LANDER MASTER TRANSPORTATION PLAN

Lander Transportation Plan

- Analyze the existing transportation network
- Identify and discuss future connections
- Determine locations where there are Level of Service issues

Being discussed at tonight's meeting

Safe Routes to Schools and Walkable, Bike-able Routes Study (AKA: Non-Motorized Plan)

- Update 2009 SRTS Plan for current school configuration
- Review/Update Lander Area Pathway System

Was discussed at Monday Night's meeting

The purpose of the meeting is to discuss the Study Report with area residents, review the study findings (proposed improvements/alternatives), and to gather feedback and public input about the Study Report.
TRANSPORTATION INVENTORY

[Map with legend showing Lander Boundary and Traffic Count Locations. The legend includes 2019 Traffic Counts in categories: 0 - 500, 501 - 1,000, 1,001 - 5,000, 5,001 - 10,000, and 10,001+. The map displays various traffic count locations marked with green dots.]
TRANSPORTATION INVENTORY
# Transportation Network Analysis

## Functional Classification

### Functional Classification Characteristics Table

<table>
<thead>
<tr>
<th>Functional Classification</th>
<th>Typical System Mileage</th>
<th>Typical Traffic Volumes</th>
<th>Qualitative Characteristics</th>
</tr>
</thead>
</table>
| **Principal Arterial**    | 4 - 9%                  | 2,000 - 8,500 vehicles/day | • High traffic volumes and low system mileage  
                           |                         |                         | • Serve as primary entry points to urban centers  
                           |                         |                         | • Provide connections to other urban centers  |
| **Minor Arterial**        | 7 - 14%                 | 1,500 - 6,000 vehicles/day | • Connect and augment the Principal Arterials  
                           |                         |                         | • Distribute traffic throughout the urban area  
                           |                         |                         | • Provide connections to remaining functional classification roadways  |
| **Collector**             | 3 - 16%                 | 300 - 2,600 vehicles/day | • Balance between access and traffic circulation  
                           |                         |                         | • Channel trips from local areas to arterial network  |
| **Minor Collector**       | 3 - 16%                 | 150 - 1,110 vehicles/day | • Similar purpose and characteristics to Collectors, but generally serve shorter trips  |
| **Local**                 | 62 - 74%                | 15 - 400 vehicles/day | • Low traffic volumes and high system mileage  
                           |                         |                         | • Provide direct access to destinations (residential, commercial, industrial, etc.)  
                           |                         |                         | • Not suited for through traffic movements  |

### Roadway Mileage Proportion Guidelines

![Graph showing the proportion of roadway mileage for different functional classifications](image)
TRANSPORTATION NETWORK ANALYSIS
FUTURE CONNECTIONS

- Identified back in 1979 Report (+40 yrs)
- Continued in Master Plan
- Run Counter to Master Plan Goals
- Should come in with future development
- Some routes seem arbitrary
- Local Connectivity NOT Bypassing Traffic
TRANSPORTATION NETWORK ANALYSIS
CRASH DATA ANALYSIS

Proportion of Injury Related Crashes

Breakdown of Crashes by Crash Type

- Rear End (Front to Rear): 231
- Angle Right (Front to Side, includes Broadside): 185
- Not a Collision w/2 Vehicles in Transport: 121
- Angle Same Direction (Front to Side): 95
- Sideswipe Same Direction (Passing): 74
- Angle (Front to Side), Opposing Direction: 73
- Rear to Side (Normally Backing): 66
- Rear to Front (Normally Backing): 51
- Unknown: 48
- Head On (Front to Front): 28
- Sideswipe Opposite Direction (Meeting): 11
- Rear to Rear (Normally Backing): 7
- Angle Direction not Specified: 4
- Other: 3
TRANSPORTATION NETWORK ANALYSIS
DEFICIENCIES AND POTENTIAL IMPROVEMENTS

Investigation of additional river crossings
TRANSPORTATION NETWORK ANALYSIS
DEFICIENCIES AND POTENTIAL IMPROVEMENTS

2nd Street and Main Street Intersection

Also reviewed 8th and Main
Transportation Network Analysis
Deficiencies and Potential Improvements

Designated Access Route to Sinks Canyon Road

5th Street (WY HWY 131) Classified as a Major Arterial (1,121 VPD)
9th Street Designated as a Collector (1,963 VPD)

Routing eastbound traffic from 9th down 5th adds 0.6 miles travel distance
Routing Westbound Traffic from 5th down 9th adds 0.3 miles travel distance

Shifted through traffic volumes onto 5th would have minimal impact during peaks
9th Street versus 5th Street Traffic Volumes
9th Street - Safe Route and Shared use
Proposed Traffic Calming Interventions
TRANSPORTATION NETWORK ANALYSIS
DEFICIENCIES AND POTENTIAL IMPROVEMENTS

Baldwin Creek Road – Lane Diet Alternative

- 4 Lanes to 3 Lanes
- 11 foot wide lanes
- Protected or Buffered Dedicated Bike Lane
  - Removable Delineators
  - Rumble Strips
  - Buffer Striping
TRANSPORTATION NETWORK ANALYSIS

PEDESTRIAN SIGNAL TIMING

Baldwin Creek/Main and 9th Street/Main

Only intersections on Main without dedicated pedestrian timing.

Peds must push button or signal timing is too short for ped.

SRO indicated students pushing button was issue at Baldwin Creek.

Pedestrian Detection System is one alternative
TRANSPORTATION NETWORK ANALYSIS
DEFICIENCIES AND POTENTIAL IMPROVEMENTS

Recommendations

- Gap Study
- HAWK pedestrian signal
- Pedestrian Median
- Shared use sidewalk (lower speed bikes)
- Lane Diet Alternative on Main
- Screened out Alternatives
TRANSPORTATION NETWORK ANALYSIS
DEFCICIENCIES AND POTENTIAL IMPROVEMENTS
Main Street Bypass Alternatives

- **Passenger Vehicle Bypass (one-way?)**
  - Added Trip Time provides little incentive for drivers to use these bypasses
  - One-way Traffic typically results in increased speeds (not good for shared use)
  - One-way traffic could impact WRTA Bus Stop on Lincoln

- **Freight Vehicle By Pass**
  - Difficulty navigating tight corners

- **Bicycle Traffic Bypass (Current Configuration)**
  - Low volumes reinforce this concept
MULTI-MODAL CONSIDERATIONS
PROPOSED LANDER AREA PATHWAYS SYSTEM MAP

Legend
- Paved Trail
- Unpaved Trail
- Shared Use Path
- Bike Lane
- Advisory Bike Lane
- Buffered Bike Lane
- Protected Bike Lane
- Bicycle Boulevard
- Multi-Use Shoulder
- Dashed Line indicates new pathway
- On-Street Bicycle Routes without Designation
- Site Specific Intervention

Map showing proposed pathways and considerations in the Lander area.
LANDER WAYFINDING
EXAMPLES

A - Community Wayfinding Guide Signs with Enhancement Markers

- Great Falls Historic District
- Overlook Park Visitor Center
- Rogers Locomotive
- City Hall

B - Destination Guide Signs for Color-Coded Community Wayfinding System

- Renwick Districts
  - Collegetown
  - South Hill
  - Lakefront

* Color coding panels are used only when optional destination guide sign is used at wayfinding boundary

OPTIONAL DESTINATION GUIDE SIGN AT WAYFINDING BOUNDARY (see Section 2D.03)

GENERAL INFORMATION SIGN (see Section 2A.02)

RENWICK CORPORATE BOUNDARY

DESTINATION GUIDE SIGN

SOUTH HILL COMMUNITY CENTER

DOWNTOWN

LAKESHORE

LAKESHORE

VISITOR CENTER

PARKING

CLINTON HOUSE

ART MUSEUM

PERFORMING ARTS CENTER

COLLEGE TOWN

ENTRANCE

Renwick

-Collegetown

South Hill

Lakefront
PARKING

Approximately 625 feet = 7 to 9 useable RV spaces.

- Received no comments on Parking
- Parking maybe perceived issue during events
- Recommend improved parking at Rail Trail and North Side Park
- RV Parking on 1st Near Main?