except Hwy 44 and Emmett. Every morning I see many drivers not stopping so they can get out on the Highway. There should be a light there.

7. Some of them need to be stop lights instead of just stop signs.

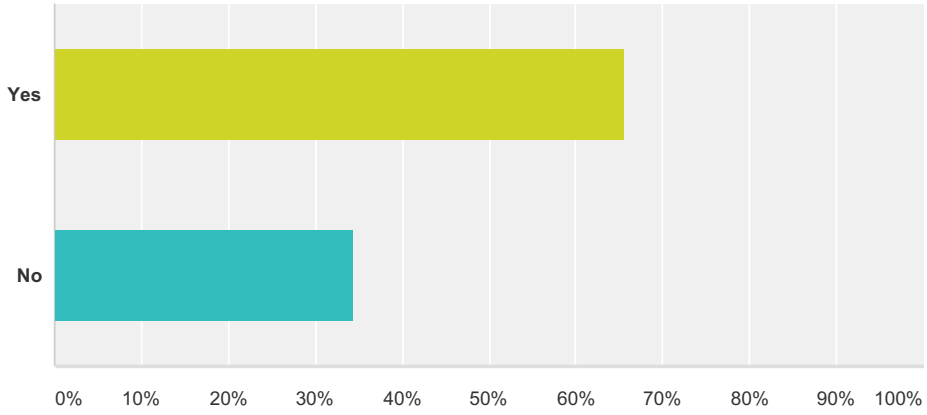
8. As mentioned above more 4 way stops on 44 or roundabouts.

9. N Middleton and hwy 44 intersection is not great

10. Willis Road and Cemetery and Hartley intersections are too busy, and something needs done! Getting onto the highway from Cemetery Road is almost impossible during school starting and ending times.

Q11 Do you utilize Middleton's pathways for walking and/or biking?

Answered: 61 Skipped: 1



Answer Choices	Responses	
Yes	**65.57%**	40
No	**34.43%**	21
Total		**61**

See following page for responses.

Question #11 If Yes, which ones?

1. Along 44

2. Middleton Place Park Roadside Park Centennial Grove

3. The green belt, hwy 44

4. I would love to but the only one is in town.

5. Walkway on Willow Dr, sidewalk along Powder River subdivision, sidewalk along Wills by Highland subdivision.

6. All of them that are accessible. However streets need sidewalks!

7. the river walk, sidewalks in downtown

8. all pathways near and around west highlands on hartley rd

9. No...but I like them a lot.

10. Highway 44 corridor

11. We regularly use the one that goes from the river up toward Ridleys. We then cross Main and head east toward Middleton Place Park. We ride bikes around the park for several laps. We love these pathways. We would support more!

12. The one behind Ridleys and the connecting one to the river.

13. I would like to use them more for biking, but they don't seem as connected as they could be.

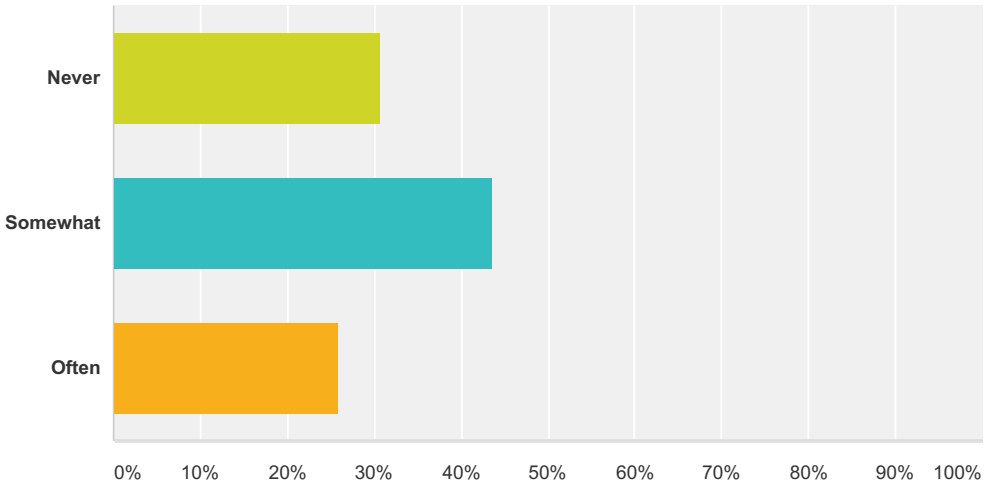
14. Most parks. Path at Harmon Park up to the Middle School.

15. All of them

16 Park Place Park to City Park to the the River

Q12 How often do you utilize Middleton's pathways?

Answered: 62 Skipped: 0



Answer Choices	Responses	
Never	30.65%	19
Somewhat	43.55%	27
Often	25.81%	16
Total		62

Add Comments Below:

1. Almost daily

2. We need more side walks on the back streets. Mainly in the "older" neighborhoods

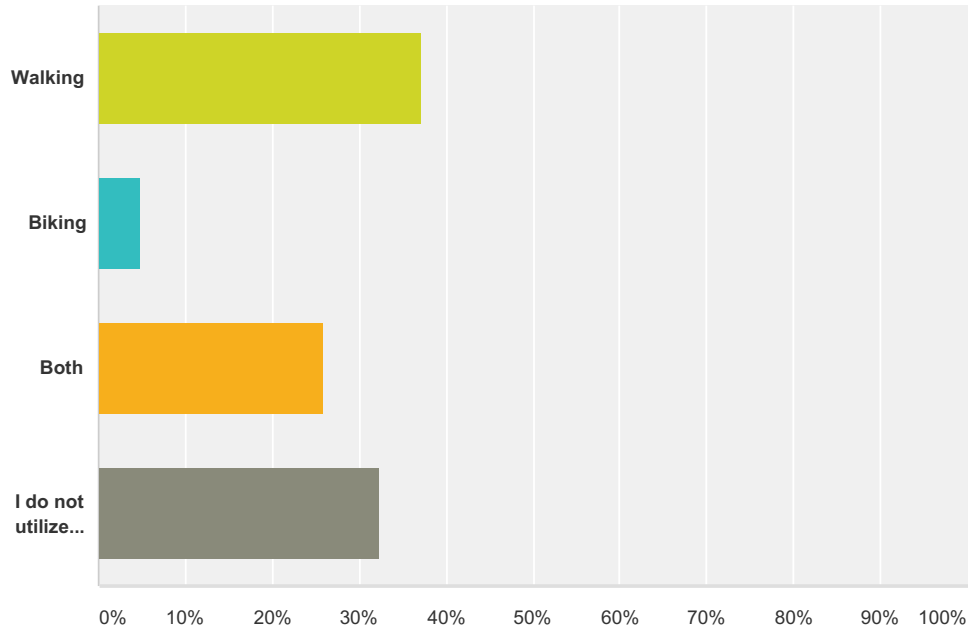
3. I want to...I just dont. Its the thought that counts. :)

4. More in the summer months. A couple times a week.

5. once a week

Q13 How do you primarily utilize Middleton's pathways?

Answered: 62 Skipped: 0



Answer Choices	Responses	
Walking	37.10%	23
Biking	4.84%	3
Both	25.81%	16
I do not utilize Middleton's pathways	32.26%	20
Total		62

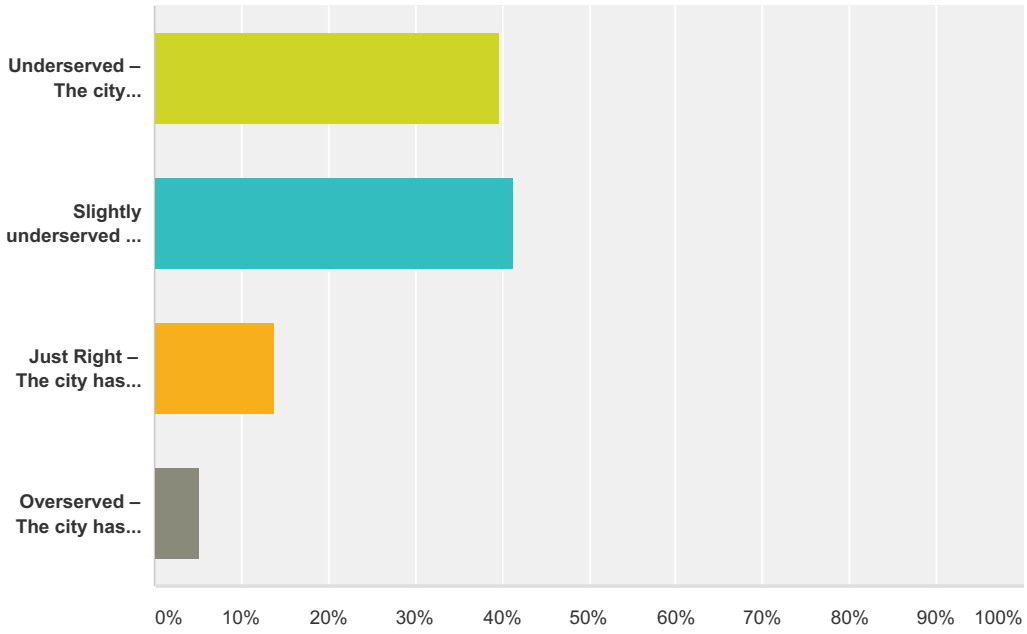
Add Comments Below:

1. would love to see a greenbelt that connects all the way to star

2. Would like to bike more. Seems unsuitable for that.

Q14 How would you rate the adequacy of Middleton's pathway system?

Answered: 58 Skipped: 4



Answer Choices	Responses	
Underserved – The city definitely needs more pathways.	39.66%	23
Slightly underserved – The city has good pathways, but should be planning for more.	41.38%	24
Just Right – The city has a good amount of pathways.	13.79%	8
Overserved – The city has invested too much in pathways.	5.17%	3
Total		58

Add Comments Below:

1. Need one on Middleton Rd

2. no access for children to commute to local schools safely

3. I can't answer this

4. I've seen so many improvements over the last few years. Keep it up!

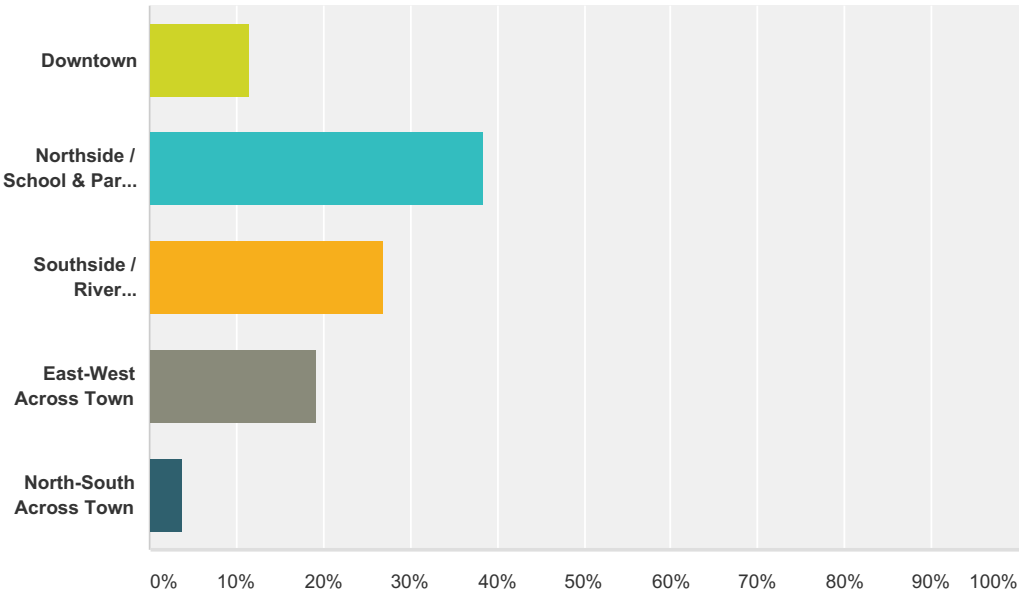
5. I live on Purple Sage. I'd love a pathway from purple sage to Picadilly.

6. Plant trees and grass on 44.It would make that path more appealing friendlier and safer.

7. Just right for now but I'd like to see more

Q15 Where do you see the greatest need for pathways?

Answered: 52 Skipped: 10



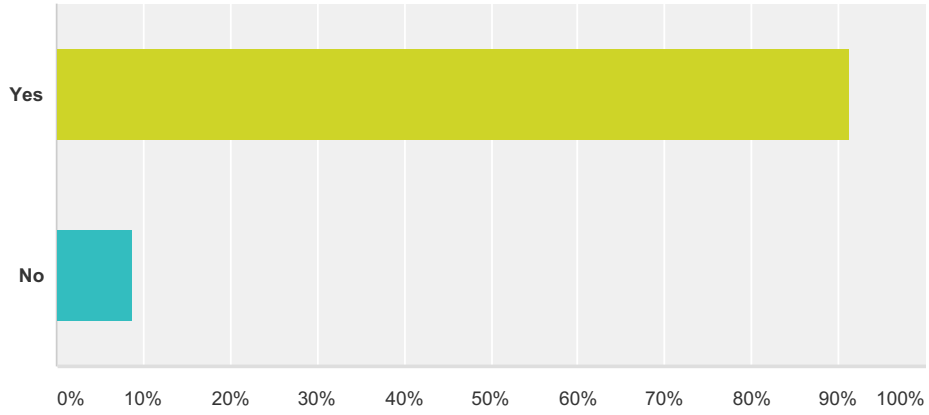
Answer Choices	Responses	
Downtown	11.54%	6
Northside / School & Park Connections	38.46%	20
Southside / River Connections	26.92%	14
East-West Across Town	19.23%	10
North-South Across Town	3.85%	2
Total		52

How many times per month do you use it?

1. 2
2. 8 to 10 times
3. 7 or 8
4. Daily
5. We use it at least 6 days a week for exercise (biking)
6. 15
7. Summer time 10
8. 2 to 3
9. Not sure
10. Daily.
11. several
12. None needed.

Q16 Would you like to see Middleton's pathway system expanded?

Answered: 57 Skipped: 5



Answer Choices	Responses	
Yes	**91.23%**	52
No	**8.77%**	5
Total		**57**

Add Comments Below:

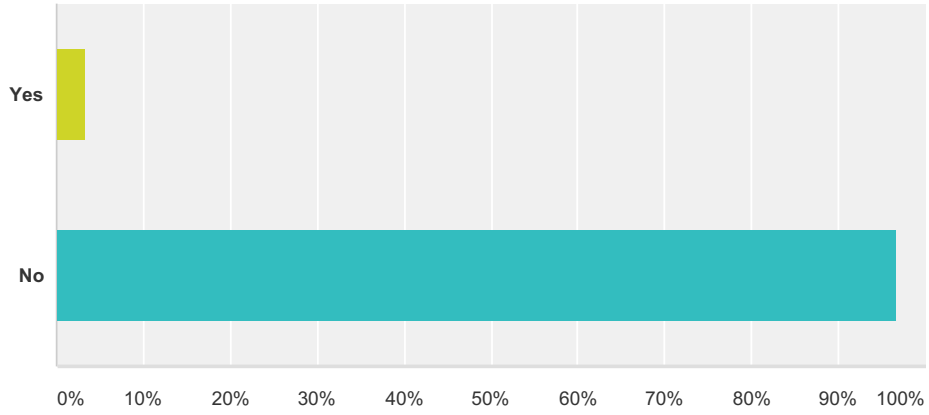
1. In front of Ridleys & Middleton Rd to 44 to downtown

2. I would love to go East out of the greenlinks subdivision area. North of 44.

3. Important for community health and growth the the pathway system is connected to neighboring towns.

Q17 Do you utilize transit options (Valleyride, busses, etc.)?

Answered: 60 Skipped: 2



Answer Choices	Responses	
Yes	3.33%	2
No	96.67%	58
Total		60

If yes, which ones?

1. I would if it was more accesible

2. I used to use the bus that picked up in middleton and ran into boise but quicker to drive.

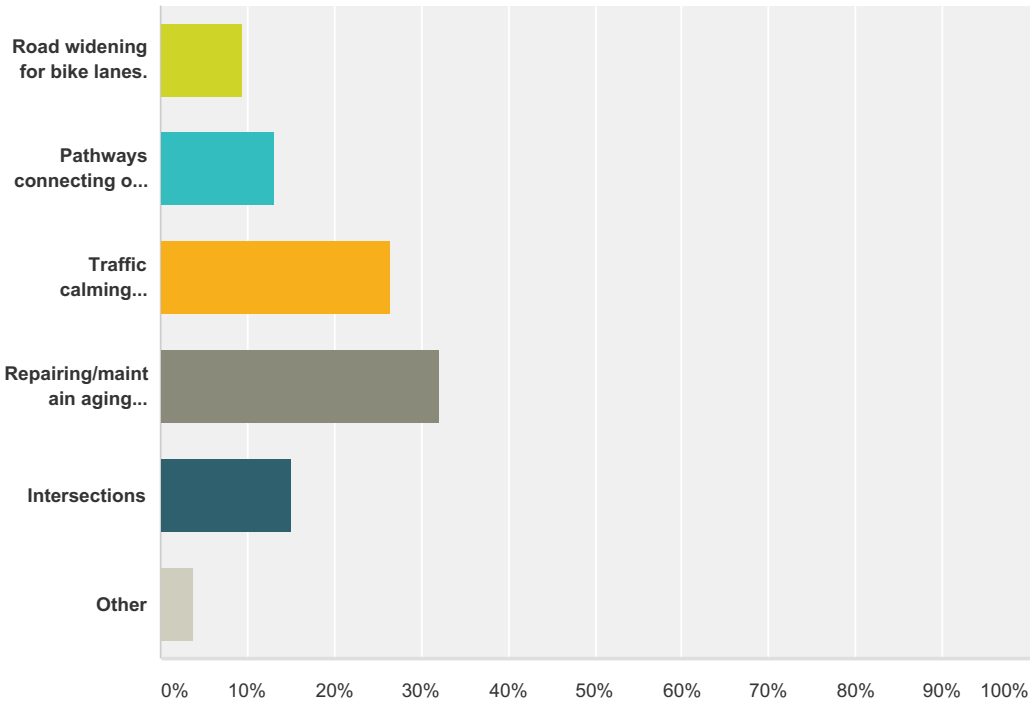
3. would like too, if more options were available

4. I have used it in the past, but not the line that starts in Middleton., That one doesn't have enough stops. I went down to Karcher Mall and took the bus to my work near the Boise Town Square Mall.

5. not at this time only because we don't need to go into Boise. We need access to Caldwell and Nampa and to the colleges as I feel many college students would use and need it. Young adults/adults trying to work who have no transportation could use it as well. And offered more than one trip a day maybe.

Q18 What is the best use of City transportation funds?

Answered: 53 Skipped: 9



Answer Choices	Responses	
Road widening for bike lanes.	9.43%	5
Pathways connecting open spaces.	13.21%	7
Traffic calming measures (islands, roundabouts, etc.).	26.42%	14
Repairing/maintain aging infrastructure.	32.08%	17
Intersections	15.09%	8
Other	3.77%	2
Total		53

Add Comments Below:

1. & Intersections Dewey & 44 - Bad design, cannot see oncoming traffic

2. All the above

3. We all have many children who use the neighborhoods to get to and from places such as the skatepark. However, there are NO sidewalks in that area for these children to use resulting in children walking in the street/sides of the street where inconsiderate drivers speed entirely too much. We need to make it safer for the children.

4. And pathways

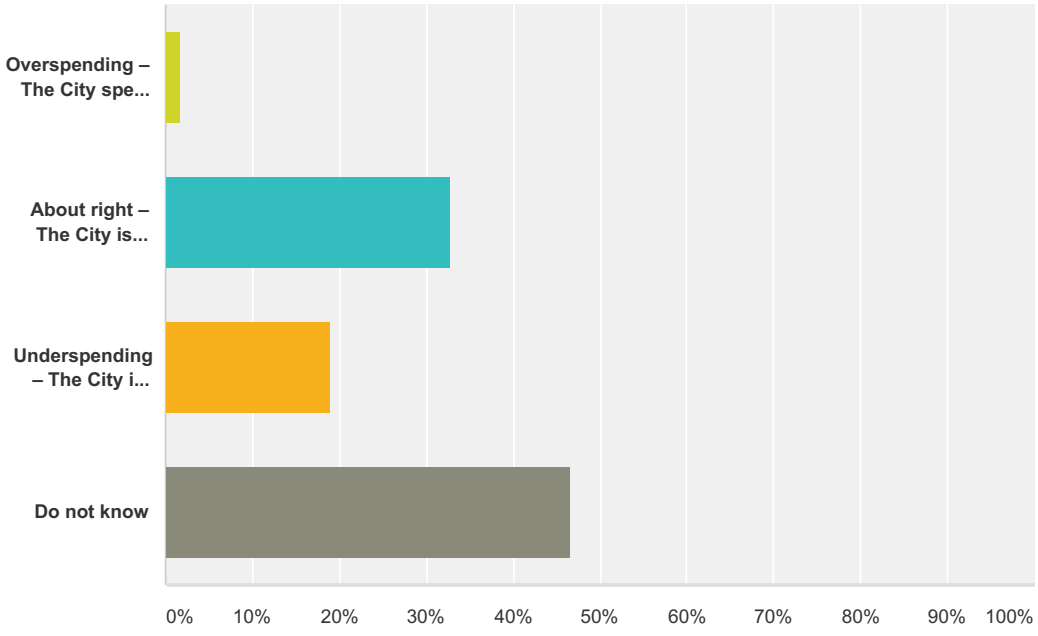
5. I would love bike lanes!

6. Traffic lights

7. repairing/maintaining plus traffic measures

Q19 Based on what you know about the City's budget, how is the City doing on transportation funding?

Answered: 58 Skipped: 4



Answer Choices	Responses	
Overspending – The City spends too much on transportation.	**1.72%**	1
About right – The City is budgeting what they should for transportation.	**32.76%**	19
Underspending – The City is not spending enough on their transportation system.	**18.97%**	11
Do not know	**46.55%**	27
Total		**58**

Add Comments Below:

1. My concern is town is small but schools are overcrowded and close to moving to 5A and we just dont have sports facilities, safe roads. Not sure why we dont have money from taxes with everyone moving here to fund these things!

Q20 Please list what you believe should be the top 3 priorities for the Middleton Transportation Plan.

Answered: 45 Skipped: 17

Answer Choices	Responses	
Priority #1	**100.00%**	45
Priority #2	**91.11%**	41
Priority #3	**73.33%**	33

#	Priority #1	Date
1	Alternate Route - when school in session - ugh!	9/27/2016 9:39 AM
2	More Roundabouts	9/27/2016 9:30 AM
3	Aging infrastructure	9/20/2016 6:45 PM
4	sidewalks for walking	9/15/2016 9:20 AM
5	Pathways	9/6/2016 10:50 PM
6	Downtown	9/4/2016 1:18 PM
7	main street through town! to many cars	9/3/2016 12:11 PM
8	Enforcing stop signs and pedestrian crossings	9/2/2016 7:52 PM
9	Left turn lane off 44 on Middleton Rd	8/31/2016 9:43 PM
10	Safety for pedestrians crossing	8/27/2016 11:05 AM
11	Side walks	8/26/2016 11:50 PM
12	road up keep	8/26/2016 11:00 PM
13	Control traffic on Main Street. More stop lights.	8/26/2016 9:29 PM
14	pathways	8/26/2016 7:48 PM
15	Fix and open the old blocked off/eroded roads	8/26/2016 6:03 PM
16	Traffic around the HS	8/26/2016 5:58 PM
17	Widening traffic lanes along Highway 44 through Middleton	8/26/2016 5:31 PM
18	Widen states st	8/26/2016 4:43 PM
19	Downtown bypass	8/26/2016 4:12 PM
20	Repairing any roads that need it	8/26/2016 3:30 PM
21	Cemetery Rd by heights elementary needs sidewalks and the intersection at cemetery and main	8/26/2016 3:28 PM
22	More paths for biking and walking	8/26/2016 2:55 PM
23	Hawthorne and Main Street	8/26/2016 2:53 PM
24	Traffic calming	8/26/2016 2:50 PM
25	Stop light at Cemetery	8/26/2016 2:31 PM
26	traffic control	8/26/2016 1:39 PM
27	Alternate route over river or widen existing road	8/26/2016 1:11 PM
28	Traffic near the schools especially the middle school	8/26/2016 12:54 PM
29	More public transportation	8/26/2016 11:25 AM

30	Stop lights at schools	8/26/2016 10:29 AM
31	Turn light single at Cemetery & Hwy 44	8/26/2016 10:18 AM
32	Signal at cemetery rd.	8/26/2016 10:05 AM
33	Bike paths	8/26/2016 9:46 AM
34	Hwy 44 through way for people who just want to connect to eagle from the freeway and not go through town.	8/26/2016 9:40 AM
35	repairs	8/26/2016 9:39 AM
36	New stop lights instead of stop signs in some places	8/26/2016 9:31 AM
37	overcoming the bottlenecks on the highway.	8/26/2016 9:26 AM
38	More pathways.	8/26/2016 9:21 AM
39	School tragic	8/25/2016 8:50 PM
40	Roundabouts	8/25/2016 6:05 PM
41	True repair of roads	8/25/2016 4:14 PM
42	busses	8/25/2016 3:48 PM
43	None	8/25/2016 3:21 PM
44	Roundabouts	8/25/2016 2:54 PM
45	Roundabout at Hartley and Willis roads	8/24/2016 4:26 PM
#	**Priority #2**	**Date**
1	44 & Dewey - Bad Design	9/27/2016 9:39 AM
2	Additional bike / pedestrian lanes	9/27/2016 9:30 AM
3	Intersection improvement	9/20/2016 6:45 PM
4	road surface improvements	9/15/2016 9:20 AM
5	Highway 44 improvements	9/6/2016 10:50 PM
6	Boise River	9/4/2016 1:18 PM
7	school areas	9/3/2016 12:11 PM
8	Maintaining existing sidewalks (keep clear of weeds)	9/2/2016 7:52 PM
9	Maintaining existing roadways	8/27/2016 11:05 AM
10	Speed bumps	8/26/2016 11:50 PM
11	improve movement within the city, both roads and walkways	8/26/2016 11:00 PM
12	Paths for riding	8/26/2016 9:29 PM
13	road widening	8/26/2016 7:48 PM
14	Widen roads and turns	8/26/2016 6:03 PM
15	Additional side walks	8/26/2016 5:58 PM
16	Traffic signal at North Middleton and Highway 44	8/26/2016 5:31 PM
17	Make intersections more visible for right turns (tree trimming, move signs)	8/26/2016 4:43 PM
18	School stop lights/ traffic patterns	8/26/2016 4:12 PM
19	Safe crossings around schools	8/26/2016 3:30 PM
20	Roads near Hawthorne park are confusing to navigate	8/26/2016 3:28 PM
21	Winter time snow removal and water flow control.	8/26/2016 2:53 PM
22	Pathway connection	8/26/2016 2:50 PM
23	Intersection at Hartley and Willis	8/26/2016 2:31 PM
24	widening main st	8/26/2016 1:39 PM

25	Traffic flow during peak hours (school) thru downtown	8/26/2016 1:11 PM
26	Maintaining clear roads from the gravel yards	8/26/2016 12:54 PM
27	Safety on Hwy. 44	8/26/2016 11:25 AM
28	Turn light signle at aEmmett and Hwy 44	8/26/2016 10:18 AM
29	Crosswalk from middle school to skatepark	8/26/2016 10:05 AM
30	More green belt like paths like from Harmon Park to Ridley's	8/26/2016 9:46 AM
31	Make 44 a four lane in town.	8/26/2016 9:40 AM
32	sidewalks	8/26/2016 9:39 AM
33	Safe routes to schools for walkers, bikers AND traffic	8/26/2016 9:26 AM
34	4 way stops or roundabouts on 44	8/26/2016 9:21 AM
35	Pathways to encourage foot and bike traffic	8/25/2016 8:50 PM
36	Walk paths	8/25/2016 6:05 PM
37	Paint	8/25/2016 4:14 PM
38	two roundabuts on Willis one at cemetery and hartley	8/25/2016 3:48 PM
39	None	8/25/2016 3:21 PM
40	More bike lanes	8/25/2016 2:54 PM
41	Roundabout at Cemetery and Willis roads	8/24/2016 4:26 PM

#	Priority #3	Date
1	Repairing existing roads	9/27/2016 9:30 AM
2	Pathways	9/20/2016 6:45 PM
3	Intersection improvements	9/15/2016 9:20 AM
4	Bike lanes	9/4/2016 1:18 PM
5	i vote large sports facilities like neighboring towns!	9/3/2016 12:11 PM
6	More walking paths	8/27/2016 11:05 AM
7	Round abouts	8/26/2016 11:50 PM
8	a quick solution to Boise (train, trolley or shuttle system	8/26/2016 11:00 PM
9	Fix rough roads.	8/26/2016 9:29 PM
10	traffic control near in town schools	8/26/2016 7:48 PM
11	Add pathways	8/26/2016 6:03 PM
12	Fixing existing failing roads	8/26/2016 5:31 PM
13	Make bike paths for bicycles no traffic bike lanes	8/26/2016 4:43 PM
14	Safe pathways for walking/biking around town	8/26/2016 3:30 PM
15	A center turn lane ALL throughout main street is needed	8/26/2016 3:28 PM
16	More pathways for walking and biking.	8/26/2016 2:53 PM
17	Connect to green belt	8/26/2016 2:50 PM
18	Improve pathways and add bike lanes	8/26/2016 2:31 PM
19	more sidewalks	8/26/2016 1:39 PM
20	Additional sidewalks	8/26/2016 1:11 PM
21	More bike lanes	8/26/2016 11:25 AM
22	Possible crossing signal at middle school due to unsafe driving conditions	8/26/2016 10:05 AM
23	Middle School pick up and drop off location.	8/26/2016 9:46 AM

24	Middle school traffic is a nightmare. It could not be worse.	8/26/2016 9:40 AM
25	maintenance	8/26/2016 9:39 AM
26	Speed limits seem fickle. The 35 limit on cemetery from the top of the hill to midway to purple sage is ridiculous. There's one subdivision there...and a turn lane in. Also the sign northbound changes to 45 long before the southbound lane is given signage to slow to 35. I've often thought if I got a ticket there (not that I speed) I would point out the road has two different speed limits for two different lanes. The speed bumps in town are insane, excessive, inconsistently constructed, and arbitrary.	8/26/2016 9:26 AM
27	More east to west road connections to get people off 44 that are just traveling through.	8/26/2016 9:21 AM
28	Bike paths	8/25/2016 6:05 PM
29	Signs.	8/25/2016 4:14 PM
30	connecting Middleton road with North Middleton road	8/25/2016 3:48 PM
31	None	8/25/2016 3:21 PM
32	Bike paths acceibitly	8/25/2016 2:54 PM
33	Roundabout at Sawtooth Lake Dr. and Middleton Road	8/24/2016 4:26 PM