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5200 TRAFFIC OPERATIONS

5201 TRAFFIC SIGNALS

5201.1 General

The Ada County Highway District (ACHD) signal shop is responsible for maintaining, trouble-shooting and repairing traffic signals, flashing beacons, pedestrian crossings and school flashers on all roadways in Ada County.

All inquiries regarding traffic signal operation should be prioritized to maintain public safety and convenience. The priorities should consider the following criteria:

1. Public and personal safety;
2. Impact on traffic flow and traffic patterns;
3. Location of problem;
4. Time of day;
5. Scope remediation (repairs, timing changes, signal modifications, etc.).

All signal operation calls should be addressed as soon as feasible, but according to the established priority system.

5201.2 Signal Crew – Procedures and Policies

Refer to the “ACHD Traffic Signal Maintenance Procedures Manual” for policies and procedures related to signal crew operation.

5201.3 Emergency Vehicle Preemption/Transit Bus Preemption

Emergency vehicle preemption allows specially equipped vehicles to interrupt the normal sequence of traffic signal operation in order to respond to emergency situations safely and quickly. Transit bus preemption, also known as Transit Signal Priority (TSP), allows appropriately equipped transit buses additional “green time” for specific signalized intersection approaches if they are running behind schedule. TSP parameters shall be coordinated with ACHD Traffic Operations prior to implementation on a specific route. Indiscriminate, unauthorized or unnecessary use shall be avoided. Implementation of emergency vehicle preemption and TSP requires equipment and wiring to be installed at traffic signals and on/within vehicles. This equipment is not included nor provided by ACHD as part of normal signal installation.

5201.3.1 Installation

Emergency vehicle preemption or TSP equipment may be installed at ACHD owned traffic signals. All installation work performed within signal controller cabinets shall be accomplished by ACHD traffic operations personnel or their designee.

5201.3.2 Expense

All expenses associated with the procurement, installation, and maintenance of emergency preemption or TSP equipment shall be borne by the party requesting the preemption equipment. All preemption equipment shall be 100% compatible with all existing signal appurtenances.

5201.3.3 Preemption Use Authorization

Emergency preemption or TSP shall only be used by authorized agencies. Due to traffic flow disruption, emergency preemption shall be used only when there is a threat to life, limb, or property. All authorized agencies shall maintain a written policy conforming to the guidelines outlined within this emergency preemption policy. ACHD Traffic Operations shall be authorized to implement coded preemption operation, which may disable emergency vehicle preemption for any agency vehicle not following this policy.

5201.3.4 Preemption Codes

All vehicles using preemption at ACHD-maintained signals shall use coded emitters. The coded identification codes shall be set in accordance with the ACHD traffic operations signal preemption code sequence list. The traffic operations supervisor or signal construction coordinator may make this list available to authorized agencies upon request. Each vehicle using a preemption emitter shall be assigned a unique code. All agencies using preemption emitters shall provide the ACHD signal construction coordinator or designee an accurate list of the emitter codes used and the vehicle (including identification numbers) assigned to each code.

5201.3.5 Equipment Maintenance

Once installed, all preemption equipment at ACHD maintained intersections shall be maintained by ACHD personnel or their designee. However, the fire district or transit service provider where the signal is located shall ultimately be responsible for providing new equipment when, in the opinion of ACHD, a device is deemed beyond repair.

5201.3.6 Notification of Malfunctions

It shall be the responsibility of the agency observing any malfunctions of the preemption equipment to notify the traffic operations signal shop foreman of the malfunction. The information supplied with this notification may include, but not necessarily be limited to, the following:

- Malfunction description;
- Location;
- Travel direction;
- Time of day;
- Vehicle number;
- Emitter code;
- Description of normal operation at the location where the malfunction was observed.

5202 SIGNS AND OBJECT MARKERS

5202.1 Sign Material Requirements

Signs shall follow the most recently adopted version of the MUTCD in color, size, reflectivity and shape. Variations and special purpose signs shall be manufactured to specifications supplied by the ACHD Traffic Engineer. Refer to ACHD traffic standard details and specifications for specific material requirements.

5202.2 Response

Priority should be given to all calls or requests involving maintenance of a “vital” sign. Examples include a Stop or Yield sign being down, missing, or blocked from view. Response to such requests should be immediate.

5202.3 Records

Accurate and timely records shall be maintained according to standard procedures. Work orders shall become part of the ongoing records. All work orders shall be approved by the Traffic Operations Superintendent or his representative.

5202.4 Authority

The sign shop crew chief shall be responsible for assuring compliance with the procedures outlined in Section 5202.2 and 5202.3. Questions or changes to this procedure should be handled by the foreman.

5202.5 Guidelines for Application (Warrants)

The most recently adopted version of the MUTCD serves as the primary guideline for traffic control device usage. Relevant Institute of Transportation Engineers (ITE) publications, the American Association of State Highway and Transportation Officials (AASHTO) policies, and other technical publications should also be used.

5202.6 Guide Sign Policy and Applications

Guide signs can provide a benefit to the traveling public when the location of a particular facility is not readily visible from a major roadway. The Ada County Highway District (ACHD) is responsible for the acceptance and placement of guide signs. The following is the policy for determining if guide signing is needed for a given facility:

1. Guide signing should be cooperative. The facility benefits from adequate guide signing and the driving public benefits by not having to drive around looking for a particular facility. If deemed appropriate, the District specifies the number, appropriate location(s), design and placement of guide signs. In some cases, the District furnishes the necessary sign post. The owner of the signed facility shall pay for the fabrication of the sign(s) through a private source and deliver the sign(s) to ACHD Traffic Operations.
2. Facilities such as those listed below are appropriate for guide signing if they are not located on arterial streets:
 - Museums;
 - Transportation depots;
 - Major recreational facilities;
 - Government centers;
 - Post offices.

3. Factors to consider when determining guide sign installation include whether the facility is open to the general public (or of a similar character), how much first time or occasional visitor traffic it generates, and whether the facility is visible and accessible from an appropriate category of street.

The following standards are applied when considering guide signing for a facility:

Facility's Primary Drawing Area	Facility Location (Distance from Route)	Number of Monthly Visitors
National	Freeway (2 miles)	ITD Policy
State	Freeway (1 mile) / State Hwy (2 miles)	ITD Policy / 1000
Regional/County	State Hwy (1 mile) / Arterial	500
County/City	State Hwy (0.5 miles) / Arterial	500
City/Community	Arterial (0.5 miles)	300
Community/Neighborhood	Collector	100

Arterial and collector designations shall be determined by the most recently adopted version of the Ada County functional classification map.

4. Special consideration may be given for medical, police, and other emergency service facilities.
5. Consideration of guide signs may be given beyond what is shown in the above chart. This includes facilities that are difficult to find or those that have unusually large draws of infrequent or first time visitors.
6. A minimum number of signs should be used to guide visitors to the site.
7. Word messages should be kept brief to convey the meaning of the sign.
8. Sign size should be based on the content of the sign and the appropriate letter size for the street. The following standards should be applied with respect to appropriate size lettering:

More than two lanes per direction <u>OR</u> speed limit 45 mph or greater	Guide signs with 6" letters
More than one lane per direction <u>OR</u> speed limit 35 or 40 mph	Guide signs with 5" letters
Other streets	Guide signs with 4" letters

9. Preferences should be given to standard signs when applicable. Those signs are listed in the most recently adopted version of the Manual on Uniform Traffic Control Devices (MUTCD) or the Standard Highway Signs (SHS) manual.
10. Guide signs should be installed at locations that do not reduce the visibility of or obscure necessary signage for traffic safety (e.g.: regulatory, warning signs and route guide signs).

5202.6.1 Access Signing

In some cases, there may be a need to provide guide signs due to difficult access (e.g.: major streets with high traffic volumes where median islands and U-turn restrictions exist). Strict criteria should apply in this application so signs are not placed where there is adequate access to a given facility. This type of signing leads a driver through a difficult access situation in conflict with the typical expectation of how to reach a facility.

5202.6.2 Sign Size and Position

The ability to provide guide signs depends on having appropriate locations to position them. The size of such signs mounted as a single sign assembly is limited to 36"x36".

5202.6.3 Responsibility for Cost

The facility requesting guide signs shall be responsible for paying for the initial fabrication, installation, and eventual replacement of the sign. The District shall verify the eligibility of the request and require payment in advance from the requestor prior to installation.

Where a traffic or roadway improvement reduces access so the location becomes eligible for signing, the District or other entity beginning the project should be responsible for the cost of access signing.

5203 STRIPING AND PAVEMENT MARKINGS

5203.1 General

The Ada County Highway District (ACHD) paint shop is responsible for maintaining all striping and pavement markings on ACHD maintained roadways in Ada County. Markings on non-ACHD maintained roadways may also be maintained by ACHD forces by intra-agency agreement. Refer to those documents when determining maintenance responsibility.

5203.2 Paint Crew – Procedures and Policies

Refer to the "ACHD Pavement Marking Procedures Manual" for policies and procedures related to striping crew operation.

5204 WORK ORDERS

5204.1 Response

Work orders should be prioritized and completed in the order they are received from Traffic Engineering. This priority is established by the crew chief, though he/she may

receive specific direction about completion dates from the Traffic Operations Superintendent, the Traffic Engineering Supervisor, or the Manager of Traffic Services. The crew chief should be able to complete the work order in the requested time, though an alternate plan may be developed if the original schedule is not feasible.

5204.2 Authority/Approval

Work orders requiring traffic control device installations and modifications require the approval of the Traffic Engineering Supervisor, the Traffic Services Manager or designee. Approval of maintenance work orders should be by the Superintendent of Traffic Operations or his representative, which is then relayed to the crew chief for action.

5204.3 Compliance

The crew chief shall assure compliance with the most recently adopted version of the MUTCD or other applicable authority in completing the work order.

5204.4 Records

The work order shall become an integral part of the record system. It will be dated, indicate what action was taken and by whom. These should be given to the crew chief for proper filing. A copy of the completed work order should also be provided to Traffic Engineering as a method of tracking investigation completion.

5205 RECORD KEEPING

5205.1 General

Records are important in engineering and maintenance decisions; they are the tool used to protect the District's interests against potential claims and lawsuits. Many requests are made for data about all aspects of day to day operation. Refer to ACHD's Legal Department for approved retention requirements.

5205.2 Record Types

Records may include, but are not necessarily limited to, the following:

- Daily log books;
- Work orders;
- Chronological filing systems;
- Electronically based record systems (spreadsheets, Laserfiche, databases, etc.).

5205.3 Content

Records should contain the following:

1. Location of work
2. Action taken

3. Date work completed
4. Work completed by whom (optional)
5. Other pertinent information for complete documentation of performed actions

Records should be updated in a timely manner to assure accuracy and that data is readily available to any entity who requests it.

5206 DIGLINE/UTILITY COORDINATION

5206.1 Line Location Requests

Line location requests normally come from Digline, but may be requested by individual utilities, contractors or others as needed. Every effort should be used to assure accurate location of District facilities. This is normally within two (2) feet of District facilities.

5206.2 Requests for Line Locates

Requests for line locates should be directed to the Traffic Operations secretary to assure proper procedures are followed. Requests can be forwarded to the secretary by phone, email or in person. When requesting a line locate, provide information as specific as possible to help locators mark the correct areas.