PLANNING COMMISSION
Meeting Agenda
Monday – May 23, 2011
7:00 PM - Regular Meeting
City Council Chambers – 155 NW 2nd Avenue

Chair Dan Ewert – Vice Chair Janet Milne
Commissioners Sean Joyce, Charles Kocher, John Proctor, Misty Slagle and Randy Tessman

1. CALL TO ORDER

2. CITIZEN INPUT ON NON-AGENDA ITEMS

3. PUBLIC HEARINGS

Canby Police Facility - The applicant is requesting Site and Design Review approval to construct a new 25,300sf police facility and a 10,000sf daylight basement for future expansion. The site is 1175 NW 3rd Avenue. The lot is approx. 13.91 acres with 4.63 acres being disturbed. Zone: Light Industrial (M-1). **DR 11-02** Markus Mead, Associate Planner

4. NEW BUSINESS

5. FINAL DECISIONS
Note: These are final, written versions of previous oral decisions. No public testimony.

Canby Police Facility – DR 11-02

6. MINUTES

April 25, 2011

7. ITEMS OF INTEREST/REPORT FROM STAFF

8. ITEMS OF INTEREST/GUIDANCE FROM PLANNING COMMISSION

9. ADJOURNMENT

The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired or for other accommodations for person with disabilities should be made at least 48 hours before the meeting to Jill Thorn at 503-266-7001.
A copy of this agenda can be found on the City's web page at www.ci.canby.or.us
City Council and Planning Commission Meetings are broadcast live and can be viewed on OCTS Channel 5.
For a schedule of the playback times, please call 503-263-6287.

Hearing Date: May 23, 2011

STAFF REPORT TO THE

PLANNING COMMISSION

FOR THE CITY OF CANBY, OREGON

SECTION I APPLICATION SUMMARY

***CASE NAME**:* Canby Police Station DR11-02

APPLICANT:
Rhys Konrad/Group Mackenzie
1515 SE Water Ave
Portland, OR 97214

PREVIOUS FILE NO.:
n/a

OWNER:
City of Canby
PO Box 930
Canby, Oregon 97013

STAFF:
Markus Mead
Associate Planner

LEGAL DESCRIPTION:
41E0500405

DATE OF REPORT:
May 13, 2011

LOCATION:
1175 NW 3rd Ave

COMP. PLAN DESIGNATION:
Light Industrial (LI)

ZONING DESIGNATION:
Light Industrial (M-1).

Existing Conditions: The 13.91-acre site is located south and west of Baker Road and 3rd Avenue. The site is undeveloped.

Proposal: The proposed project consists of a new single-story 25,300sf police facility with a 10,000sf daylight basement for future expansion. The proposed site plan provides 34 public parking stalls and 54 secure police parking stalls.

SECTION II STAFF RECOMMENDATION

Based upon the findings in this Staff Report, and without benefit of testimony at a public hearing, Staff recommends **APPROVAL** of Site & Design Review DR11-02, pursuant to the conditions presented in this Staff Report.

SECTION III APPLICABLE REVIEW CRITERIA

Canby Comprehensive Plan

Land Use Element Goal: Policy No. 6, Areas of Special Concern

- *Area "A" and*
- *Area "B"*

Canby Municipal Code Sections

Canby Municipal Code Chapters

16.10	Off Street Parking
16.32	Light Industrial (M-1)
16.49	Site and Design Review
16.43	Outdoor Lighting Standards
16.89.040	Application and Review Procedures Type III Decision

Possible Chapters

16.130	Division XII. Riparian Preservation
16.140	Division XIII Wetland Preservation

SECTION IV. SUMMARY OF MAJOR CONSIDERATIONS

The three primary considerations for this project are related to impacts including:

A. Intersection traffic volumes through the Cedar and 2nd Avenue neighborhood
B. Intersection safety at SW 3rd at Cedar for pedestrians and vehicles (including bicycles)
C. Stormwater impacts of water quality to the receiving bodies (on-site wetland and Molalla River).
D. Emergency Access Road Alignment Options

A. Nearby Neighborhood traffic volumes

To protect livability in neighborhood areas, the City of Canby has adopted traffic impact thresholds for residential streets. The proposed police station is expected to add 57 vehicles during the a.m. peak hour and 60 during the p.m. peak hour to both N Cedar Street and NW 2nd Avenue along the residential portions. There are 2,422 existing daily vehicle trips on 2nd avenue and 2,352 existing daily vehicles along Cedar Street and the proposed police station will add 594 trips per day with 416 of those trips using Cedar Street and 2nd Avenue.

Volume reduction mitigation measures are required for these intersections. There is not a certain peak hour traffic increase that caused the need for mitigation in this case, but that any increase in traffic since the 2,500 maximum allowed trips per day volume already existed so any additional traffic caused the requirement to mitigate by trying to divert the expected additional traffic from this use to another route. Volume reduction measures could include diverters, movement closures, and decrease route speed by modifying geometry and/or traffic control.

Volume reducing recommended options include:

1. Traffic circle at the intersection of NW 2nd Avenue/N Cedar Street could be an appropriate mitigation. The traffic circle would be much like the traffic circle at the intersection of NW 2nd Avenue/N Aspen Street as shown in the photo below

Figure 1Traffic Circle Example: Ground View

Figure 2Traffic Circle Example: Plan View

2. Providing guide signing to the police station (via NW 3rd Avenue) and working with the police station to educate employees on the appropriate routes for both their commute and emergency response trips. If the guide signing and employee education is successful, a mitigation such as a traffic circle may not be necessary.

3. Installing a diverter at the intersection of SW 3rd at Cedar. This would reduce though traffic trips southbound along Cedar to the SW 2nd intersection; significantly reducing traffic volume at that intersection. (this option also has the benefit of safety increases to the intersection.)

4. Installing a stop sign for south-bound traffic along Cedar at the northern SW 3rd intersection on the west side of Cedar. Due to street alignments, this stop sign would be mid-block. Combined with directional signage, the stop sign would discourage through trips southbound along Cedar and encourage traffic to use SW 3rd for

east-bound destinations. This would reduce traffic volumes at the southern SW 3rd at Cedar intersection and the SW 2nd at Cedar intersections.

Recommendation: Staff recommends options 2, 3 and 4 be used concurrently. By including the stop sign at the northern SW 3rd/Cedar intersection in conjunction with the diverter at the intersection of SW 3rd at Cedar, volumes are reduced and intersection safety is improved simultaneously with little capital improvement cost. (The Traffic Impact Study in Exhibit B of this report does not discuss a diverter because it was identified subsequent to Study completion. A revised Study is being completed.)

B. Intersection Safety

Police vehicles exiting the site will normally travel through the intersection of NW 3rd Avenue/N Cedar Avenue to access any location within the city. Staff identifies a potential for high-speed vehicle-pedestrian or vehicle-cyclist accidents.

This intersection is required to meet a sight distance minimum of 280 feet for stop controlled approaches; however, it is not currently meeting this required stop distance for eastbound moving looking to the north (190 feet of sight distance) or to the south (180 feet of sight distance). The two photos below show a driver's eye view from a vehicle traveling eastbound at the intersection of NW 3rd Avenue/N Cedar Avenue looking to the north (left photo) and to the south (right photo). As shown, the bushes limit sight distance looking north and a fence limits sight distance looking south.

Figure 3: SW 3rd at Cedar

These sight distance constraints could be particularly problematic for high-speed vehicles in an emergency response situation. Therefore, it is recommended that the sight distance issues at the intersection of NW 3rd Avenue/N Cedar Avenue be mitigated as a part of this project. Several options for mitigating these conditions were considered, including:

- Trim vegetation and modify the fence - this could be problematic as both

sight distance obstructions appear to be located on private property

- Modify the intersection control to make NW 3rd Avenue the through movement – this would be consistent with the collector classification as a through route, but would have similar sight distance issues for the southbound approach (limited ability to see eastbound vehicles)
- Implement all-way stop control - while not warranted based on motor vehicle volumes alone, an all-way stop could be a way to mitigate for the sight distance constraints at the intersection. This all-way control is described as the stop sign and diverter scenario listed above. An example diverter photo is shown below in Figure 4.

Recommendation: As described above for consideration "A", Staff recommends options 2, 3 and 4 be used concurrently. By including the stop sign at the northern SW 3rd/Cedar intersection in conjunction with the diverter at the intersection of SW 3rd at Cedar, volumes are reduced and intersection safety is improved simultaneously with little capital improvement cost.

Figure 4 Diverter Example

C. Stormwater impacts of water quality to the receiving bodies (on-site wetland and Molalla River).

This is a particular consideration because the City's drinking water intake is immediately downstream from the proposal's stormwater outlet at the Molalla River. The drainage system has been designed to meet City storm drainage requirements and parking lot landscaping standards for the entire site. However, it is unknown if the City's water quality standard is sufficient to protect drinking water quality.

There is an existing stormwater pond on the northeast corner of the site with a ditch that flows out to the Molalla River. This application does not propose any changes to this facility. The onsite storm system will collect water from the roof, as well as parking and landscaped areas. Stormwater will be treated and infiltrated in the water quality swale connecting to the existing ditch that flows to the Molalla River.

Recommendation: Staff recommends that the applicant specifically assess this potential impact to determine if additional stormwater treatment can be provided to assure clean runoff from this site into the river.

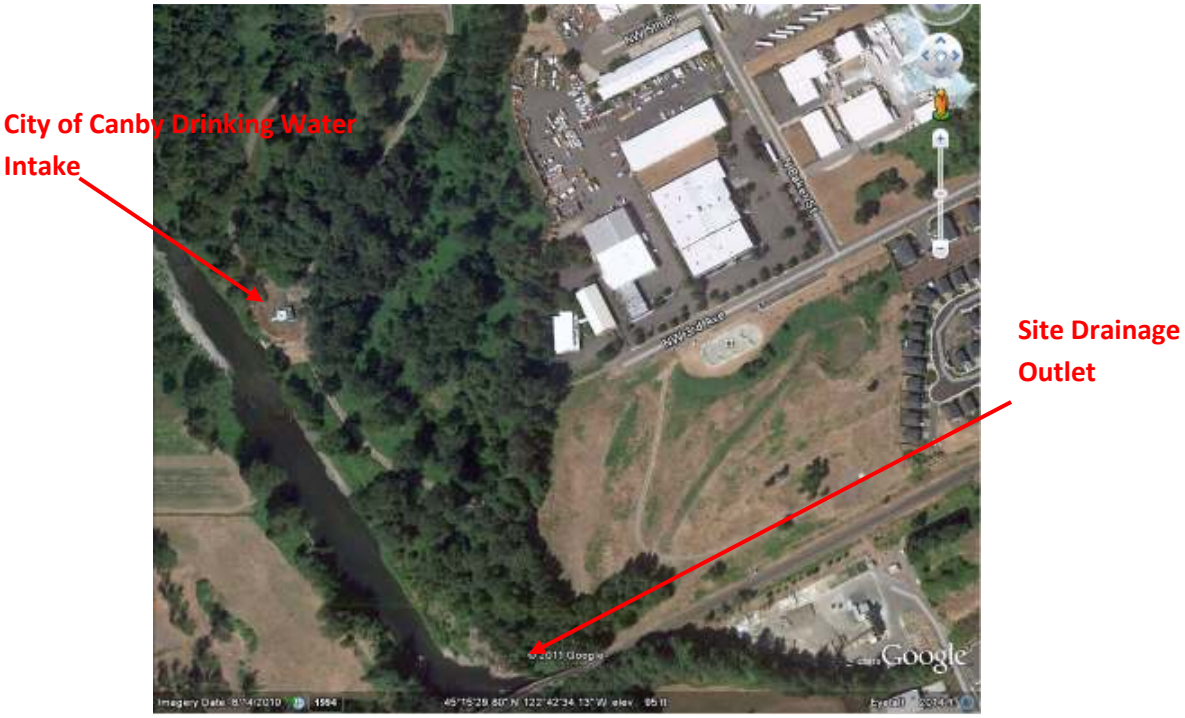

Figure 5Aerial Photo Showing Site, Drainage Outlet and City Drinking Water Intake. Photo: GoogleMaps 2011

D. Emergency Access Road Alignment Options

- Option 1: As proposed; connecting to SW 3rd.
- Option 2: Access existing access easements adjacent to the Union Pacific Rail Road at the southern terminus of N. Cedar Street.

Recommendation: Staff recommends Option 2 because it circumvents the potential intersection congestion at SW Cedar at both 2nd and 3rd, does not create a new access point on SW 3rd Avenue (increasing street safety) and allows the site to be used more efficiently.

SECTION V. PROCESS

Process: Staff has determined that the above project qualifies as a Type III "Site and Design Review" requiring a Site and Design Review (DR) application. Canby Municipal Code (CMC) 16.49.030.1.a requires "all new buildings" to be reviewed as a Site and Design Review. This review is a "quasi-judicial" process which is considered through a public hearing with a decision made by the Planning Commission. This application requires notice to property owners and residents within a 500 foot radius from property limits; at least one neighborhood meeting is required. There is a 20 day notice period and 10 day appeal period. The Type III review process is described in further detail in Canby Municipal Code (CMC) 16.89.050. If appealed, the proposal is heard by the City Council.

Notice of this application and this hearing was mailed to owners of lots within 500 feet of the subject properties on May 3, 2011 ending on May 23, 2011. As of the date of this Staff Report, the following public comments were received by City of Canby Planning Staff:

1. Request for staff report

No substantive comments were received.

In February and March 2011, the Urban Renewal Agency, in conjunction with Group Mackenzie, put on a 3-part public design charette for City of Canby residents. All meetings were advertised to the general public in an effort to engage residents in the development of the new Police Department facility. In addition to advertisements, the Urban Renewal Agency sent invitations to residents and businesses within 500' area of the project.

SECTION VI. STAFF REPORT APPROACH

This Staff Report includes the applicant's narrative as findings to describe compliance for applicable regulations found in Section VII, Review for Conformance With Applicable Approval Criteria. This narrative is found in Exhibit A of this Staff Report. Each criterion references findings that identify the associated narrative sections.

SECTION VII. REVIEW FOR CONFORMANCE WITH APPLICABLE APPROVAL CRITERIA

Figure 6: Canby Comprehensive Plan 2007 Excerpt Page 67

Land Use Element Goal: To Guide The Development And Uses Of Land So That They Are Orderly, Efficient, Aesthetically Pleasing, And Suitably Related To One Another.

Policy No. 6: Canby Shall Recognize The Unique Character Of Certain Areas And Will Utilize The Following Special Requirements, In Conjunction With The Requirements Of The Land Development And Planning Ordinance, In Guiding The Use And Development Of These Unique Areas.

Implementation Measures:

- *Area "A" is significant because of its location on Highway 99-E at a main entry to the City. This site has long been zoned for industrial development but has remained vacant because of topographic constraints, lack of State highway access, and limited rail access. With the installation of traffic signals at the intersection of Highway 99-E and S.W. Berg Parkway, the opportunity for major access improvements to the site can be seen. It now appears that commercial development would better utilize this area, but with a large adjacent area designated for industrial development, it would seem most reasonable to allow either light industrial or general commercial development (provided that any commercial development utilize the signalized intersection for access to Highway 99-E). The development of Area "A" is expected to have an impact on access to Area "B," which is adjacent. Area "A" has been rezoned C-M.*

Findings: The subject site and site disturbance area are not within Area A. However, by its description, it is associated with Area B, which contains the subject site and disturbance area. Thus, Area A is applicable to the proposal. The proposed use is not commercial nor industrial. However, the office-type use component of the proposal is more akin to commercial than industrial and the "fleet headquarters" type use is more akin to light industrial than heavy industrial. Therefore, the proposed use is lighter than heavy industrial and somewhat related to commercial uses and meets the intent of this Area.

- *Area "B" is designated for Heavy Industrial use on the Land Use Map. It is unique because of its location within an old aggregate removal site, with special access, water and sewer service, and drainage concerns which result from its physical condition and location. Area "B" will be upzoned to M-2 when all public facilities are available to serve the area and access problems have been resolved.*

Findings: The Implementation Measures for this Area intend to realize industrial intensity increase when sufficient services and facilities are available. As this proposal is not for an industrial use, this Implementation Measure Is not applicable. Additionally, through the course of the application, the application will demonstrate that all required public facilities and services are available, or will become available through the development, to adequately meet the needs of the proposed development; which meets the

intent of the Implementation Measure. Therefore the applicable portions of this Measure are met.

Floodplain

According to FIRM Map 0264D, the property is not in a FEMA-designated floodplain. The City's Comprehensive Plan does not identify any areas of concern (environmental) on this property. However, there is a jurisdictional wetland on the site that has been delineated as part of this proposal and described in that report.

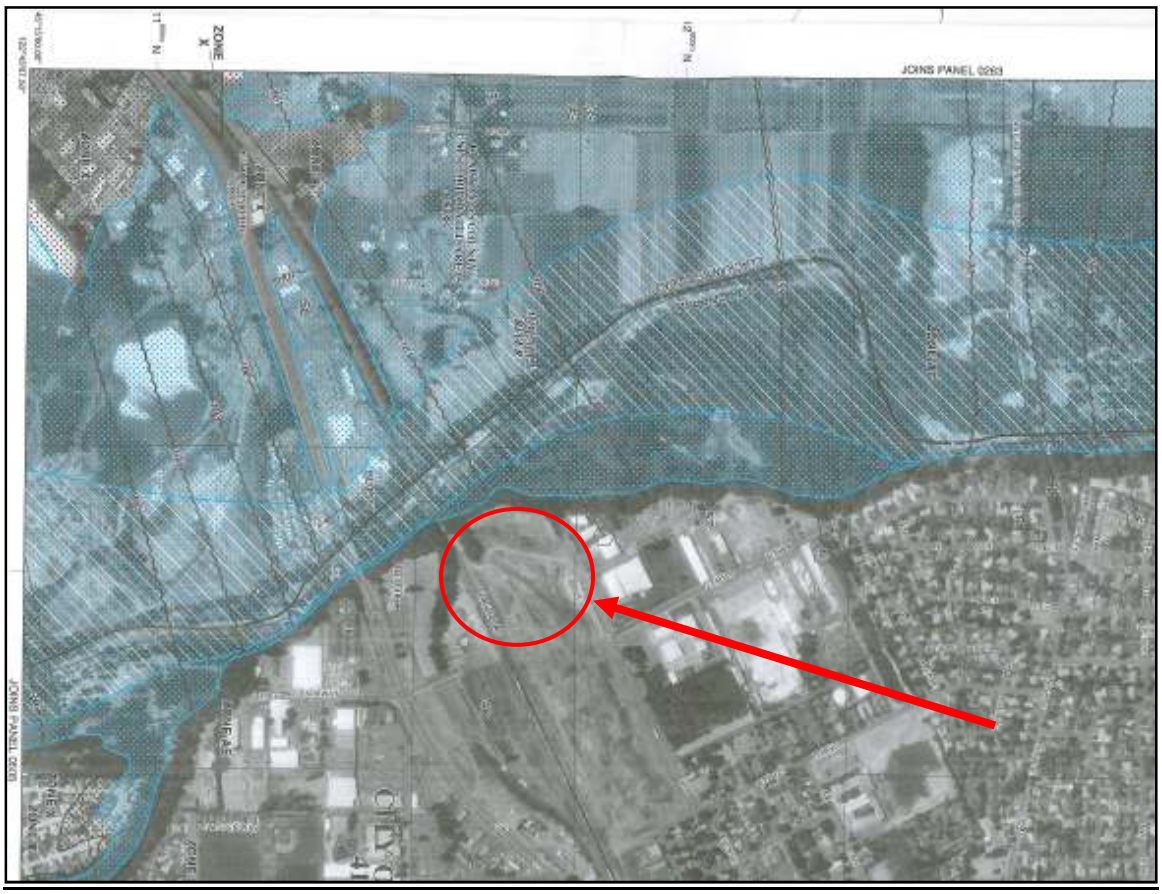

Figure 7 FIRM Map 0264D Scan

Canby Municipal Code Chapters

16.10	Off Street Parking
16.32	Light Industrial (M-1)
16.49	Site and Design Review
16.43	Outdoor Lighting Standards
16.89.040	Application and Review Procedures Type III Decision

Possible Chapters

16.130	Division XII. Riparian Preservation
16.140	Division XIII Wetland Preservation

16.10 Off Street Parking

Findings: Per Table 16.10.050 of CMC 16.10.050, section h: Government offices require 3.50 spaces per 1,000 gross square feet of floor area: = 89 spaces minimum. The applicant is proposing a total of 90 parking spaces, meeting the standard. Staff recommends that the "firing range" square footage be discounted from the calculation. Staff finds that the applicant narrative is sufficient for the purposes of this staff report and the criterion is met.

16.10.060 Off-street loading facilities

Findings: Per subsection G of this section:

> *G. The Planning Commission may exempt a building from the loading berth requirement, or delay the requirement, based on findings that loading berths are not needed for a particular building or business.*

Findings: The proposal requests the Planning Commission to exempt it from the loading berth requirement. Staff concurs with the exemption. Staff finds that the applicant narrative is sufficient for the purposes of this staff report, and with exemption, this criterion does not apply.

16.10.070.B Parking lots and access

Findings: This Staff Report incorporates the relevant Section of the applicant's narrative as findings. Staff finds that the applicant narrative is sufficient for the purposes of this staff report and the applicable criteria are or can be met.

16.32 Light Industrial (M-1)

Findings: This Staff Report incorporates the relevant Section of the applicant's narrative as findings. Staff finds that the applicant narrative is sufficient for the purposes of this staff report and the applicable criteria are or can be met.

The proposed use of "Public building or uses such as fire station, or park or playground: is permitted outright by CMC 16.32.010.Y.

16.32.030 Development standards.

A. Minimum lot area: five thousand square feet;
B. Minimum width and frontage: fifty feet;
C. Minimum yard requirements:
1. Street yard: Remaining property none, except ten feet where abutting a residential zone.
2. Interior yard: none, except ten feet where abutting a residential zone;
D. Maximum building height:
1. Freestanding signs: thirty feet;
2. All other structures: forty-five feet.
E. Maximum lot coverage: no limit;
F. Other regulations:
1. Vision clearance distances shall be fifteen feet from any alley or driveway and thirty feet from any other street or railroad.

16.49. Site And Design Review

Findings: This Staff Report incorporates the relevant Section of the applicant's narrative as findings. However, the applicant used a now antiquated version of this code section. A new code section was adopted in Jan 2011 with Low Impact Development standards. The sections missing are:

> *4. The proposed development incorporates the use of LID best management practices whenever feasible based on site and soil conditions. LID best management practices include, but are not limited to, minimizing impervious surfaces, designing on-site LID stormwater management facilities, and retaining native vegetation.*
>
> *a. The development accumulates a minimum of 70 percent of the total possible number of points from the list of design criteria in Table 16.49.040; and*
>
> *b. At least 15 percent of the points used to comply with (a) above must be from the list of LID Elements in Table 16.49.040. (Ord. 1338, 2010).*

Although the sections were not specifically addressed, the application incorporates LID elements and meets the code standard as described on page 22 of the applicant narrative. Additionally, the total number of possible points was achieved as described. The maximum number of points applicable to the proposed project is 47 points, of which 34 points (72%) are met. There are 15 points out of 47 that are from the Low Impact Development section, approximately 32%.

Staff finds that the applicant narrative is sufficient for the purposes of this staff report and the applicable criteria are or can be met.

16.43 Outdoor Lighting Standards

Findings: This Staff Report incorporates the relevant Section of the applicant's narrative as findings. . This is in designated Lighting Zone Two (LZ 2). Staff finds that the applicant narrative is sufficient for the purposes of this staff report and the applicable criteria are or can be met.

16.130 Division XII. Riparian Preservation
16.140 Division XIII Wetland Preservation

Findings: This Staff Report incorporates the relevant Section of the applicant's narrative as findings. As shown in Figure 5 of this report, the City's drinking water intake is downstream from the proposal's stormwater outlet at the Molalla River. The proposed development's drainage system has been designed to meet City storm drainage requirements and parking lot landscaping standards for the entire site. However, it is unknown if the City's water quality standard is sufficient to protect drinking water quality.

Staff finds that the applicant narrative is sufficient for the purposes of this staff report and to meet the applicable criteria and the standards for wetland preservation and surface water quality and quantity are or can be met. However, staff is uncertain if the drinking water intake has been considered and, as a condition of approval to assess potential impacts to the City's drinking water supply.

CONCLUSION REGARDING CONSISTENCY WITH THE STANDARDS OF THE CANBY MUNICIPAL CODE:

Staff has reviewed the standards and intent of the applicable portions of the Canby Comprehensive Plan and Municipal Code and concludes that, with the proposed conditions, the site and design application is consistent with the applicable Canby's Comprehensive Plan Policies and Municipal Code Standards and criteria.

SECTION VII PUBLIC TESTIMONY

As of the composition date of this Staff Report, no substantive public comments have been received regarding the staff report or specific proposal. Public testimony could be presented at the Planning Commission Hearing**.**

SECTION VIII COMMENTS SUMMARY

Comments were received from the following agencies/departments:

- City Engineer
- Canby Telcom
- Clackamas County Engineering Division
- City Traffic Engineer
- ODOT

City Engineer Comment Summary:
We have reviewed the submitted application on the above mentioned project and have the following comments:

1. Gravity sanitary sewer service to the new building can be provided from the existing sanitary sewer main located in NW 3rd Avenue or alternatively from the existing sanitary sewer main located in the southeast corner of the site.

2. NW 3rd Avenue is classified as a collector road, the minimum access spacing between the proposed driveways shall be 100 feet as per table 7-2 of the Canby Transportation System Plan.

3. Public sidewalks must be extended from the existing terminus point on the south side of NW 3rd Ave to the proposed building entrance to provide a continuous pedestrian access.

4. We recommend the proposed driveway extending on NW 3rd Avenue to the secured police parking to have a minimum width of 24 feet for a two-way access. The cross section shall have 4" of asphaltic concrete over 12" of base coarse.

5. All driveway access connections to NW 3rd Avenue shall have commercial driveway approach aprons in conformance with City of Canby public works standards.

6. The proposed improvements on NW 3rd Avenue are intended at this time to provide a viable access to the new police station. In the future and upon the extension of NW 3rd Avenue street alignment to Berg Parkway, these improvements may be altered and temporarily interrupt the police station access.

7. The new maintenance access to the existing retention pond and sewage pump station must have asphaltic concrete surfacing where the vertical gradient is 10% or greater. The cross section shall be designed for AASHTO H-20 vehicle loading. A minimum of 30-foot long landing area with a vertical slope not to exceed 5% shall also be provided at the connection point with NW 3rd Avenue.

8. The storm drainage runoff from NW 3rd Avenue shall be collected in a conveyance system and discharged onsite with an energy dissipation structure. The City of Canby will assume all maintenance responsibilities of this storm drainage line. The runoff overflow from the newly created impervious surfaces will be permitted to connect to this system.

9. We recommend a more low impact development (LID) approach be applied to treat the storm runoff generated from the new parking lot and building to include Planter Boxes, Flow-Through Planters or Vegetated Filter facilities at the downspouts coupled with an Ecoroof / Roof Garden for a portion of the proposed building (per Ryan Suarez of Group Mackenzie). The water quality design analysis should conform to the City of Portland or Clean Water Services storm drainage design standards for 2-year 24-hr storm event recurrence.

City Traffic Engineer Comments
Project traffic impacts were evaluated on the surrounding roadway network for a.m. and p.m. peak hour conditions. Based on comparison to City of Canby and ODOT standards for intersection operations, neighborhood through traffic, and access spacing, as well as a review of safety for emergency responses, the following series of mitigation measures are recommended:

Project Site Access and Frontage

- Complete all required frontage improvements on NW 3rd Avenue to City collector standards.
- Ensure adequate sight distance at the site driveways by restricting landscaping or any
- potential obstructions on the project frontage within sight distance triangles.

Neighborhood Through-Trip Impacts

- Reduce through-traffic on N Cedar Street and NW 2nd Avenue by:
- Install guide-signing to the police station that routes traffic on NW 3rd Avenue instead of NW 2nd Avenue.
- Request that the police department works with employees to require commute trips and emergency response (when applicable) to use NW 3rd Avenue to/from reach N Elm Street. If the guide-signing and employee education is effective, no further mitigation may be required. However, to provide adequate mitigation in-case the measures are not effective, the following additional measures are recommended:
- Collect fees equivalent to the design and construction of a traffic circle at N Cedar Street and NW 2nd Avenue
- Conduct traffic counts 6-months after occupancy of the site to determine if additional mitigation is required
- If additional mitigation is required, engage the residents along N Cedar Street and NW 2nd Avenue to determine appropriate mitigation for the through-trip impacts.
- Construct the mitigation with the fees collected from the applicant.
- If additional mitigation measures are not required and no complaints are received after a period of 2 years, refund the mitigation fees to the applicant.

Off-Site Safety Improvements

- Complete sidewalks on the south side of NW 3rd Avenue between the project site and NW Cedar Street.
- Stripe bike lanes on NW 3rd Avenue between the project site and NW Cedar Street.
- Address sight distance issues at the intersection of NW 3rd Avenue/N Cedar Street by trimming vegetation (northwest corner) and modifying a

fence (southwest corner). If the improvements are determined to be infeasible due to private property issues, install all-way stop control.

No or non-substantive comments:

- Canby Telcom
- Clackamas County Engineering Division
- ODOT

SECTION IX CONCLUSION

1. Staff concludes that the use is in conformance with applicable sections of the City's Comprehensive Plan and the Zoning Ordinance.
2. Staff concludes that the relevant site and design standards and minimum acceptable scores are met.
3. Staff concludes that the site can accommodate the proposed use.
4. Staff concludes that public service and utility provision to the site is available or can be made available through future improvements
5. Intersection operations as a result of project traffic would not trigger significant impacts and corresponding mitigations.
6. The proposed police station is expected to add a sufficient quantity of vehicles during peak hours to both N Cedar Street and NW 2nd Avenue along the residential portions to require mitigation measures along these roadways as a result of this project.
7. With conditioned mitigation measures, the proposed access points are expected to meet the sight distance requirements.
8. In the immediate vicinity of the project there are no sidewalks available on the north side of NW 3rd Avenue between N Baker Street and N Cedar Street. Additionally, there is a gap in the sidewalks on the south side of NW 3rd Avenue between the skate park and the proposed site.
9. The bike lanes on the south side of NW 3rd Avenue may not be feasible west of N Baker Drive unless they are combined with the off-street path through the skate park.
10. Cedar Avenue could be particularly problematic for high-speed vehicles in an emergency response situation. This intersection is required to meet a sight distance minimum of 280 feet for stop controlled approaches; however, it is not currently meeting this required stop distance for

eastbound moving looking to the north (190 feet of sight distance) or to the south (180 feet of sight distance).

11. The installation of a south-bound stop sign on N. Cedar at NW 3rd Avenue westbound combined with a diverter at N. Cedar at NW 3rd Avenue southbound would address both volume and safety considerations most effectively and with less cost than other options.
12. Both emergency access options are viable.

SECTION X DECISION

Based on the application submitted and the facts, findings and conclusions of this report, but without benefit of a public hearing, the Planning Director recommends **APPROVAL of** Site and Design Review DR 11-02 pursuant to the conditions presented in this Staff Report in Section XI.

SECTION XI CONDITIONS OF APPROVAL

Approval of this application is based on submitted application materials as indicated in Exhibits A. Approval is strictly limited to the submitted proposal and is not extended to any other development of the property. Any modification of development plans not in conformance with the approval of application file no. DR11-02, including all conditions of approval, shall first require an approved modification in conformance with the relevant sections of the Canby Municipal Code.

Conditions Unique to this Proposal

Prior to Issuance of Certificate of Occupancy the following must be completed:

1. Complete all required frontage improvements on NW 3rd Avenue to City collector standards.
2. Ensure adequate sight distance at the site driveways by restricting landscaping or any potential obstructions on the project frontage within sight distance triangles.
3. Guide signage directing vehicles to the police station (via NW 3rd Avenue) shall be provided to reduce trip alignment on SW 2nd and Cedar.
4. A police employee education program shall be conducted on the appropriate routes for both their commute and emergency response trips to lessen traffic on Cedar between 2nd and 3rd and on 2nd Avenue east of

Cedar.

5. A stop sign shall be installed for south-bound traffic along Cedar at the northern SW 3rd intersection on the west side of Cedar. This stop sign may be combined with either of the following:
   - A diverter at the intersection of SW 3rd at Cedar. Or
   - A traffic circle at the intersection of SW 2nd at Cedar
6. A public information meeting (with the same notice list as previous meetings) shall be held to help determine the most appropriate measure selection of condition #6.
7. A sidewalks conforming to City standard shall be constructed on the south side of NW 3rd Avenue between the project site and NW Cedar Street.
8. A bike lane conforming to City standard shall be painted on the south side of NW 3rd Avenue which is combined with the off-street path through the skate park; or
9. A 14-foot wide multi-use path delineated by white paint and filled with green or blue paint shall be created.
10. The applicant shall assess and substantiate the water quality emanating from this site shall not negatively affect in any way the City's drinking water quality at the Molalla intake facility.
11. All driveway access connections to NW 3rd Avenue shall have commercial driveway approach aprons in conformance with City of Canby public works standards.
12. The proposed improvements on NW 3rd Avenue are intended at this time to provide a viable access to the new police station. In the future and upon the extension of NW 3rd Avenue street alignment to Berg Parkway, these improvements may be altered and temporarily interrupt the police station access.
13. If the new maintenance access alternative along the east side of the City property is chosen then the existing retention pond and sewage pump station must have asphaltic concrete surfacing where the vertical gradient is 10% or greater. The cross section shall be designed for AASHTO H-20 vehicle loading. A minimum of 30-foot long landing area with a vertical slope not to exceed 5% shall also be provided at the connection point with NW 3rd Avenue.
14. The storm drainage runoff from NW 3rd Avenue shall be collected in a conveyance system and discharged onsite with an energy dissipation structure. The City of Canby will assume all maintenance responsibilities of this storm drainage line. The runoff overflow from the newly created impervious surfaces will be permitted to connect to this system.

15. Emergency access to and from the site shall be provided. The applicant may chose either the proposed alignment or the alternative along the Rail Road.

Procedural Conditions

Prior to Issuance of Building Permit the following must be completed:

16. The applicant may submit the civil construction drawings separate from the building permit submittal package for final preconstruction conference sign-off approval.
17. A Pre-Construction Conference with sign-off on all final plans is required.
18. The property owner's design engineer shall provide 3 copies of the final Storm Drainage Report detailing infiltration and drainage analysis with the final construction plans submittal.
19. A Grading and Erosion Control Permit will be required from the City prior to commencing site work.
20. The building permit application shall include a revised set of all full size development plans (including site plan, landscape plan, elevations, etc.) which depicts each of the written conditions to the satisfaction of the City Planning Department. All written conditions must be met prior to final occupancy of the building unless otherwise noted.
21. Prior to the issuance of a building permit, installation of public utilities, or any other site work other than rough site grading, construction plans must be approved and signed by the City and all other utility/service providers. The design, location, and planned installation of all roadway improvements and utilities including but not limited to water, electric, sanitary sewer, natural gas, telephone, storm water, cable television, and emergency service provision is subject to approval by the appropriate utility/service provider. The City of Canby's preconstruction process procedures shall be followed.
22. Construction plans shall be designed and stamped by a Professional Engineer registered in the State of Oregon.
23. Clackamas County will provide review of Fire & Life Safety, Plumbing, and Electrical permits for this project. Fire & Life Safety approval must be obtained from Canby Fire prior to issuance of a City building permit.

Prior to Issuance of Occupancy Permit the following must be completed:

24. A non-residential wastewater survey must be submitted for review and approval prior to final building occupancy.

25. The design engineer shall submit to the City of Canby for review and approval a storm drainage plan and analysis for the storm water disposal from both the building and the parking areas. The drainage analysis should conform to the City of Portland or Clean Water Services storm drainage design standards. The water treatment facilities design must be based on a 2-year 24-hr storm event recurrence and the existing stormwater conveyance system has adequate capacity to convey the runoff following the 25-year 24-hr storm event.

Exhibits:

A. Applicant narrative
B. Traffic Impact Study
C. Neighborhood Meetings Minutes

File: O:\DR\2011\DR 11-02 Canby Police Station\Admin\Staff Report Canby Police Station DR 11-02 May 13 2011.docx

Exhibit A - Applicant Narrative

GROUP MACKENZIE

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SITE AND DESIGN REVIEW APPLICATION

To
City of Canby

For
City of Canby Police Facility

Submitted
April 15, 2011

Project Number
2110061.00

GROUP MACKENZIE
Since 1960

RiverEast Center | PO Box 14310 | Portland, OR 97293
1515 SE Water Ave, Suite 100 | Portland, OR 97214
T 503.224.9560 | F 503.228.1285 | www.grpmack.com

1. PROJECT SUMMARY

Applicant:	City of Canby PO Box 930 Canby, OR 97013 Contact: Robert Bitter 503-226-4021
Applicant Representative:	Group Mackenzie PO Box 69039 Portland, OR 97239-0039 Contact: Rhys Konrad 503-224-9560
Site:	1175 NW 3rd Avenue
Tax Lot:	Map 41E05, TL 00405
Acreage:	13. 91 – Acres 4.63 – Acres disturbed
Zoning:	M-1 – Light Industrial
Comprehensive Plan Designation:	LI – Light Industrial
Project Description:	Construct an approximately 25,300 SF police facility and a 10,000 SF daylight basement for future expansion.
Request:	Type III Site and Design Review
Code Sections Addressed:	*16.10 Off-Street Parking* *16.32 Light Industrial (M-1)* *16.43 Outdoor Lighting Standards* *16.49 Site and Design Review Approval Criteria* *16.89.040 Type III Decision* *16.130 Division XII. Riparian Preservation* *16.140 Division XIII. Wetland Preservation*

2. INTRODUCTION

The City of Canby is proposing to build a new 25,300 SF police facility with a 10,000 SF daylight basement for future expansion. This Site and Design Review application is for Tax Lot 00405 Map 4S1E05 as depicted on the attached Tax Map (Exhibit A).

The proposed building is intended to serve the City of Canby's current and future needs. As shown below, the subject site is located adjacent to N. Baker Street on NW 3rd Avenue. The subject site is zoned M1–Light Industrial, as shown on the attached Zoning Map (Exhibit B). The site is currently undeveloped with exception of the City of Canby State Park located on the eastern portion of the site. The surrounding parcels to the north are similarly zoned for industrial purposes. An existing residential development abuts the site to the east and the Southern Pacific Railroad borders the site to the south. The Molalla River and forested floodplain are off-site and to the west.

The subject site contains areas of steep slopes, as well as a man-made pond for purposes of stormwater associated with downtown Canby. An existing pump station and electrical equipment are located at the southeast corner, and are proposed to remain.

Aerial Photo of Site

3. PROPOSED DEVELOPMENT

This application requests approval of a Site and Design Review for a new 25,300 SF police facility. A pre-application conference with City staff was held on March 3, 2011.The current police facility is substandard and cannot accommodate projected growth. The proposed facility is intended to serve the City of Canby's long-term police needs and meet current standards for police facilities.

The orientation of the proposed building faces north toward NW 3rd Avenue, with parking to the sides of the proposed building. The site will have 90 new off-street parking spaces, 54 of which are designated for police use and will be secured at the west end of the site. The disturbed construction area is 4.63-acres of the entire 13.9-acre site. Included in the disturbed area is the building, parking, and necessary grading, as well as the new access road to serve utility providers and provide emergency access for the police. The site plan proposes 133,829 SF of landscaped area for the entire site (66.4% of the developed area). The parking area for the disturbed construction area for the initial phase of building area is 42,371 SF with 10,318 SF of parking lot landscaping (25.5% of new parking lot area).

ON-SITE DEVELOPMENT

Building

The overall building was designed to be compatible with the site's surrounding industrial and residential uses. The proposed building will be 25,300 SF, with a 10,000 SF unfinished basement which will be used for future use. The proposed building will utilize concrete masonry unit and structural clay masonry construction, with open-web steel joists and girders, and a standing seam metal roof system. The exterior will include metal paneling and glass curtain-wall window systems at the entry and community room corners, as well as a metal canopy overhang the entry walkway to emphasize the main public entrance. Additional windows and curtain walls will occur along each building length in order to articulate the façade and provide daylight to interior functions. On the west side, clerestory windows will be evident below some of the roofs providing additional daylighting to the interior.

Site Development

A total of 90 new parking spaces have been provided for the first phase of building area. Future parking has been shown for the future expansion space. New sidewalks are proposed along the site's frontage with NW 3rd Avenue, where the proposed sidewalks will connect to the building's entrance. In addition, a new utility and emergency access road is proposed along the site's eastern edge allowing required access to utility providers, as well as an alternate route out of the site for police emergency response.

Landscaping

The landscape design for the proposed development meets or exceeds all City of Canby landscape standards. The proposed development complies with the minimum percentages for both site and parking lot landscaping. All planting areas will be irrigated with current irrigation technology to conserve water resources. The planting design is coordinated

with circulation and site utilities. The site plan proposes 133,829 SF of landscaped area for the entire site (66.4% of the developed area). The parking area for the disturbed construction area is 42,371 SF with 10,318 SF of parking lot landscaping (25.5%of new parking lot area).

Utilities

Storm

There is an existing stormwater pond on the northeast corner of the site with a ditch that flows out to the Molalla River. This application does not propose any changes to this facility. The onsite storm system will collect water from the roof, as well as parking and landscaped areas. Stormwater will be treated and infiltrated in the water quality swale connecting to the existing ditch that flows to the Molalla River.

Sanitary

There is an existing sanitary pump station at the southeast corner of the site and sanitary mains located on the east property line. This application does not propose changes to this facility. The existing sanitary main will be extended approximately 130' in NW 3rd Avenue and a new 6" lateral will be provided to serve the proposed building.

Water

The proposed building will be sprinkler served by a new fire service line from the existing 10" water main located in NW 3rd Avenue. The 8" fire fault will be located directly across the street from the existing fire hydrant on NW 3rd Avenue. The fire service will provide a 6" building sprinkler system and two onsite fire hydrants as well. A new 2" domestic water line and meter are proposed.

4. TYPE III SITE DESIGN AND REVIEW

This section of narrative provides detailed responses to approval criterion associated with the requested Site and Design Approval.

CHAPTER 16.89 APPLICATIONS AND REVIEW PROCEDURES

16.89.020 Description and Summary of Process

C. Type III Procedure (Quasi-Judicial/Legislative). Type III decisions are made by the Planning Commission after a public hearing, with appeals reviewed by the City Council. Type III procedures generally use discretionary approval criteria.

Response: The proposed police facility requires Type III Site and Design Review approval. Therefore, the application is subject to Section 16.89.050.

16.89.050 Application and Review Procedures – Type III decision

A. Pre-Application Conference. A pre-application conference may be required by the Planning Director for Type III applications.

Response: A pre-application conference was held on March 3, 2011 with City staff. This standard is met.

B. Neighborhood Meetings. As directed in Table 16.89.020, the applicant may be required to present their development proposal at a neighborhood meeting before the City accepts the application as complete. See Section 16.89.070.

Response: The project team had several meetings with surrounding neighbors and interested representatives of the general public. Meeting Minutes from March 15, 2011 are submitted with this application. This standard is met.

C. Application Requirements. Type III applications shall be made on forms provided by the Planning Director. The application shall be accompanied by all required information and fees.

Response: All required information and fees are provided with this application. This standard is met.

CHAPTER 16.32 LIGHT INDUSTRIAL (M-1) ZONE

16.32.010 Uses Permitted Outright

Uses permitted outright in the M-1 zone shall be as follows:

Y. Public building or uses such as fire station, or park or playground.

Response: The proposed building is best classified as a public building, as it is intended for a police facility. The use is permitted outright.

16.32.030 Development Standards

Response: The proposed development satisfies the development standards of the M-1 zone as shown in Table 1 below. The attached site plan demonstrates compliance with several of the requirements listed below.

TABLE 1 – Development Standards Summary		
Standard	M1 Zone	Proposed
A. Minimum Lot Area	5,000 SF	Total Site Area: 605,946 SF Disturbed Area: 201,500 SF
B. Minimum lot width and frontage	50'	1,010' along NW 3rd Avenue
C. Minimum yard requirements 1. Street yard 2. Interior yard	 None None, except 10' where abutting residential zone	 37' 83' from abutting residential zone
D. Maximum Height	45'	From ground floor: 30'4"' From basement floor: 45'
E. Maximum Lot Coverage	None	Entire lot: 13.59% Impervious area Disturbed Area: 33.58% Impervious area
F. Vision Clearance	Alley or driveway: 15' Street or railroad: 30'	Proposed Vision Clearance: 245' along frontage (See Exhibit C)
Site Landscaping	15%	66.4% (of development area)
Parking Lot Landscaping	15% of combined area of all parking spaces and maneuvering areas	25.5% (of new parking area)
Minimum Automobile Parking	Government Office : 3.50/1,000 SF = 89 89 spaces required Future addition: 10,000 SF 35 spaces required	Government office: 25, 300 SF Standard public spaces: 34 Compact spaces: 0 Handicap spaces: 2 Police spaces: 54 Total Spaces: 90 Future Spaces: 35
Minimum Bicycle Parking	Office: 1 space per 1,000 SF	Covered private police spaces 10 Covered public spaces 5 Uncovered public spaces 10 Total Spaces: 25

CHAPTER 16.10 OFF STREET PARKING REQUIREMENTS

16.10.030 General Requirements

A. Should the owner or occupant of a structure change the use to which the building is put, thereby increasing parking or loading requirements, the increased parking/loading area shall be provided prior to commencement of the new use.

Response: This application proposes constructing a new building. Therefore, this standard does not apply.

B. Parking and loading requirements for structures not specifically listed herein shall be determined by the City Planner, based upon requirements of comparable uses listed.

Response: This application utilizes the minimum automobile parking ratio from Table 16.10.050H, "Government office requires 3.5 parking spaces for every 1,000 SF". This standard is met.

C. In the event several uses occupy a single structure, the total requirements for off-street parking shall be the sum of the requirements of the several uses computed separately.

Response: This application proposes a single use structure. Therefore, this standard does not apply.

D. Off-street parking spaces for dwellings shall be located on the same lot or adjacent lot with the dwelling. Other required parking spaces may be located on a separate parcel, provided the parcel is not greater than 500' feet from the entrance to the building to be served, measured along the shortest pedestrian route to the building. The applicant must prove that parking located on another parcel is functionally located and that there is safe vehicular and pedestrian access to and from the site.

Response: This application proposes all parking to be provided onsite. Therefore, this standard does not apply.

E. Required parking spaces shall be available for the parking of operable passenger automobiles of residents, customers, patrons and employees and shall not be used for storage of vehicles or materials or for the parking of trucks used in conducting the business.

Response: All required parking spaces will be available for public use of the proposed facility, as well as the police employees. This standard is met.

F. Institution of on-street parking shall not be allowed for off-street parking, where none is previously provided, and shall not be done solely for the purpose of relieving crowded parking lots in commercial or industrial planning districts.

Response: This application does not propose on-street parking. This standard does not apply.

G. Parking facilities may be shared by users on adjacent parcels if all of the following standards are met, or the Planning Commission determines a lesser combination meets the intent of the ordinance:

1. *One of the parcels has excess parking spaces, considering the present use of the property; and the other parcel lacks sufficient area for required parking spaces. Excess parking spaces can be determined by considering when the uses need the parking spaces, such as time of day or day of week.*
2. *The total number of parking spaces meets the standards for the sum of the number of spaces, which would be separately required for each use.*
3. *Legal documentation, to the satisfaction of the City Attorney, shall be submitted verifying permanent use of the excess parking area on one lot by patrons of the uses deficient in required parking areas.*

4. *Physical access between adjoining lots shall be such that functional and reasonable access is actually provided to uses on the parcel deficient in parking spaces.*
5. *Adequate directional signs shall be installed specifying the joint parking arrangement.*

Response: This application does not propose parking facilities to be shared by users on adjacent parcels. However, it is assumed that users of the abutting state park will utilize the public parking spaces provided with this facility. This standard does not apply.

H. The number of vehicular spaces required in Table 16.10.050 may be reduced by up to 10% if one of the following is demonstrated to the satisfaction of the Planning Director or Planning Commission:

1. *Residential densities greater than nine units per gross acre (limit parking to no less than one space per unit for multi-family structures); or*
2. *The proposed development is pedestrian-oriented by virtue of a location which is within convenient walking distance of existing or planned neighborhood activities (such as schools, parks, shopping, etc.) and the development provides additional pedestrian amenities not required by the code which, when taken together, significantly contribute to making walking convenient (e.g., wider sidewalks, pedestrian plazas, pedestrian scale lighting, benches, etc.).*

Response: This application does not propose reducing the total number of required parking spaces. This standard does not apply.

16.10.040 Prohibited Near Intersections

In no case will off-street parking be allowed within a vision clearance area of an intersection.

Response: This application does not propose off-street parking within a vision clearance area of an intersection. Therefore, this standard does not apply.

Chapter 16.10.050 Parking Standards Designated.

TABLE 1 – Development Standards Summary

Standard	M1 Zone	Proposed	
Minimum Automobile Parking	Government Office : 3.50/1,000 SF = 89 89 spaces required	Standard public spaces: Compact spaces: Handicap spaces: Police spaces: Total new spaces: Total Spaces:	34 0 2 54 90 90

Chapter 16.10.060 Off-street Loading Facilities

A. The minimum number of off-street loading berths for commercial and industrial uses is as follows:

Floor Area (SF)	Number of Berths
Less than 5,000	0
5000–25,000	1
25,000–60,000	2
60,000 and over	3

Response: The proposed police facility does not require off-street loading facilities. This standard does not apply.

B. Loading berths shall conform to the following minimum size specifications:
1. Commercial uses:13' x 35'
2. Industrial uses: 12' x 60'
3. Berths shall have an unobstructed minimum height of 14'.

Response: The proposed police facility does not require off-street loading facilities. This standard does not apply.

C. Required loading areas shall be screened from public view, from public streets, and adjacent properties by means of sight-site obscuring landscaping, walls or other means, as approved through the site and design review process.

Response: The proposed police facility does not require off-street loading facilities. This standard does not apply.

D. Required loading facilities shall be installed prior to final building inspection and shall be permanently maintained as a condition of use.

Response: The proposed police facility does not require loading facilities. This standard does not apply.

E. A driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading children shall be located on the site of a school or day care center having a capacity greater than twenty-five (25) students.

Response: This application does not propose a driveway specifically for loading and unloading children. Therefore, this standard does not apply.

F. The off-street loading facilities shall, in all cases, be on the same lot or parcel as the structure they are intended to serve. In no case shall the required off-street loading spaces be part of the area used to satisfy the off-street parking requirement.

Response: The proposed police facility does not require off-street loading facilities. This standard does not apply.

G. The Planning Commission may exempt a building from the loading berth requirement, or delay the requirement, based on findings that loading berths are not needed for a particular building or business. (Ord. 854 section 2[part], 1991; Ord. 848, Part V, section 1, 16.10.060, 1990; Ord. 1237, 2007)

Response: This application seeks Planning Commission exemption from loading berth requirements as the proposed police facility does not require off-street loading facilities. Loading of merchandise or other goods is not a function necessary for a police facility use. Further, security functions of the proposed facility require only authorized vehicles allowed within the private, secured parking area to the west of the new building. Given the lack of need for loading functions for this use, as well as the required security, the loading berth requirement does not apply.

Chapter 16.10.070 Parking Lots and Access

A. Parking Lots. A parking lot, whether as an accessory or principal use, intended for the parking of automobiles or trucks, shall comply with the following:

1. Parking lot design shall comply with the dimensional standards set forth in Figure 1 of this section.

Response: The parking lot design complies with dimensional standards set forth in Figure 1 of Chapter 16.10.070, for 90-degree parking (see Exhibit C). This standard is met.

2. Parking stalls of eight (8) feet in width and sixteen (16) feet in length for compact vehicles may comprise up to a maximum of thirty (30) percent of the total number of parking stalls. Such parking stalls shall be marked "Compact Parking only" either on the parking surface or on a sign in front of the parking stalls.

Response: This application does not propose parking stalls for compact vehicles. This standard does not apply.

3. Areas used for standing or maneuvering of vehicles shall have paved asphalt, concrete, solid concrete paver surfaces, or paved "tire track" strips maintained adequately for all weather use and so drained as to avoid the flow of water across sidewalks or into public streets, with the following exception:

a. The Planning Commission may approve the use of an engineered aggregate system for outdoor storage and/or non-required parking areas as part of a Conditional Use Permit provided that the applicant can demonstrate that City Standards related to:

i. minimizing dust generation,

ii. minimizing transportation of aggregate to city streets, and

iii. minimizing infiltration of environmental contaminants including, but not limited to, motor oils, fuels, volatile organic compounds (e.g. benzene, toluene, ethylbenzene, xylene), and ethylene glycol are met. The Planning Commission may impose conditions as necessary to meet City Standards.

b. Use of permeable surfacing materials for parking lots and driveways is encouraged whenever site and soil conditions make permeable surfacing feasible. Permeable surfacing includes, but is not limited to: paving blocks, turf block, pervious concrete, and porous asphalt. All permeable

surfacing shall be designed, constructed, and maintained in accordance with the Canby Public Works Design Standards and the manufacturer's recommendations.

Response: Areas used for standing or maneuvering of vehicles are specified to have paved asphalt maintained adequately for all weather use and drained to avoid the flow of water across sidewalks or into public streets. This application does not propose the use of permeable surfacing materials as they are unable to provide the required compaction necessary for fire vehicles and require additional maintenance considerations. This standard is met.

4. *The full width of driveways must be paved in accordance with (3) above:*
   a. *For a minimum of 20 feet from the right-of-way line back into the private property to prevent debris from entering public streets, and*
   b. *To within 150 feet of all portions of the exterior wall of the first story of any structure(s) served by the driveway to ensure fire and emergency service provision.*

Response: All driveways and vehicle areas will be paved. This standard is met.

5. *Except for parking to serve residential uses, parking areas adjacent to or within residential planning districts or adjacent to residential uses shall be designed to minimize disturbance of residents. Artificial lighting, which may be provided, shall be so deflected as not to shine or create glare in any residential planning district or on any adjacent dwelling, or any street right-of-way in such a manner as to impair the use of such way.*

Response: While the entire site is adjacent to residential uses on the east, the portion of the site proposed for development is several hundred feet away. Nonetheless, lighting has been designed to minimize potential visual impacts to the residences to the east. This standard does not apply.

6. *Groups of more than four (4) parking spaces shall be so located and served by driveways that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.*

Response: All proposed parking areas do not require backing movements or other maneuvering within a street right-of-way. This standard is met.

7. *Off-street parking areas, and the accesses to them, shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress and the maximum safety of pedestrian and vehicular traffic on the site and in adjacent roadways. The Planning Director or Planning Commission may require engineering analysis and/or truck turning diagrams to ensure safe and efficient traffic flow based on the number and type of vehicles using the site, the classification of the public roadway, and the design of the parking lot and access drives.*

Response: All off-street parking areas are designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrian and vehicular traffic on site and on NW 3rd Avenue (see Exhibit C). This standard is met.

8. *Parking bumpers or wheel stops shall be provided to prevent cars from encroaching on street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.*

Response: Proposed sidewalks and landscaped areas adjacent to parking are protected by new curbs. Sidewalks specifically, have been increased in width to ensure adequate clearance for pedestrian use. Parking bumpers or wheel stops are not provided (see Exhibit C). This standard is met.

9. *Accessible parking shall be provided, constructed, striped, signed and maintained as required by ORS 447.233 and all Oregon Structural Specialty Code requirements.*

Response: Accessible parking shall be provided, constructed, striped, signed, and maintained as required by ORS 447.233 and all Oregon Structural Specialty Code requirements. This standard is met.

B. Access

1. *The provision and maintenance of vehicular and pedestrian ingress and egress from private property to the public streets as stipulated in this ordinance are continuing requirements for the use of any structure or parcel of real property in the City of Canby. No building permit or other permits shall be issued until scale plans are presented that show how the ingress and egress requirement is to be fulfilled. Should the owner or occupant of a lot or building change the use to which the lot or building is put, thereby increasing ingress and egress requirements, it shall be unlawful and a violation of this ordinance to begin or maintain such altered use until the required increase in ingress and egress is provided.*

Response: The attached plans demonstrate how ingress and egress will function from NE 3rd Avenue into the subject property. This standard is met.

2. *The City of Canby encourages joint/shared access. Owners of two (2) or more uses, structures, or parcels of land may agree to, or may be required by the City to, utilized jointly the same ingress and egress when the combined ingress and egress of both uses, structures, or parcels of land satisfies their combined requirements as designed in this ordinance, provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts shall be placed on permanent files with the city recorder.*

Response: The subject site has one property owner. The parking required to serve the proposed police facility has been provided. Future parking needs for the expansion space have been identified on the attached site plan. This standard is met.

3. *All ingress and egress shall connect directly with public streets.*

Response: This application proposes two public driveways serving the public parking area and one private driveway for police, all of which connect directly with public streets. In addition, the new emergency access and utility driveway connect with NW 3rd. This standard is met.

4. *Vehicular access for residential uses shall be brought to within fifty (50) feet of the ground floor entrances or the ground floor landing of a stairway, ramp or elevator leading to dwelling units.*

Response: The proposed use is not residential. Therefore, this standard does not apply.

5. *Required sidewalks shall extend from the ground floor entrances or the ground floor landing of a stairs, ramps or elevators to the sidewalk or curb of the public street or streets that provide the required access and egress.*

Response: All sidewalks extend from the ground floor entrances to the sidewalk or curb of NW 3rd Avenue (see exhibit C). This standard is met.

6. *To afford safe pedestrian access and egress for properties within the city, a sidewalk shall be constructed along all street frontages, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section shall be constructed to city standards except in the case of streets with inadequate right-of-way width or where the final street design and grade have not been established, in which case the sidewalks shall be constructed to a design, and in a manner approved by the Site and Design Review Board. Sidewalks approved by Board may include temporary sidewalks and sidewalks constructed on private property; provided, however, that such sidewalks shall provide continuity with sidewalks of adjoining commercial developments existing or proposed. When a sidewalk is to adjoin a future street improvement, the sidewalk construction shall include construction of the curb and gutter section to grade and alignment established by the Site and Design Review Board.*

Response: The proposed development includes an 8' sidewalk along NW 3rd Avenue (see exhibit C). This standard is met.

7. *The standards set forth in this ordinance are minimum standards for access and egress, and may be increased through the site and design review process in any particular instance where the standards provided herein are deemed insufficient to protect the public health, safety and general welfare. (Ord. 890 section 12, 1993; Ord. 1237, 2007; Ord. 1338, 2010)*

Response: This application fully complies with access and egress standards. This standard is met.

8. *Minimum access requirements for residential uses - ingress and egress for residential uses shall not be less than the following (except that in the case of flag lots, section 16.64.0400) shall apply)*

Response: The proposed use is not residential. Therefore, this standard does not apply.

9. *Minimum access requirements for commercial or institutional uses - ingress and egress for commercial uses shall not be less than the following: 5-99 parking spaces; 1 minimum number of accesses required; 20' minimum access width; curbs required; sidewalk on one side minimum.*

Response: This application proposes 90 parking spaces, with 3 accesses in excess of the 20' minimum and a new sidewalk along NW 3rd (see exhibit C). This standard is met.

10. *Minimum access requirements for industrial uses - ingress and egress for industrial uses shall not be less than the following: 1-250 parking spaces required, 1 number of accesses required; 24 feet minimum access width; sidewalks on one side minimum.*

Response: The proposed use is not industrial. Therefore, this standard does not apply.

11. *One-Way Ingress or Egress – Way Ingress or Egress – When approved through the site and design review process, one-way ingress or egress may be used to satisfy the requirements of subsection (H), (I) and (J). However, the hard surfaced pavement of one-way drives shall not be less than twelve (12) feet for multi-family residential, commercial or industrial uses.*

Response: This application proposes all two-way ingress or egress. Therefore, this standard does not apply.

12. *Maximum driveway widths and other requirements except for single-family dwellings [see subsection (d) below]:*
    a. *Unless otherwise herein provided, maximum driveway widths shall not exceed forty (40) feet.*
    b. *No driveways shall be constructed within five (5) feet of an adjacent property line, except when two (2) adjacent property owners elect to provide joint access to their respective properties as provided by subsection 2.*
    c. *There shall be a minimum distance of forty (40) feet between any two (2) adjacent driveways on a single property.*
    d. *The minimum distance between two driveways on one single-family residential lot shall be thirty (30) feet. There is no minimum setback distance between a driveway and the property line for driveways on single-family residential lots.*

Response: All new driveways proposed with this application meet these standards.

13. *Distance Between Driveways and Intersections- Except for single-family dwellings [see subsection (f) below] the minimum distance between driveways and intersections shall be as provided below. Distances listed shall be measured from the stop bar at the intersection:*
    a. *At the intersection of any collector or arterial streets, driveways shall be located a minimum of fifty (50) feet from the intersection.*
    b. *At the intersection of two (2) local streets, driveways shall be located a minimum of thirty (30) feet from the intersection as provided, the driveway shall be constructed as far from the intersection as possible, while still maintaining the five (5) foot setback between the driveway and property line.*
    c. *If the subject property is not of sufficient width to allow for the separation between driveway and intersection as provided, the driveway shall be constructed as far from the intersection as possible, while still maintaining the five (5) foot setback between the driveway and property line.*

d. In the case of existing flag lots, it shall be at the discretion of the Site and Design Review Board to determine the best location for driveways.

e. When considering a public facilities plan that has been submitted as part of site and design review plan in accordance with this ordinance, the city Public Works Supervisor may approve the location of a driveway closer than fifty (50) feet from the intersection of collector or arterial streets, based on written findings of fact in support of the decision. Said written approval shall be incorporated into the recommended decision of the City Planner for the site and design review plan under the process set forth.

f. The minimum distance between driveways for single-family residential houses and an intersection shall be thirty (30) feet. The distance shall be measured from the curb intersection point [as measured for vision clearance area (16.04.670)]. (Ord. 890 section 12, 1993; Ord. 872, 1991; Ord. 854 section 2 [part], 1991; Ord 848, Part V, section 16.10.070 (A)(B) 1990; Ord. 955 section 3 & 4 1996; Ord. 981 section 44, 1997; Ord. 1019 section 5, 1999; Ord 1237, 2007).

Response: This application is not adjacent or within 30' of any intersection. Therefore, this standard does not apply.

16.10.080 Streets

To be established. Street Tree Plan should be incorporated into this section. (Ord. 854, 1991; Ord. 848, Part VI, section 1, 1990)

Response: This application does not propose including the Street Tree Plan. This standard does not apply

16.10.090 Drive up Uses

A. Drive-up uses shall provide a minimum stacking area clear of the public right-of-way or parking lot aisle from the window service to the vehicles as follows:

1. All drive-up uses. – Each lane shall provide a minimum capacity for two (2) to eight (8) automobiles, as determined by the Site and Design Review Board.

2. For purposes of this section, an automobile shall be considered no less than twenty (20) feet in length. The width and turning radius of drive-up aisles shall be approved by the City Public Works Director.

Response: This application does not propose a drive up use. Therefore, this standard does not apply.

B. The stacking area shall not interfere with safe and efficient access to other parking areas on the property. Traffic aisles shall be wide enough to accommodate backing movements where adjacent to parking stalls. Parking maneuvers shall not occur in the stacking area. (Ord. 848, Part VII, section 16.10.090, 1990)

Response: This application does not propose a stacking area. Therefore, this standard does not apply.

16.10.100 Bicycle Parking

Bicycle parking shall be provided for all multi-family residential, institutional, commercial, and industrial uses.

A. Dimensions and characteristics: Bicycle parking spaces shall be a minimum of six (6) feet long and two (2) feet wide, and overhead clearance in covered spaces shall be a minimum of seven (7) feet. A minimum five (5) foot aisle for bicycle maneuvering shall be provided and maintained beside or between each row of bicycle parking. Bicycle racks located on a sidewalk shall provide a minimum of two (2) feet between the rack and a wall or other obstacle, and between the rack and curb face. Bicycle racks or lockers shall be securely anchored to the surface or a structure. Bicycle racks located in the Downtown Commercial Zone shall be of the inverted U style (a.k.a. staple racks). See Figure 20 of the Canby Downtown Plan for correct rack placement.

Response: This application proposes 10 outdoor covered bicycle parking spaces with a 7' overhead clearance, 5 indoor covered bicycle parking spaces with a 7'overhead clearance, and 10 external uncovered bicycle parking spaces (see exhibit C). This standard is met.

B. Location: Bicycle parking shall be located in well-lit, secure locations within fifty (50) feet of the main entrance to a building, but not further from the entrance than the closest automobile parking space, and in no case further than 50 feet from an entrance when several entrances are involved.

Response: This application proposes all public bicycle parking to be located in a well-lit, secure location within 50' of the main entrance of the building. This standard is met.

C. Number of spaces: The bicycle parking standards set out in Table 16.10.100 shall be observed. (Ord. 1019 section 1, 1999; Ord. 1076, 2001)

Response: According to Table 16.10.100, a minimum of 25 bicycle parking spaces are required for an office use, which most closely aligns with the proposed police facility. This application proposes 25 bicycle parking spaces. This standard is met.

CHAPTER 16.43. OUTDOOR LIGHTING STANDARDS

16.43.030 Outdoor Lighting Applicability

The outdoor lighting standards in this section apply to the following:

A. New uses, buildings, and major additions or modifications:

1. For all proposed new land uses, developments, buildings, and structures that require a building permit, all outdoor lighting fixtures shall meet the requirements of this Code.

2. All building additions or modifications of fifty (50) percent or greater in terms of additional dwelling units, gross floor area, or parking spaces, either with a single addition or cumulative additions subsequent to the effective date of this provision, shall invoke the requirements of this Code for the entire property, including previously installed and any new outdoor lighting.

B. Minor additions. Additions or modifications of less than fifty (50) percent to existing uses, as defined in Section A(2) above, and that require a building permit, shall require the submission of a complete inventory and site plan detailing all existing and any proposed new outdoor lighting. Any new lighting on the site shall meet the requirements of this Code with regard to shielding and lamp type. The total outdoor light output after the modifications are complete shall not exceed that on the site before the modification, or that permitted by this Code, whichever is larger.

Response: The proposed new building requires a building permit. Therefore, outdoor lighting standards apply.

16.43.040 Lighting Zones

A. Zoning districts designated for residential uses (R-1, R-1.5 and R-2) are designated Lighting Zone One (LZ 1). All other zoning districts are designated Lighting Zone Two (LZ 2).

B. The designated Lighting Zone of a parcel or project shall determine the limitations for lighting as specified in this ordinance.

Response: The proposed new building is zoned M-1 and designated in LZ 2.

16.43.060 Prohibited Light and Lighting

A. All outdoor light sources, except street lights, shall be shielded or installed so that there is no direct line of sight between the light source or its reflection at a point 3 feet or higher above the ground at the property line of the source. Light that does not meet this requirement constitutes light trespass. Streetlights shall be fully shielded.

B. The following lighting systems are prohibited from being installed or used except by special use permit:

1. Aerial Lasers

2. "Searchlight" style lights

3. Other very intense lighting, defined as having a light source exceeding 300 watts

Response: All outdoor light sources will be shielded so there is no direct line of sight between the light source or reflection at a point 3' or higher above the ground at the property line of the source. Aerial lasers, searchlight-style lights, or other very intense lighting will not be utilized. This standard is met.

16.43.060 Luminaire Lamp Wattage, Shielding, and Installation Requirements

A. All outdoor lighting shall comply with the limits to lamp wattage and the shielding requirements in Table 16.43.070 per the applicable Lighting Zone. These limits are the upper limits. Good lighting design will usually result in lower limits.

B. The City may accept a photometric test report, demonstration or sample, or other satisfactory confirmation that the luminaire meets the requirements of the shielding classification.

C. Such shielded fixtures must be constructed and installed in such a manner that all light emitted by the fixture complies with the specification given. This includes all the light emitted by the fixture, either directly from the lamp or by a diffusing

element, or indirectly by reflection or refraction from any part of the fixture. Any structural part of the fixture providing this shielding must be permanently affixed.

D. All canopy lighting must be fully shielded. However, indirect upward light is permitted under an opaque canopy provided that no lamp or vertical element of a lens or diffuser is visible from beyond the canopy and such that no direct upward light is emitted beyond the opaque canopy. Landscape features shall be used to block vehicle headlight trespass while vehicles are at an external point of service (i.e. drive-thru aisle).

E. All facade lighting must be restricted to the facade surface. The margins of the facade shall not be illuminated. Light trespass is prohibited. The sides of commercial buildings without a customer entrance shall not be lit.

Response: The proposed development will be in compliance with all lighting standards. See attached photometric plan and lighting cut sheets (Exhibits C and D). This standard is met.

16.43.080 Height Limits

Pole and surface-mounted luminaires under this section must conform with Section 16.43.070.

A. Lighting mounted onto poles or any structures intended primarily for mounting of lighting shall not exceed a mounting height of 40% of the horizontal distance of the light pole from the property line, nor a maximum height according to Table 16.43.080, whichever is lower. The following exceptions apply:

1. Lighting for residential sports courts and pools shall not exceed 15 feet above court or pool deck surface.

2. Lights specifically for driveways, and then only at the intersection of the road providing access to the site, may be mounted at any distance relative to the property line, but may not exceed the mounting height listed in Table 16.43.080.

3. Mounting heights greater than 40% of the horizontal distance to the property line but no greater than permitted by Table 16.43.080 may be used provided that the luminaire is side-shielded toward the property line.

4. Landscape lighting installed in a tree. See the Definitions section.

5. Street and bicycle path lights.

B. Lighting mounted onto buildings or other structures shall not exceed a mounting height greater than 4 feet higher than the tallest part of the building or structure at the place where the lighting is installed, nor higher than 40% of the horizontal distance of the light from the property line, whichever is less. The following exceptions apply:

1. Lighting attached to single family residences shall not exceed the height of the eave. Lighting for driveways shall conform to Table 16.43.080.

2. Lighting for facades may be mounted at any height equal to or less than the total height of the structure being illuminated regardless of horizontal distance to property line.

3. For buildings less than 40 feet to the property line, including canopies or overhangs onto the sidewalk or public right of way, luminaires may be mounted to the vertical facade or the underside of canopies at 16 feet or less.

4. *The top exterior deck of parking garages should be treated as normal pole mounted lighting rather than as lights mounted to buildings. The lights on the outside edges of such a deck must be side shielded to the property line.*

Response: The proposed development will be in compliance with all lighting standards. See attached photometric plan and lighting cut sheets (see Exhibits C and D). This standard is met.

16.43.090 Lighting Controls

The city strongly recommends the use of timers and/or motion detectors on outdoor lighting, and that motion detectors be set to minimize unnecessary activation. For example, motion detectors for entryway or driveway lights should not activate for off-site pedestrians or cars.

Response: The use of timers on outdoor lighting will be utilized for the secured police parking area and also the public parking area (see Exhibits C and D). This standard is met.

16.43.110 Lighting Plan Required

A lighting plan shall be submitted with the development or building permit application and shall include:

A. A site plan showing the location of all buildings and building heights, parking, and pedestrian areas.

B. The location and height (above grade) of all proposed and existing luminaires on the subject property.

C. Luminaire details including type and wattage of each lamp, shielding and cutoff information, and a copy of the manufacturer's specification sheet for each luminaire.

D. Control descriptions including type of control (time, motion sensor, etc.), the luminaire to be controlled by each control type, and the control schedule when applicable.

E. Any additional information necessary to demonstrate compliance with the standards in this section. (Ord.1338, 2010)

Response: The proposed development will be in compliance with all lighting standards. See attached photometric plan and lighting cut sheets (see Exhibits C and D). This standard is met.

16.130.030 DIVISION XII. RIPARIAN PRESERVATION

16.130.030 Applicability and Generalized Mapping

The inventory of riparian areas contained in the Canby Wetlands and Riparian Inventory specifies which streams and lakes are fish-bearing, and the stream –size category. Based on the classification contained in this inventory, the following riparian corridors shall be established:

1. *Along the Molalla River within the City Limits, with average annual stream flows greater than 1,000 cubic feet per second (2760 cfs), the riparian corridor boundary shall be 75 feet upland from the top of each bank.*

2. *Clackamas County 100 foot riparian setbacks for the Molalla River apply to lands currently outside the City Limits but within the Urban Growth Boundary (See Section 704 of Clackamas County Zoning and Development Ordinance).*
3. *Where the riparian corridor includes all or portions of a significant wetland as identified in the Local Wetland and Riparian Inventory, and mapped on the Canby Wetland and Riparian Inventory Map, the standard distance to the riparian corridor boundary shall be measured from, and include, the upland edge of the wetland.*
4. *Except as provided for in 16.130.030(2), the measurement of distances to the riparian corridor boundary shall be from the top of bank. The measurement shall be a slope distance. In areas where the top of each bank is not clearly defined, the riparian corridor boundary shall be measured from the ordinary high water level, or the line of non-aquatic vegetation, whichever is most land ward. In areas where the predominant terrain consists of steep cliff, the distance to the corridor boundary shall be measured as a horizontal distance until the top of the cliff is reached, and as a slope distances from that point.*

Response: The subject site does not abut Molalla River or contain a significant wetland identified in the City's Local Wetland and Riparian Inventory. However, wetland delineation was performed by Pacific Habitat Services (PHS) evaluating three areas on the subject site. The largest feature (pond) cuts diagonally through the site. This feature was excavated for the purpose of capturing stormwater from downtown Canby. A 36" culvert outfalls into the northern end of the pond where water extends to the southwest. PHS concluded that since this feature's only source of hydrology is the stormwater outfall, this feature should not be jurisdictional by DSL/Corps. Further information on the three areas can be found in the *Wetland Delineation for the Canby Police Facility* Report by Pacific Habitat Services.

The delineation is based on the presence of wetland hydrology, hydric soils, and hydrophytic vegetation in accordance with the Routine On-site Determination, as described in the *Corps of Engineers Wetland Delineation Manual, Wetland Research Program Technical Report Y-98-1, and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Cost Region.* The proposed features identified by PHS are not significant wetlands. Therefore, these standards do not apply.

16.140 DIVISION XIII. WETLAND PRESERVATION

Response: A wetland delineation report was performed by Pacific Habitat Services (PHS) for the subject site. They investigated three areas on the subject site. The largest feature on the site is called out as a "pond", that is a man-made feature which infiltrates stormwater from downtown Canby. PHS concluded that as this feature's only source of hydrology is the stormwater outfall, this feature should not be jurisdictional by DSL/Corps. The limits of the three features are provided as an appendix to their report. Per review of applicable City maps, this site does not contain a significant wetland. Given this information, the subject site does not contain a "significant wetland" as defined in this Chapter, and the regulations do not apply.

CHAPTER 16.49 SITE AND DESIGN REVIEW

16.49.040 Site and Design Approval Criteria and Standards

1. In review of a Type III Site and Design Review Application described in Section16.49.035B, the Board shall, in exercising or performing its powers, duties or functions, determine whether there is compliance with the following A through D, and with Criteria 4, 5, and 6 below:

A. The proposed site development, including the site plan, architecture, landscaping and graphic design, is in conformance with the standards of this and other applicable city ordinances insofar as the location, height and appearance of the proposed development are involved; and

Response: As shown on Table 1 (see Section 4 above), the proposed development is in conformance with the development standards of the M-1 zone. The proposed development is in conformance with all applicable standards as demonstrated in this application and on the attached plans. This standard is met.

B. The proposed design of the development is compatible with the design of other developments in the same general vicinity; and

Response: The surrounding area is a mix of existing developments including industrial, park or open space, and residential. The proposed design, as shown on the attached elevations, is compatible with the design and character of existing developments within the vicinity of the site. This standard is met.

C. The location, design, size, color and materials of the exterior of all structures and signs are compatible with the proposed development and appropriate to the design character of other structures in the same vicinity.

Response: The surrounding area is a mix of existing developments including industrial, park or open space, and residential. The proposed design has been prepared in order to ensure that appearance and location of the new facility are compatible with existing development in the surrounding area. Specific features include orientation of the building near NW 3rd Avenue and the use of long-lasting building materials with neutral paint colors. This standard is met.

D. The Board shall, in making its determination of compliance with subsections B and C above, use the following matrix to determine "compatibility." An application is considered to be "compatible," in regards to subsections B, C, and D above, if a minimum of 65 percent of the total possible number of points (not including bonuses) are accumulated for the whole development.

Response: As this site is within the M-1 zone, the proposed development was designed in accordance with the 16.49.030 Site Design Review Menu to ensure compliance with the M-1 zoning. Please see the discussion below.

2. In review of a Type II Site and Design Review Application described in Section 16.49.035.A.1, the Planning Director shall, in exercising his powers, duties or functions, determine whether there is compliance with the DCO site and design review standards set forth in 16.41.070.A through F, and with Criteria 4, 5, and 6 below.

Response: The proposed application is a Type III review. This standard does not apply.

3. *In review of a Type III Site and Design Review Application described in Section* 16.49.035.*A.2, the Board shall, in exercising or performing its powers, duties or functions, determine whether there is compliance with the INTENT of the DCO site and design review standards set forth in* 16.41.070.*A.1,* 16.41.070.*B.1,* 16.41.070.*C.1,* 16.41.070.*D.1,* 16.41.070.*E.1, and* 16.41.070.*F.1, and with Criteria 4, 5, and 6 below.*

Response: It is understood the Board will review the standards listed above. The subject narrative and accompanying information demonstrate compliance with these standards.

4. *The Board shall, in making its determination of compliance with the above requirements, be guided by the objectives and standards set forth in this section. It must be demonstrated that all required public facilities and services are available, or will become available through the development, to adequately meet the needs of the proposed development. If the site and design review plan includes utility facilities or public utility facility, then the City Planner shall determine whether those aspects of the proposed plan comply with applicable standards*

Response: All required public facilities and service will become available onsite through the development of the new police facility to adequately meet the needs of the proposed development. This standard is met.

5. *The Board shall, in making its determination of compliance with the requirements set forth, consider the effect of its action on the availability and cost of needed housing. The Board shall not use the requirements of this section to exclude needed housing types. However, consideration of these factors shall not prevent the Board from imposing conditions of approval necessary to meet the requirements of this section. The costs of such conditions shall not unduly increase the cost of housing beyond the minimum necessary to achieve the purposes of this ordinance.*

Response: This application proposes to build a new police facility and does not propose the construction of housing. This standard does not apply.

6. *As part of the site and design review, the property owner may apply for approval to cut trees, in addition to those allowed in* Chapter 12.32*, the city Tree Ordinance. The granting or denial of said application will be based on the criteria in* Chapter 12.32. *The cutting of trees does not in and of itself constitute change in the appearance of the property which would necessitate application for site and design review.*

Response: The proposed development does not require the cutting of trees on site. Therefore, this standard does not apply.

Design Review Matrix

The City uses the following matrix to evaluate compliance with the design guidelines. The matrix was provided by City staff for the general design review matrix provided in Chapter 16.49.040 Site Design Review Menu. Required for approval: 70% of total possible points (15% of which must be from LID elements)

Response: As noted in the Design Review matrix, some provisions do not apply to every project. Regarding the City of Canby police facility project, tree retention and signs do

not apply. Therefore, the maximum number of points applicable to the proposed project is 47 points, of which 34 points (72%) are met. There are 15 points out of 47 that are from the *Low Impact Development* section, approximately 32%.

- Parking: The minimum required parking for the proposed development is 89 stalls. We are proposing 90 stalls which are 101% of the required parking. A total of 34 public parking stalls are located to the east side of the building, and 54 secured parking stalls to the west side. Parking lot lighting is provided for all parking spaces, in accordance with Section 16.43. The proposed development does not require loading facilities. Based upon the description above, there are 5 applicable points in this section, of which 4 are earned.

- Access: The proposed distance from the nearest intersection (N. Baker Street) is more than 100'. All pedestrian walkways from the public street to the building entrance are connected and there are pedestrian walkways from the parking lot to the building entrance. There is one sidewalk from the front of the building to the public parking lot and one sidewalk from the NW 3rd Avenue right-of-way to the building. Based upon the description above, there are 6 applicable points in this section, of which 6 are earned.

- Signs: There are no proposed signs with this application. Therefore, this design criterion is not applicable in this matrix. Future approval for desired signs will be obtained prior to construction.

- Building Appearance and Orientation: The proposed project utilizes materials and color that are similar to surrounding development. The building was designed to blend in with the residential development to the east and also the industrial development to the north. Materials consist of concrete masonry unit and structural clay masonry construction, with open-web steel joists and girders, and a standing seam metal roof system. The exterior will include metal paneling and glass curtain-wall window systems at the entry and community room corners, as well as a metal canopy overhang in the entry walkway to emphasize the main public entrance. Additional windows and curtain-walls will occur along each building length in order to articulate the façade and provide daylight to interior functions. On the west side, clerestory windows will be evident below some of the roofs for providing additional daylighting to the interior. All colors used are various shades of gray and tan, in an attempt to match surrounding development. The size of the building is greater than 20,000 SF. Based upon the description above; there are 7 applicable points in this section, of which 6 are earned.

- Landscaping: There are 17 proposed new trees with 10,318 SF of landscaping. Unfortunately due to slope constraints on the site, we are unable to provide a minimum of one tree per 500 SF of landscaping. The landscape plan includes between less than 25% of fertilized and maintained grass in the overall landscape area (2,611SF of lawn grass).The shrubs are placed in the background. Based upon the description above, there are 4 applicable points in this section, of which 3 are earned.

- Low Impact Development: Eco-roof covering at least 10% of the total roof area will be provided. There is an existing park for public use on site. Over 75% of plants are drought tolerant species. Also, over 120% of additional interior parking lot landscaping is provided. Shared parking with the adjacent public park use is proposed. Parking is not integrated within the building footprint. Based upon the description above, there are 25 applicable points in this section, of which 15 are met.

16.49.065 Bicycle and Pedestrian Facilities

Developments coming under design review shall meet the following standards:

A. The internal walkway system shall be extended to the boundaries of the property to adjoining properties developed or zoned for commercial, public, or multi-family uses . . .

Response: The internal walkways included with the proposed development are intended to provide safe employee and public access. The proposed walkways connect to the public parking area and NW 3rd Avenue. The proposed walkways will be constructed of scored concrete. This standard is met.

B. On-site facilities shall be provided to accommodate safe and convenient pedestrian and bicycle access within new subdivisions, multi-family developments, planned development, shopping centers, and commercial districts, and connecting to adjacent residential areas and neighborhood centers. Residential developments shall include streets with sidewalks and access ways.

Response: The proposed development connects to a public sidewalk on NW 3rd Avenue. This standard is met.

C. For new office parks and commercial development:

1. At least one sidewalk connection between the proposed development and each abutting commercial or office property shall be provided. One connection shall also be provided to each neighborhood.

2. Walkways shall be provided to the street for every 300 feet of developed frontage.

3. Walkways shall be direct with minimal driveway crossings.

4. Walkways shall be linked to the internal circulation of the building.

5. Walkways shall be at least five feet wide and shall be raised, have curbing, or have different paving materials when crossing driveways. (Ord. 1043 section 3, 2000)

Response: The proposed development is not a new office park or commercial development. Therefore, this standard does not apply.

Section 16.49.080 General Provisions for Landscaping

1. The standards set forth in this section are minimum standards for landscaping.

2. The minimum area requirement for landscaping for developments coming under design review shall be the percentage of the total land area to be developed as follows:

A. Fifteen (15) percent for all industrial and commercial zones (except the Downtown-Commercial zone, but including the Commercial-Residential zone).

B. Seven and one-half (7.5) percent for the Downtown-Commercial zone.

C. Thirty (30) percent for all residential zones.

Response: This site is in the M-1 zone and is therefore subject to 15% of the total land area to be landscaped. As shown on the site plan, the proposed project has 133,829 SF or 66.4% of the total disturbed area landscaped, which meets the requirement.

3. *Trees and other plant materials to be retained shall be identified on the landscape plan. The Site and Design Review Board encourages the retention, to the extent practicable, of existing healthy trees.*

Response: The site does not contain any existing trees or other plan materials proposed for retention. This standard does not apply.

4. *During the construction process:*
   - *A. The owner or the owner's agent shall provide above and below ground protection for existing trees and plant materials identified to remain.*
   - *B. Trees and plant materials identified for preservation shall be protected by chain link fencing placed around the tree, at the drip line.*
   - *C. If it is necessary to fence within the drip line, such fencing shall be specified by a qualified arborists, nurseryman, or landscape architect.*
   - *D. Neither top soil storage nor construction material storage shall be located within the drip line of trees designated to be preserved.*
   - *E. Where site conditions make necessary grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's drip line area, such grading, building, paving, trenching, boring, digging, or other similar encroachment shall only be permitted under the direction of a qualified arborist, nurseryman or landscape architect. Such direction must assure that the health needs of trees within the preserved area can be met.*
   - *F. Tree root ends shall not remain exposed.*

Response: The owner and construction team will abide by these regulations during the construction process. This standard is met.

5. *Landscaping under preserved trees shall be compatible with the retention and health of said trees.*

Response: The site does not contain existing trees or other plan materials proposed for retention. This standard does not apply.

6. *When it is necessary for a preserved tree to be moved in accordance with the Tree Ordinance, the landscaped area surrounding said tree or trees shall be maintained and replanted with trees which relate to the present landscape plan, or if there is no landscaping plan, then trees which are complimentary with existing, nearby landscape materials.*

Response: The site does not contain existing trees or other plan materials proposed for retention. This standard does not apply.

7. *Any required landscaped area shall be designed, constructed, installed and maintained so that within three (3) years, the ground shall be covered by living grass or other plant material. . .*

Response: All required and proposed landscaping will be in place within the maximum time frame of three years. As shown on the landscape plan, various materials are proposed for landscaping this development to ensure that maximum percentages are not exceeded for materials used in the development. This standard is met.

8. *All trees and plant materials shall be healthy, disease-free, damage-free, well-branched stock, characteristic of the species.*

Response: All trees selected for landscaping are specified to comply with this section's requirements. This standard is met.

9. *Landscaping shall be installed in accordance with the provisions of Sunset New Western Garden Book, 1979 edition, Lane Publishing Company, Menlo Park, California.*

Response: All landscaping to be installed will follow the provisions of the Sunset New Western Garden Book. This standard is met.

10. The following guidelines are suggested to insure the longevity and continued vigor of plant materials:
- *A. Select and site permanent landscape materials in such a manner as to produce a hardy and drought-resistant landscaped area.*
- *B. Consider soil type and depth, spacing, exposure to sun and wind, slope and contours of the site, building walls and overhangs, and compatibility with existing native vegetation preserved on the site or in the vicinity.*

Response: The existing site conditions, including soil type and exposure to natural elements, were taken into consideration when deciding which species to include to ensure a long-lasting landscape. This standard is met.

11. All plant growth in landscaped areas of developments shall be controlled by pruning, trimming or otherwise, so that:
- *A. It will not interfere with designated pedestrian or vehicular access; and*
- *B. It will not constitute a traffic hazard because of reduced visibility.*
- *C. It will not hinder solar access considerations.*

Response: The landscaped elements were selected to be compatible with the proposed use. Maintenance will occur in a manner that will not negatively impact pedestrian or vehicular access, nor security requirements of the police staff. This standard is met.

12. After completion of site grading, topsoil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting.

Response: The grading associated with site preparation for the proposed development will replace top soil in the identified landscaped areas on the site. Any additional top soil will be adequately replaced to provide the landscaping with a suitable base. This standard is met.

13. All planting areas shall be graded to provide positive drainage.

Response: As shown on the grading plan, the proposed planting areas are graded in order to provide positive drainage. This standard is met.

14. Neither soil, water, plant materials nor mulching materials shall be allowed to wash across roadways or walkways.

Response: Maintenance of the property will ensure the spread of the above elements will not encroach on abutting roadways or walkways. This standard is met.

16.49.100 Landscaping Installation and Maintenance

Response: Please see the attached landscape plan for specifications of proposed landscape materials.

16.49.100 Landscaping Installation and Maintenance

1. Except as allowed by subsection (2), all landscaping and exterior improvements required as part of the site and design review approval shall be completed prior to the issuance of any certificate of occupancy.

Response: All landscaping and other elements associated with the Site and Design Review will be in place before building occupancy. This standard is met.

2. *A temporary certificate of occupancy may be issued prior to the complete installation of all required landscaping and exterior improvements if security equal to 110 percent of the cost of the landscaping and exterior improvements . . .*

Response: It is not anticipated that a temporary occupancy permit will be required. However, if necessary, the requirements of this section will be met.

3. *All landscaping approved through the site and design review process shall be continually maintained, including necessary watering, weeding, pruning and replacement, in a manner substantially similar to that originally approved by the Site and Design Review Board, unless later altered with Board approval.*

Response: The landscaping that is approved with this application will continue to be maintained. Parking lot landscaping is designed to enhance the visual environment of the parking area by breaking up large areas of asphalt and providing shade and relief from large heat islands. This standard is met.

16.49.120 Parking Lot Landscaping Standards

1. *General Provisions. In addition to the objectives stated in section 2 of this ordinance, goals of parking lot standards are to create shaded areas in parking lots to reduce glare and to enhance the visual environment. The design of the parking area shall be the responsibility of the developer and should consider visibility of signage, traffic circulation, comfortable pedestrian access, and aesthetics. Trees shall not be cited as a reason for applying for or granting a variance on placements of signs.*

Response: Larger trees are proposed to be located at various locations throughout the site, which will provide shaded areas for vehicle parking. Smaller shrubs and landscaping materials are specified in order to make signage visible and pedestrian access safe within the site. This standard is met.

2. *Application. Parking lot landscaping standards shall apply to any surface passenger vehicle parking area of ten (10) spaces or more, or to any paved vehicular use area 3,500 square feet or larger on the same tax lot or on contiguous tax lots under common ownership. Any paved vehicular area which is used specifically as a utility storage lot or a truck loading area shall be exempt from landscaping requirements within a parking lot.*

Response: This application proposes more than 10 parking spaces. Therefore, parking lot landscaping standards apply.

3. *Landscaping Within a Parking Lot. Area within a parking lot shall include the paved parking and maneuvering area, as well as any paved area within ten (10) feet of any exterior face of curb surrounding the paved parking and maneuvering area.*
   - *A. Area within a parking lot shall include the paved parking and maneuvering area, as well as any paved area within ten (10) feet of any exterior face of curb surrounding the paved parking and maneuvering area.*
   - *B. Each interior landscaped area shall be a minimum of five feet wide, unless the area is added to the required perimeter landscaping.*

Response: The parking areas include paved parking and maneuvering area, as well as any paved area within 10′ of an exterior face of curb surrounding the paved parking and maneuvering area (approximately 40,350 SF). Each interior landscaped area is, at a minimum, 5′ wide. This standard is met.

4. Computing Minimum Area Required to be Landscaped Within a Parking Lot.

A. Fifteen (15) percent for all residential, industrial, and commercial zones (except the Downtown-Commercial Zone, but including the Commercial-Residential Zone).

Response: There is 40,350 SF of paved parking and maneuvering area associated with the proposed site. As shown on the site plan, a total of 10,318 SF (25.5%) of landscaping is provided, which exceeds the requirement.

5. Trees Required Within Parking Lots. Deciduous, evergreen and/or shade trees shall be planted within all parking lots and shall be distributed on the basis of one (1) tree for each eight (8) parking spaces or 2,800 square feet of paved vehicular-use area, whichever is greater. The Site and Design Review Board explicitly encourages the use of planter islands with trees for landscaping parking lots.

Response: A total of 90 parking spaces are proposed for the new facility, requiring 15 trees within the parking area. As shown on the landscape plan, 17 deciduous parking lot trees are proposed, of which 7 are in planter islands. This standard is met.

6. Criteria for Trees in Parking Lots. Deciduous, evergreen and /or shade trees shall meet the following criteria:

Response: All trees included with the proposed development comply with the standards in this subsection.

7. Size of Landscape Planter Islands:

A. Landscape planter islands containing trees shall have a minimum planting area or twenty-five (25) square feet; shall have a minimum width of forty-eight (48) inches measured from back of curb; and shall be designed so as to prevent vehicular damage to trees. (Curb height to be six (6) inches minimum.)

B. Sidewalks shall not encroach upon the minimum planting width.

Response: While the size of the landscape planter islands that contain trees, as shown on the site plan vary, all planter islands meet the minimum standards listed above.

8. Perimeter of Parking and Loading Areas:

A. Screening of parking and loading areas is required. Within three (3) years of planting, screening shall be of such height and density as to shield vehicle headlights from head-on visibility.

B. In addition, one (1) deciduous, evergreen and/or shade tree shall be planted every forty (40) feet, minimum, along the required setback of the vehicular use area.

Response: The use of trees and other landscaping is proposed to screen the public parking area adjacent to NW 3rd Avenue. There is a landscape tree located every 40' along vehicle areas. This standard is met.

9. Irrigation System or Available Water Supply Required. Landscaped areas shall be provided with automatic irrigation systems or a readily available water supply with at least one (1) outlet located within 150 feet of all plant materials to be maintained.

Response: An automatic irrigation system is proposed to be installed with the landscaping to encourage the longevity and health of all landscape material areas. This standard is met.

16.49.150 Parking Lots or Paving Projects

All new paving or parking lot projects which create over 2,500 square feet of impervious surface and any new paving added to existing paving areas which creates a total of more than 2,500 square feet of impervious surface must meet City storm drainage requirements, parking lot landscaping standards and the drainage and access standards of the Oregon Department of Transportation (if applicable).

Response: As shown on the enclosed plans, the drainage system has been designed to meet City storm drainage requirements and parking lot landscaping standards for the entire site.

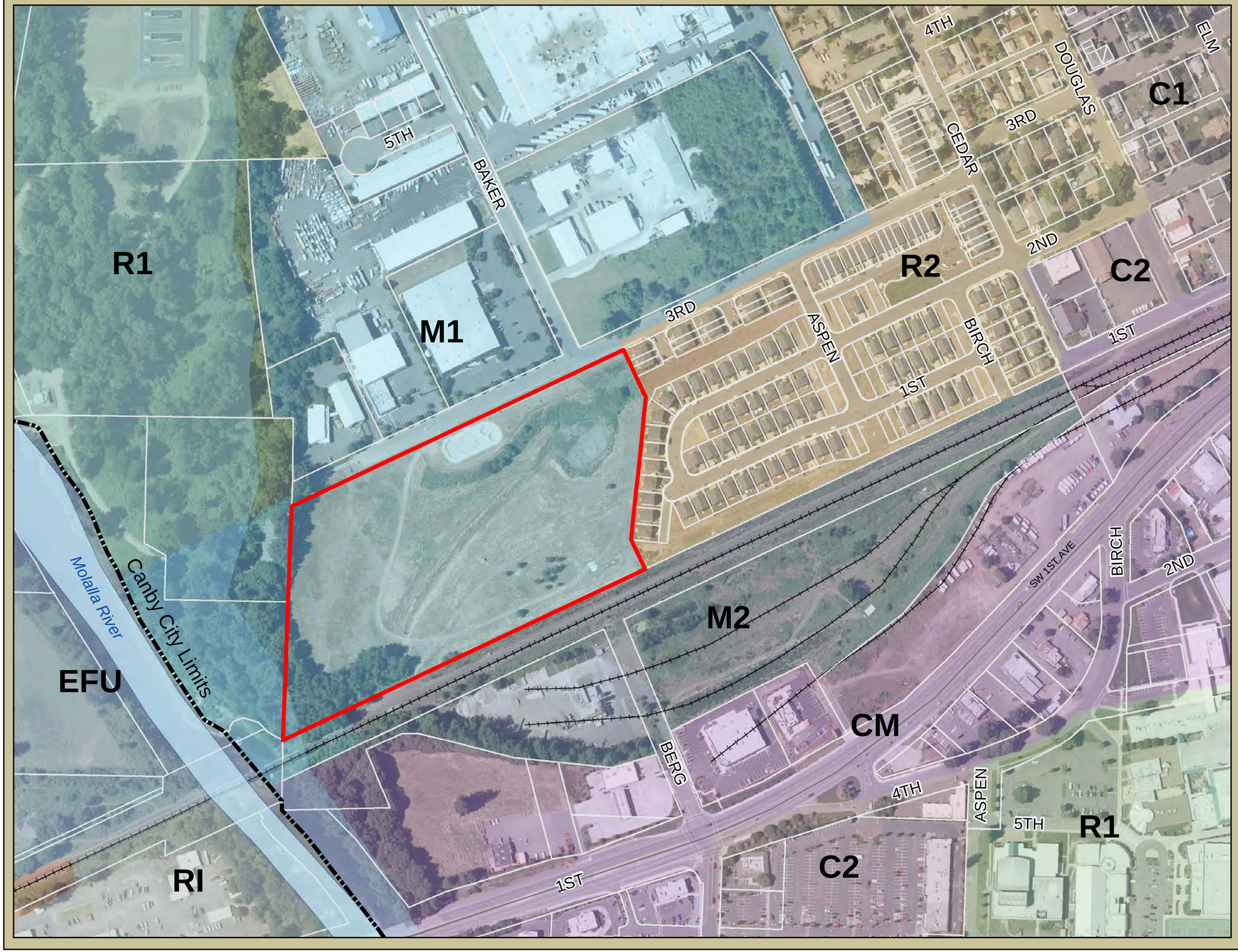
6. CONCLUSION

The proposed project, as described in the narrative above and on the attached plans, meet all applicable criteria. Specifically, of the 47 points possible, the project achieves 34 (72%) including 15 from the LID section. The proposed facility and associated exterior improvements will be compatible with the surrounding area.

7. EXHIBITS

A. Tax Map
B. Site Aerial/Zoning Map
C. Plan Set
D. Lighting Cut Sheets
E. Site Design Review Matrix
F. Color and Material Elevations

Canby Police Station Zoning Map



Canby Police Station Site

Taxlots

0 100 200 400 Feet

SCALE

1 inch = 250 feet

Source Data

Metro RLIS Lite Base Data, June 2010

Geographic Projection Information

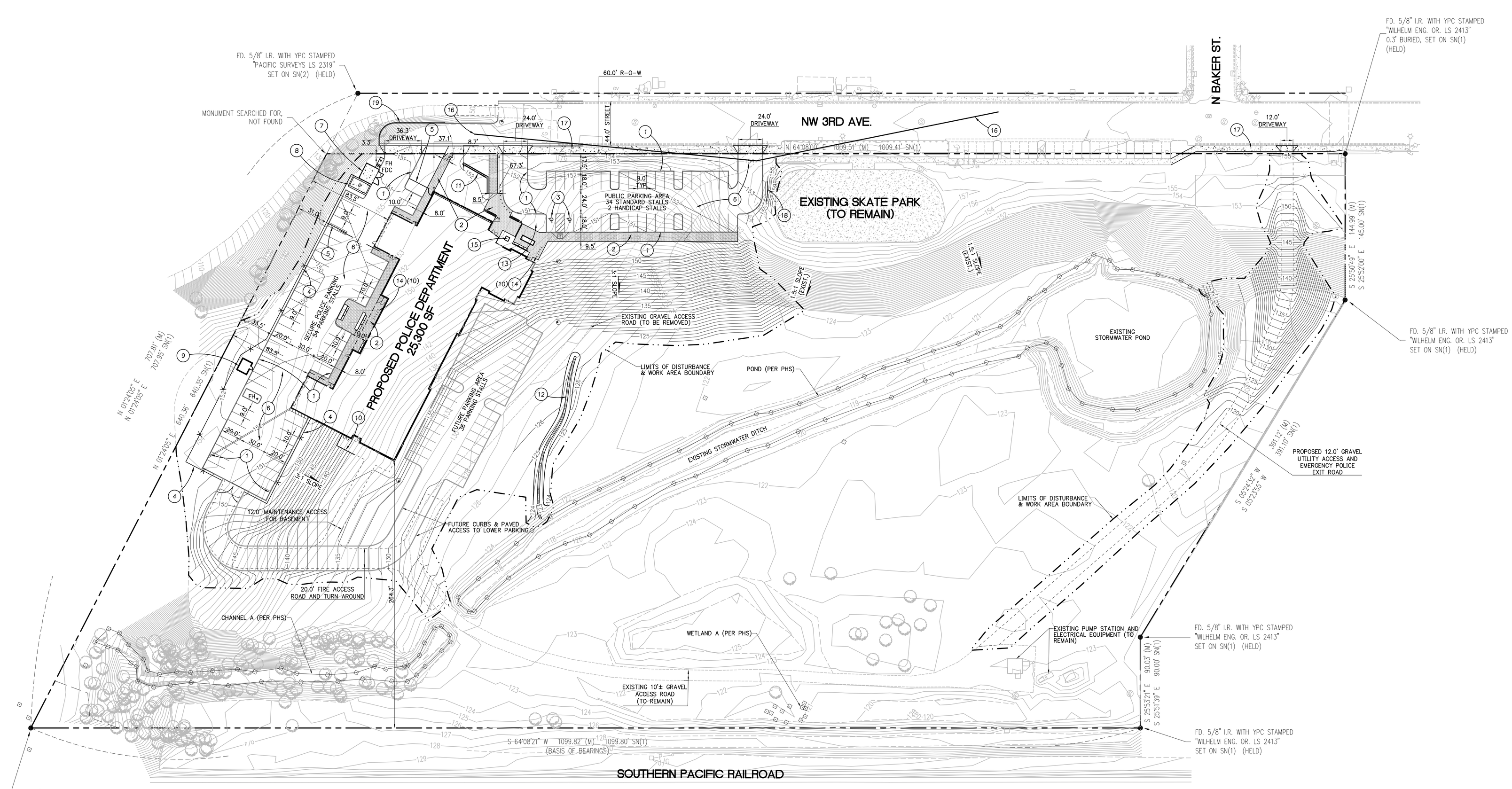
NAD 83 HARN, Oregon North
Lambert Conformal Conic

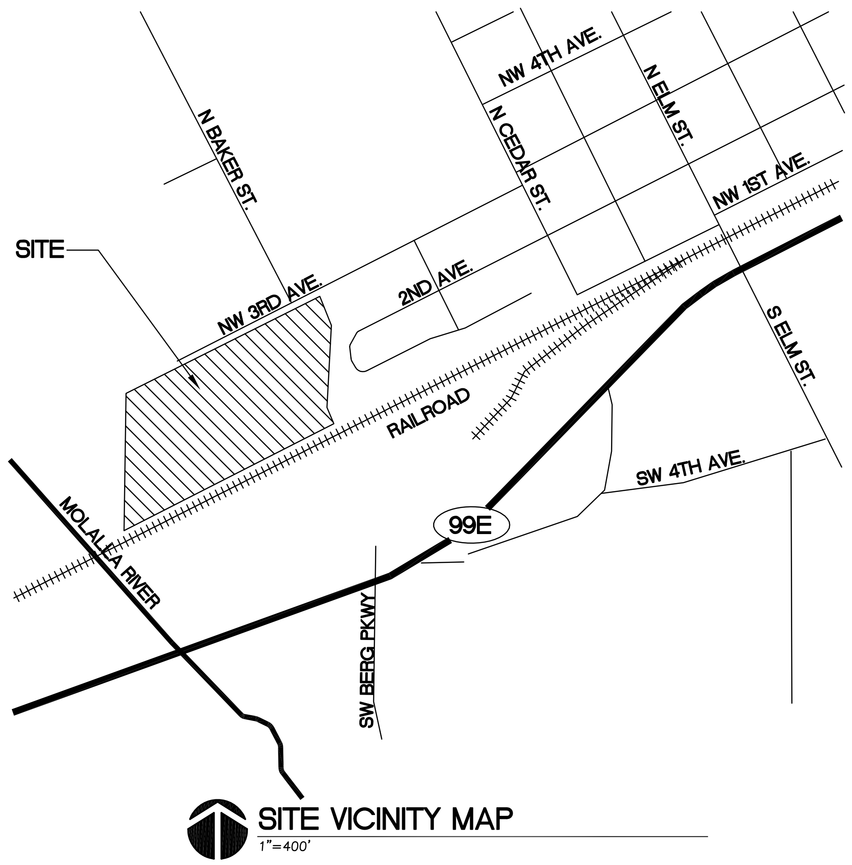
Location Map

GROUP MACKENZIE
PORTLAND, OR | SEATTLE, WA | VANCOUVER, WA
RiverEast Center | 1515 Water Avenue, Suite 100 | Portland, OR 97214
P.O. Box 14310 | Portland, OR 97293
T: 503.224.9560 | F: 503.228.1285 | www.grupnackenzie.com

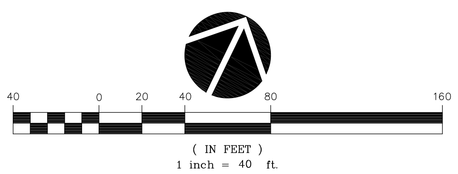
Date: 4/12/2011
File:CanbyPolice.mxd

Map Created by: GF
Project No: 2110061.00





SITE VICINITY MAP
1"=400'



OWNER/DEVELOPER

CITY OF CANBY

PO Box 930
Canby, OR 97013

Phone: (503) 266-1574

Contact: Robert Bitter

ARCHITECT/CIVIL ENGINEER

GROUP MACKENZIE

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Portland, Oregon 97214

P.O. Box 14310
Portland OR 97293

Phone: (503) 224-9560
Fax: (503) 228-1285

Architectural Contact: Jeff Humphreys, AIA
Civil Contact: Tim McGuire, P.E.

SURVEYOR

ZTEC ENGINEERS, INC.

3737 S.E. 8th Ave.
Portland, Oregon 97202

Phone: (503) 235-8795
email: ztec@ztecengineers.com

Contact: Chris Fischborn

SITE DATA

TOTAL SITE AREA =	605,946 SF (13.91 AC)
TOTAL WORK AREA =	201,500 SF (4.63 AC)
PROPOSED BUILDING =	25,300 SF
PARKING AREA (EXCLUDES FUTURE PARKING) =	35,599 SF
SIDEWALK/PLAZA AREA =	6,772 SF
TOTAL IMPERVIOUS AREA=	67,671 SF
GRAVEL ACCESS ROADS=	16,626 SF
LANDSCAPE AREA =	133,829 SF
% LANDSCAPE COVERAGE (% OF WORK AREA) =	66.42%

BICYCLE PARKING:

EXTERNAL SPOTS= 20
INTERNAL SPOTS= 5

PROPOSED PARKING:

PUBLIC PARKING = 34
POLICE PARKING = 54
HANDICAP PARKING = 2
TOTAL PARKING = 90

FUTURE PARKING:

PUBLIC PARKING = 36
TOTAL FUTURE PARKING = 126

REQUIRED PARKING:

CURRENT
3.5 STALLS PER 1,000 SF = 25.30*3.5 = 89 STALLS

FUTURE
3.5 STALLS PER 1,000 SF = 35.30*3.5 = 124 STALLS

LEGEND

- CONCRETE VERTICAL CURB
- PROPERTY LINE
- WETLAND BOUNDARY
- WETLAND BUFFER LINE
- DISTURBANCE LIMITS
- EXISTING CONTOUR LINE 154
- PROPOSED CONTOUR LINE 140
- PROPOSED FENCE

KEYNOTES

1. VERTICAL CURB
2. CONCRETE SIDEWALK
3. ADA ACCESSIBLE PARKING STALL
4. 8' CHAIN LINK FENCE WITH BARBED WIRE
5. 8' SECURITY WALL
6. ASPHALT PAVING
7. TRASH ENCLOSURE
8. GENERATOR
9. 10' X 12' STORAGE BUILDING
10. 6' MAX. CONCRETE RETAINING WALL
11. MONUMENT SIGN
12. WATER QUALITY SWALE
13. WATER QUALITY PLANTER
14. BIKE PARKING
15. WATER FEATURE
16. SITE VISION CLEARANCE LINE (BASED ON 2004 AASHTO RECOMMENDATIONS)
17. PROPOSED PUBLIC SIDEWALK
18. 3' MAX. BLOCK RETAINING WALL
19. 8' MAX. CONCRETE RETAINING WALL (PUBLIC)

GROUP MACKENZIE
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Land Use Planning
Civil Engineering
Structural Engineering
Transportation Planning
Landscape Architecture
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Client
CITY OF CANBY
182 N. HOLLY ST.
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Project
CANBY POLICE FACILITY

MECHANICAL/ELECTRICAL
INTERFACE ENGINEERING, INC
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Phone: (503)382-2266
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COST ESTIMATOR
TS CONSTRUCTION MGMT
1515 SE WATER AVE, #201
PORTLAND, OR 97214
Phone: (503)517-8701
FAX: (503)517-6920

REVISIONS:

REVISION DELTA	REVISIONS THIS SHEET	REVISION DELTA CLOSING DATE

SHEET TITLE:
SITE PLAN

DRAWN BY: RVS

CHECKED BY: TWM

SHEET
1

JOB NO. 2110061.00

DESIGN REVIEW SET : 4/15/2011

MATERIALS SCHEDULE

SYMBOL	NOTE	REFERENCE
	CONCRETE PAVING TYPE 1, STANDARD	X/LX.X
	CONCRETE PAVING TYPE 2, INTEGRAL COLOR	X/LX.X SPECS.
	CONCRETE PAVING, VEHICULAR	CIVIL

ABBREVIATION LEGEND

ITEM	NOTE	REFERENCE
PA	PLANTING AREA	N/A

KEY NOTES

ITEM	NOTE	REFERENCE
1	SEATWALL W/ BENCH	X / LX.1
2	SIGN WALL	X / LX.1
3	RAISED PLANTER	X / LX.1
4	WATER TABLE	X / LX.1
5	FLAG POLE	SPECS.
6	STORMWATER SCUPPER	X / LX.1
7	TRENCH DRAIN	X / LX.1
8	FDC	CIVIL
9	FIRE HYDRANT	CIVIL

SITE FURNISHING SCHEDULE

ITEM	NOTE	REFERENCE
1	BENCH TYPE 1, STANDARD (11 TOTAL)	SPECS.
2	BENCH TYPE 2, WALL MOUNT (2 TOTAL)	X / LX.1 SPECS.
3	BENCH TYPE 3, BACKLESS, WALL MOUNT (2 TOTAL)	X / LX.1 SPECS.
4	BIKE RACK (15 TOTAL (10 EXTERIOR, 5 INTERIOR)	SPECS.
5	TRASH RECEPTACLE (2 TOTAL)	SPECS.
6	BOLLARD (6 TOTAL)	SPECS.

GENERAL NOTES

1. ----------

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REVISIONS:

REVISION DELTA	REVISIONS THIS SHEET	REVISION DELTA CLOSING DATE

SHEET TITLE:
LANDSCAPE CONSTRUCTION PLAN

DRAWN BY: TMK, TEB

CHECKED BY: DKJ

SHEET
2

JOB NO. 2110061.00

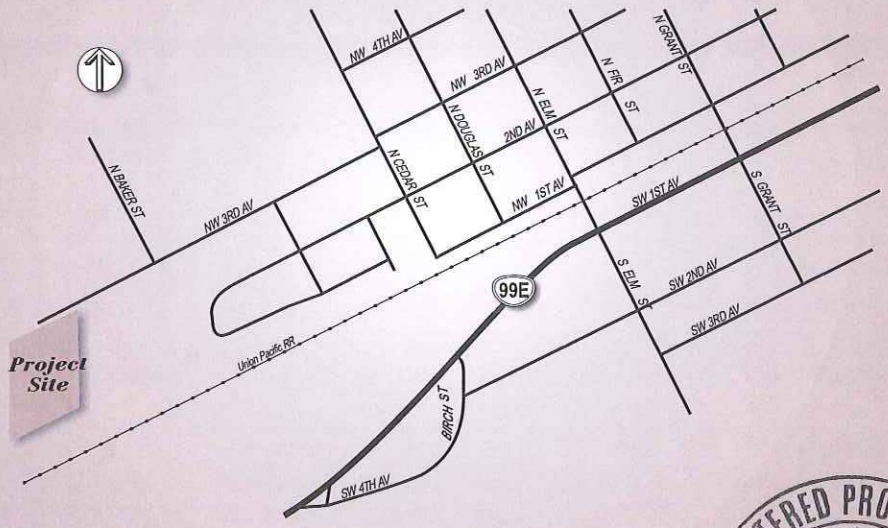
DESIGN REVIEW SET : 4/15/2011

Exhibit B - Traffic Impact Study

Report for

Canby Police Station

Transportation Impact Study



Prepared by

DKS Associates
TRANSPORTATION SOLUTIONS

April 2011

REGISTERED PROFESSIONAL ENGINEER
63,019
OREGON
JANUARY 11, 2005
C. S. MACIEJEWSKI
EXPIRES: 12/31/2012

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1: INTRODUCTION AND SUMMARY

This study evaluates the transportation impacts for the proposed Canby Police Station located on NW 3rd Avenue, about one block west of N Baker Street in the downtown area of Canby, Oregon. In addition, this study recommends mitigation measures that offset the impacts of the proposed development.

Project Summary

The proposed City of Canby Police Station will be located at the western terminus of NW 3rd Avenue (as shown in Figure 1). The project site is currently zoned as Light Industrial-M1. The proposed site plan includes a 25,000 square foot building with a 10,000 square foot basement (totaling 35,000 square feet). The 25,000 square foot portion of the building will be built out as part of this project and the basement will be used for future expansion needs. As part of this project, the following intersections were analyzed during the a.m. and p.m. peak hours to determine impacts from the proposed City of Canby Police Station.

- NW 3rd Avenue/N Cedar Street
- NW 3rd Avenue/N Elm Street
- NW 2nd Avenue/N Cedar Street
- NW 2nd Avenue/N Elm Street
- NW 1st Avenue/N Elm Street
- OR 99E/N Elm Street

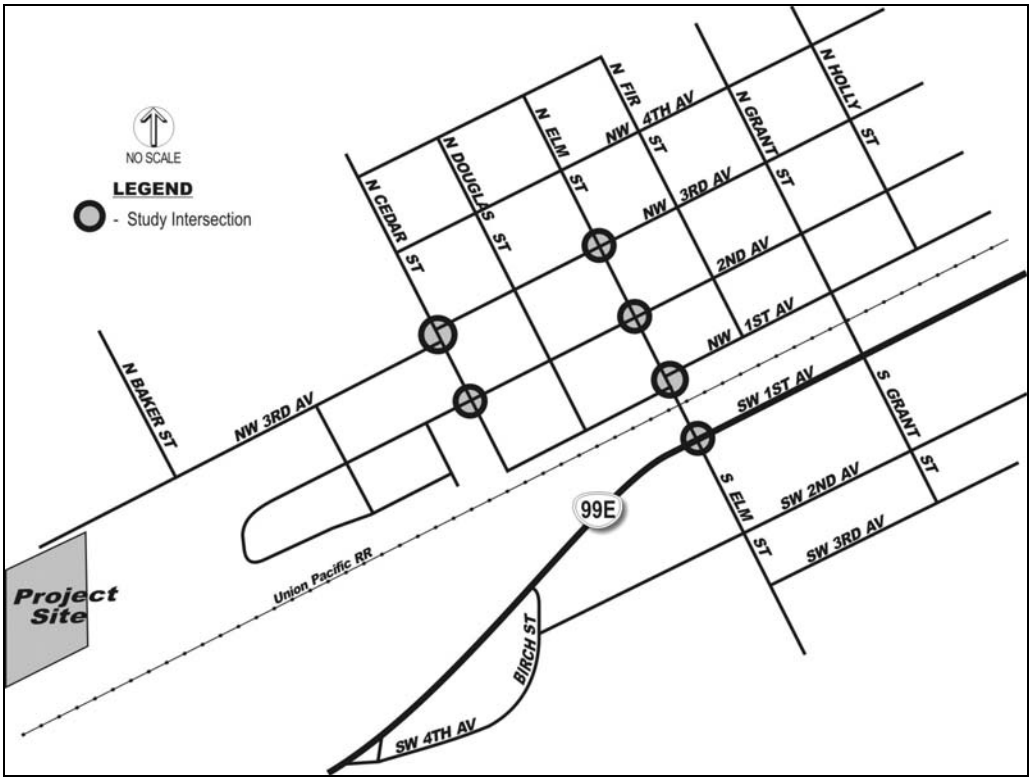


Figure 1: Study Area

Summary of Key Findings

Project traffic impacts were evaluated on the surrounding roadway network for a.m. and p.m. peak hour conditions. Based on comparison to City of Canby and ODOT standards for intersection operations, neighborhood through traffic, and access spacing, as well as a review of safety for emergency responses, the following series of mitigation measures are recommended:

Project Site Access and Frontage

- Complete all required frontage improvements on NW 3rd Avenue to City collector standards.
- Ensure adequate sight distance at the site driveways by restricting landscaping or any potential obstructions on the project frontage within sight distance triangles.

Neighborhood Through-Trip Impacts

- Reduce through-traffic on N Cedar Street and NW 2nd Avenue by:
    - Install guide-signing to the police station that routes traffic on NW 3rd Avenue instead of NW 2nd Avenue.
    - Request that the police department works with employees to require commute trips and emergency response (when applicable) to use NW 3rd Avenue to/from reach N Elm Street.

  If the guide-signing and employee education is effective, no further mitigation may be required. However, to provide adequate mitigation in-case the measures are not effective, the following additional measures are recommended:
    - Collect fees equivalent to the design and contruction of a traffic circle at N Cedar Street and NW 2nd Avenue
    - Conduct traffic counts 6-months after occupancy of the site to determine if additional mitigation is required
    - If additional mitigation is required, engage the residents along N Cedar Street and NW 2nd Avenue to determine appropriate mitigation for the through-trip impacts. Construct the mitigation with the fees collected from the applicant.
    - If additional mitigation measures are not required and no complaints are received after a period of 2 years, refund the mitigation fees to the applicant.

Off-Site Safety Improvements

- Complete sidewalks on the south side of NW 3rd Avenue between the project site and NW Cedar Street.
- Stripe bike lanes on NW 3rd Avenue between the project site and NW Cedar Street.
- Address sight distance issues at the intersection of NW 3rd Avenue/N Cedar Street by trimming vegetation (northwest corner) and modifying a fence (southwest corner). If the improvements are determined to be infeasible due to private property issues, install all-way stop control.

CHAPTER 2: EXISTING CONDITIONS

This chapter provides documentation of existing study area conditions, including the project site, study area roadway network, and existing traffic volumes and operations. Supporting details (i.e., traffic counts and level of service calculations) are provided in the appendix.

Project Site

The site for the proposed City of Canby Police Station is located at the western terminus of NW 3rd Avenue. The lot is currently vacant and has only one existing fronting roadway, NW 3rd Avenue. Within the vicinity of the project are industrial land uses to the north, neighborhoods and the downtown area to the east, undeveloped land to the south, and the Molalla River to the west.

Study Area Roadway Network

Key study area roadways are listed in Table 1 along with their functional classifications and other important roadway characteristics. Within the study area, all roadways provide some sidewalks; however, there are gaps on most of the roadways. In the immediate vicinity of the project there are no sidewalks available on the project frontage nor on the north side of NW 3rd Avenue between N Baker Street and N Cedar Street. Additionally, there is a gap in the sidewalks on the south side of NW 3rd Avenue between the skate park and the neighborhood development. None of the study area roadways provide striped bike lanes; however, all the collector streets within the study area provide sufficient cross sections to be striped for bike lanes (if on-street parking was removed in some areas).

Table 1: Study Area Roadway Characteristics

Roadway	City of Canby Classification[1]	Cross Section	Speed	On-Street Parking	Sidewalks	Bike Lanes	Roadway Width
NW 3rd Avenue	Collector	2 Lanes	25 mph	Yes	Partial	No	38-50ft
NW 2nd Avenue	Local	2 Lanes	25 mph	Yes	Yes	No	44ft
NW 1st Avenue	Local	2 Lanes	25 mph	Yes	Partial	No	40ft
N Cedar Street	Neighborhood/ Local	2 Lanes	25 mph	Yes	Partial	No	34ft
N Elm Street	Collector	2 Lanes	25 mph	Yes	Partial	No	60ft
OR 99E	Arterial	5 Lanes	35 mph	No	Partial	No	80ft

Existing Traffic Volumes and Operations

Intersection turn movement counts were collected for the a.m. and p.m. peak periods in March 2011. Additionally, 24-hour directional traffic volume and speed data were collected in March 2011 on N Cedar Street south of NW 3rd Avenue and on NW 2nd Avenue west of N Cedar Street. Existing intersection operations analysis was performed at the study intersections using the turn movement counts, which are shown in Figure 2. The analysis was conducted to ensure that the

[1] City of Canby Transportation System Plan (TSP), December 2010

transportation network reaches desired performance levels (agencies often specify intersection performance thresholds as required operating standards).

Intersection Performance Measures

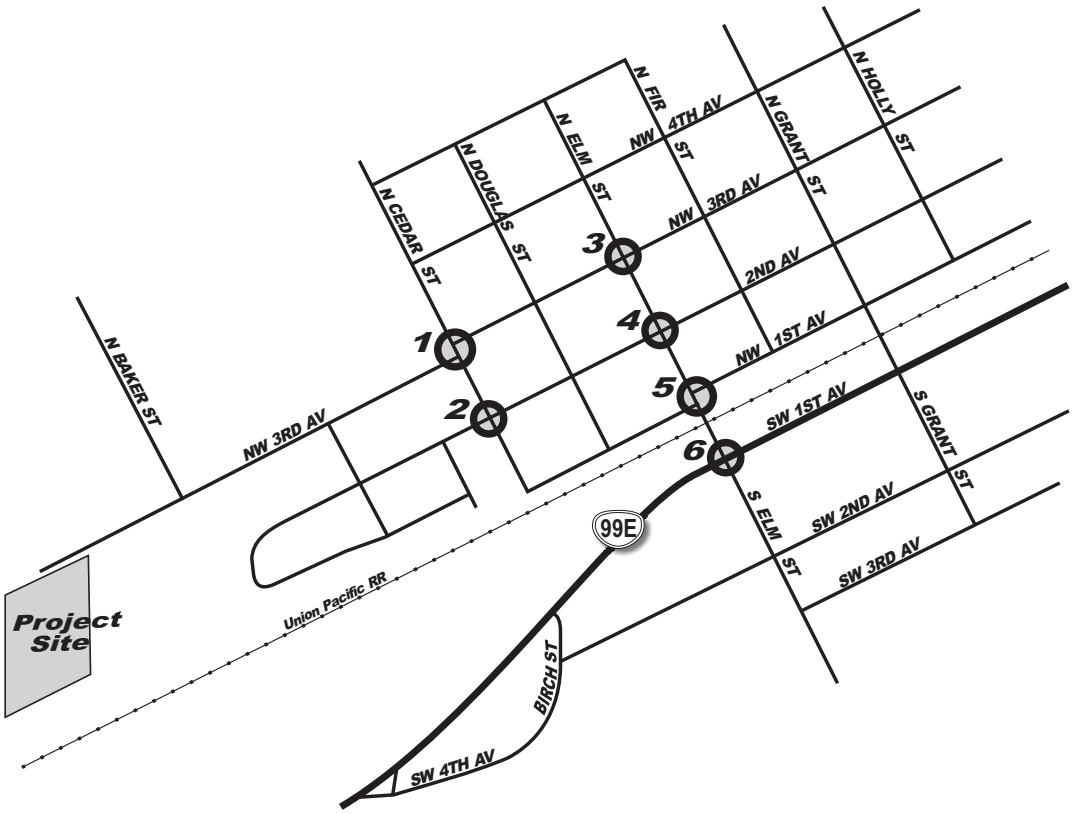
Level of service (LOS) ratings and volume-to-capacity (v/c) ratios are two commonly used performance measures that provide a good picture of intersection operations. In addition, they are often incorporated into agency mobility standards.

- **Level of service (LOS):** A "report card" rating (A through F) based on the average delay experienced by vehicles at the intersection.[2] LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay has become excessive and demand has exceeded capacity. This condition is typically evident in long queues and delays.
- **Volume-to-capacity (v/c) ratio:** A decimal representation (typically between 0.00 and 1.00) of the proportion of capacity that is being used at a turn movement, approach leg, or intersection. It is determined by dividing the peak hour traffic volume by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. As the ratio approaches 1.00, congestion increases and performance is reduced. If the ratio is greater than 1.00, the turn movement, approach leg, or intersection is oversaturated and usually results in excessive queues and long delays.

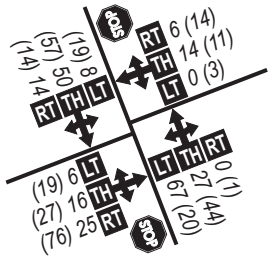
Required Operating Standards

The intersection of N Elm Street/Highway 99E is within ODOT jurisdiction and must meet the operational standard of a volume to capacity ratio of 0.95 or less[3]. The remaining study intersections are required to meet the City of Canby's operating standard. For peak periods at unsignalized two-way stop controlled study intersections, the City's minimum acceptable level of service (LOS) is LOS E and a volume to capacity ratio of 0.90 or less.[4]

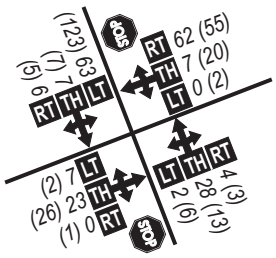
[2] A description of Level of Service (LOS) is provided in the appendix and includes a list of the delay values (in seconds) that correspond to each LOS designation.
[3] 1999 Oregon Highway Plan – Amendment, The Oregon Department of Transportation, July 2005.
[4] City of Canby Transportation System Plan (TSP), December 2010.



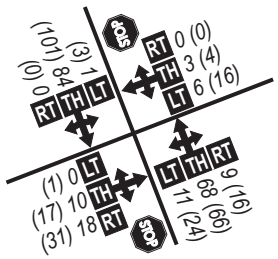
1. *NW 3rd Ave. @ N Cedar St.*



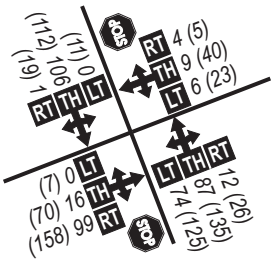
2. *NW 2nd Ave. @ N Cedar St.*



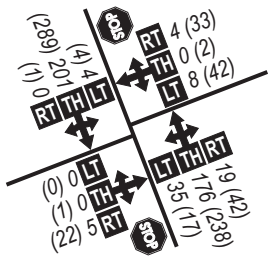
3. *NW 3rd Ave. @ N Elm St.*



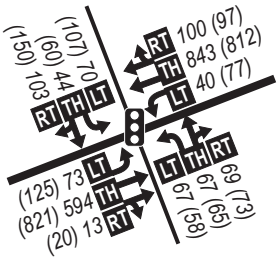
4. *2nd Ave. @ N Elm St.*



5. *NW 1st Ave. @ N Elm St.*



6. *OR 99E @ N Elm St.*



LEGEND

- Study Intersection
- Stop Sign
- Traffic Signal
- Lane Configuration
- *AM (PM)* - Peak Hour Traffic Volumes
- LT TH RT (Left•Thru•Right) - Volume Turn Movement

DKS Associates
TRANSPORTATION SOLUTIONS

NO SCALE

Figure 2

EXISTING AM/PM PEAK HOUR TRAFFIC VOLUMES

Existing Operating Conditions

The existing traffic operations at the study intersections were determined for the signalized and two-way stop controlled intersection operations using the *2000 Highway Capacity Manual* methodology.[5] The estimated average delay, level of service (LOS), and volume to capacity (v/c) ratio of each study intersection are shown in Table 2. As can be seen, all intersections currently meet operating standards.

Table 2: Existing Study Intersection Operations

Intersection	Operating Standard	A.M. Peak Hour			P.M. Peak Hour		
		Delay	*LOS*	*V/C*	*Delay*	*LOS*	*V/C*
NW 3rd Avenue/N Cedar Street	LOS E and v/c ≤ 0.90	10.8	A/B	0.07	10.9	A/B	0.22
NW 3rd Avenue/N Elm Street		10.7	A/B	0.05	11.5	A/B	0.07
NW 2nd Avenue/N Cedar Street		11.2	A/B	0.09	12.7	A/B	0.12
NW 2nd Avenue/N Elm Street		13.3	A/B	0.18	24.0	A/C	0.46
NW 1st Avenue/N Elm Street		12.0	A/B	0.03	16.0	A/C	0.22
OR 99E/N Elm Street	v/c ≤ 0.95	24.4	C	0.63	26.8	C	0.63

Signalized Intersections: Delay = Average Stopped Delay per Vehicle (sec), V/C = Volume-to-Capacity Ratio of Intersection
Unsignalized Intersections: Delay = Average Stopped Delay per Vehicle (sec) at Worst Movement,
V/C = Volume-to-Capacity Ratio of Worst Movement

Public Transit Service

The Canby Area Transit (CAT) provides service within the city of Canby and neighboring communities. CAT operates with four fixed routes that run five days a week. The closest transit stop to the project site is on N Cedar Street, just south of NW 3rd Avenue.

[5] *2000 Highway Capacity Manual*, Transportation Research Board, Washington DC, 2000.

CHAPTER 3: PROJECT IMPACTS

This chapter reviews the impacts that the proposed Canby Police Station would have on the study area transportation system in the downtown area of the City of Canby. Analysis was performed for the a.m. and p.m. peak hours to capture impacts during each of these periods. The impact analysis discusses the proposed police station (including trip generation and distribution), build conditions, neighborhood through traffic, and site access and circulation.

Proposed Development

The proposed City of Canby Police Station will be located at the western terminus of NW 3rd Avenue (as shown in Figure 1). The project site is currently zoned as Light Industrial-M1. The proposed site plan includes a 25,000 square foot building with a 10,000 square foot basement (totaling 35,000 square feet). The 25,000 square foot portion of the building will be build out as part of this project and the basement will be used for future expansion needs. This analysis considers the entire 35,000 square feet to account for the total potential site impacts.

Trip Generation

Trip generation is the method used to estimate the number of vehicles that are added to the site driveways and surrounding roadway network by the proposed project during a specified period (i.e., such as the p.m. peak hour). Trip generation is performed by multiplying trip rates by land use size.

The trip rates used to estimate trip generation for the proposed site were obtained from the Institute of Transportation Engineers (ITE) *Trip Generation, 6th Edition*[6] manual land use of General Office (ITE Code 710). This is not the most recent version of the trip generation manual, but it was used for this development because the trip-rate equation provided in the *8th Edition* of the trip generation is not appropriate for a General Office development that is less than 70,000 square feet. Table 3 provides the trip generation results for the a.m. and p.m. peak hour.

Table 3: Project Trip Generation Summary

Peak Hour	Size	Daily Trips	Trips Volumes		
			In	*Out*	***Total***
Weekday a.m. peak hour	35,000 sq. ft	594	71	10	**81**
Weekday p.m. peak hour			11	56	**67**

Trip Distribution

Trip distribution is the estimation of where project trips would be coming from and going to and is given as percentages at key gateways to the study area. The trip distribution for the proposed Canby Police Station was estimated based on the distribution of existing traffic volumes, the existing roadway network, and the Canby TSP travel forecast tool. Based on the trip generation and distribution, the majority of the proposed police station generated traffic would flow on NW 3rd Avenue between the site and N Cedar Street and on NW 2nd Avenue between N Cedar

[6] *Trip Generation, 6th Edition*, Institute of Transportation Engineers, 1997.

Street and N Elm Street. Figure 3 shows the trip generation used to develop the project traffic volumes, which are shown in Figure 4.

Build Conditions

Project traffic was added to existing traffic volumes to reflect a build scenario. The resulting turn movement volumes were analyzed at the study intersections for the a.m. and p.m. traffic scenarios. Figure 5 shows the traffic volumes that were used in the analysis of the build conditions.

Existing (Plus Project) Intersection Operations

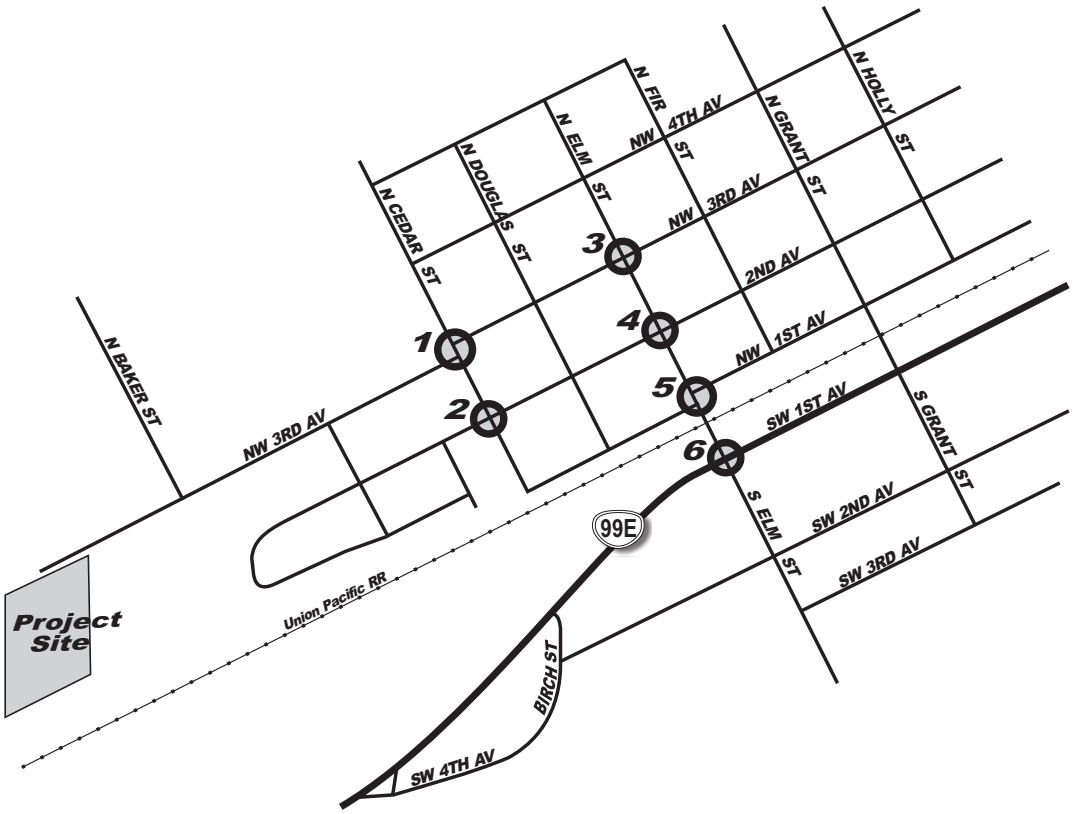
The existing plus project scenario intersection operations were analyzed for the peak hours using *2000 Highway Capacity Manual* methodology[7] for signalized and unsignalized intersections. Table 4 lists the operating conditions for the Existing and Existing Plus Project scenarios. By comparing the intersection performance between the scenarios with and without project traffic, the project impacts at the study intersections can be determined. As shown, all intersections meet applicable operating standards both with and without project traffic. Therefore, intersection operations as a result of project traffic would not trigger significant impacts and corresponding mitigations.

Table 4: Existing (Plus Project) Intersection Operations

Intersection	Operating Standard	A.M. Peak Hour			P.M. Peak Hour		
		Delay	*LOS*	*V/C*	*Delay*	*LOS*	*V/C*
Existing							
NW 3rd Avenue/N Cedar Street	LOS E and v/c ≤ 0.90	10.8	A/B	0.07	10.9	A/B	0.22
NW 3rd Avenue/N Elm Street		10.7	A/B	0.05	11.5	A/B	0.07
NW 2nd Avenue/N Cedar Street		11.2	A/B	0.09	12.7	A/B	0.12
NW 2nd Avenue/N Elm Street		13.3	A/B	0.18	24.0	A/C	0.46
NW 1st Avenue/N Elm Street		12.0	A/B	0.03	16.0	A/C	0.22
OR 99E/N Elm Street	v/c ≤ 0.95	24.4	C	0.63	26.8	C	0.63
Existing Plus Project							
NW 3rd Avenue/N Cedar Street	LOS E and v/c ≤ 0.90	12.8	A/B	0.10	12.2	A/B	0.35
NW 3rd Avenue/N Elm Street		10.8	A/B	0.05	11.6	A/B	0.10
NW 2nd Avenue/N Cedar Street		11.7	A/B	0.15	14.7	A/B	0.15
NW 2nd Avenue/N Elm Street		15.4	A/C	0.19	28.3	A/D	0.53
NW 1st Avenue/N Elm Street		12.7	A/B	0.03	17.4	A/C	0.24
OR 99E/N Elm Street	v/c ≤ 0.95	25.9	C	0.66	28.8	C	0.66

Signalized Intersections: Delay = Average Stopped Delay per Vehicle (sec), V/C = Volume-to-Capacity Ratio of Intersection
Unsignalized Intersections: Delay = Average Stopped Delay per Vehicle (sec) at Worst Movement,
V/C = Volume-to-Capacity Ratio of Worst Movement

[7] *2000 Highway Capacity Manual*, Transportation Research Board, Washington DC, 2000.



1. *NW 3rd Ave. @ N Cedar St.*	**2.** *NW 2nd Ave. @ N Cedar St.*	**3.** *NW 3rd Ave. @ N Elm St.*
4. *2nd Ave. @ N Elm St.*	**5.** *NW 1st Ave. @ N Elm St.*	**6.** *OR 99E @ N Elm St.*

LEGEND

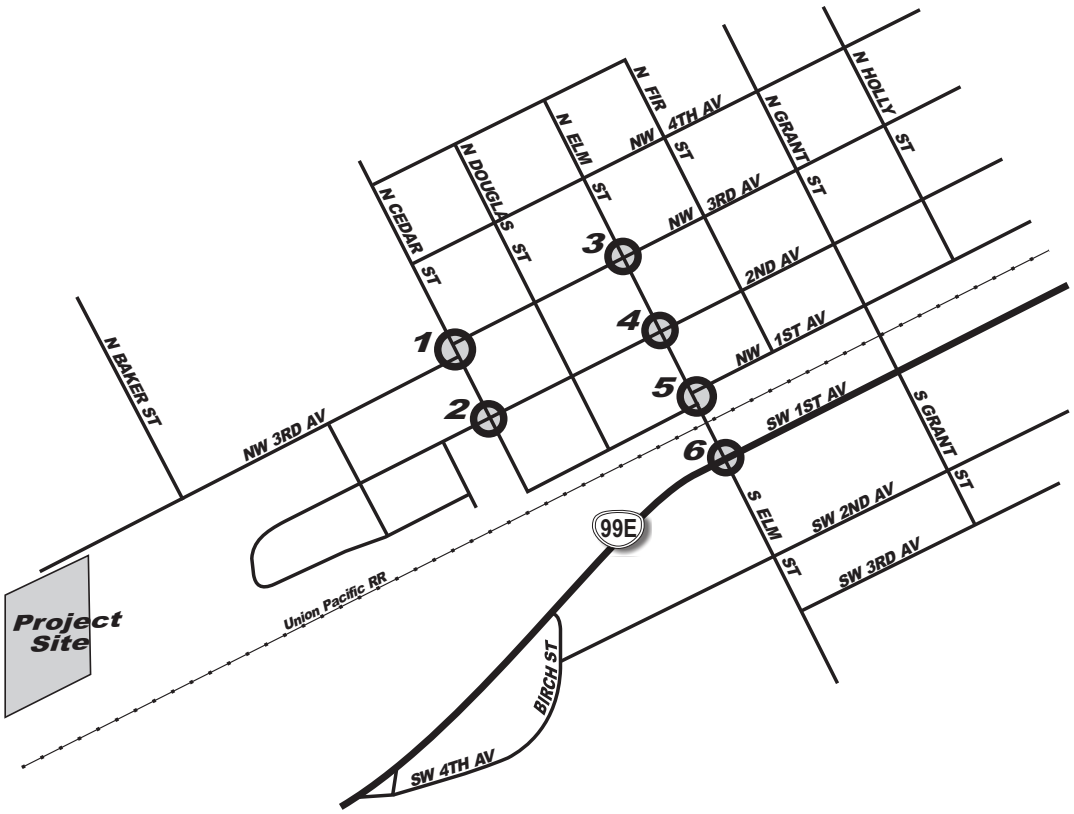
- Study Intersection
- *00%* - Trip Distribution Percentage
- LT TH RT - Turn Movement (Left•Thru•Right)

DKS Associates
TRANSPORTATION SOLUTIONS

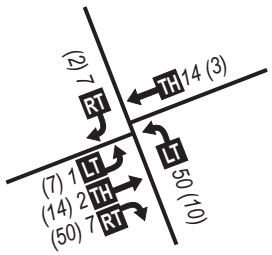
NO SCALE

Figure 3

PROJECT TRIP DISTRIBUTION



1. *NW 3rd Ave. @ N Cedar St.*



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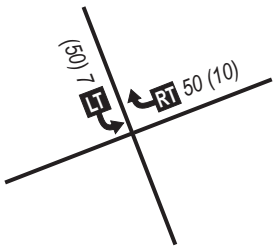
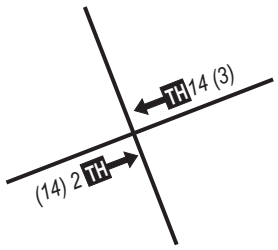
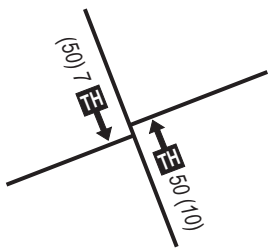


3. *NW 3rd Ave. @ N Elm St.*

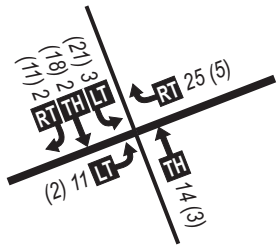


4. *2nd Ave. @ N Elm St.*

5. *NW 1st Ave. @ N Elm St.*



6. *OR 99E @ N Elm St.*



LEGEND

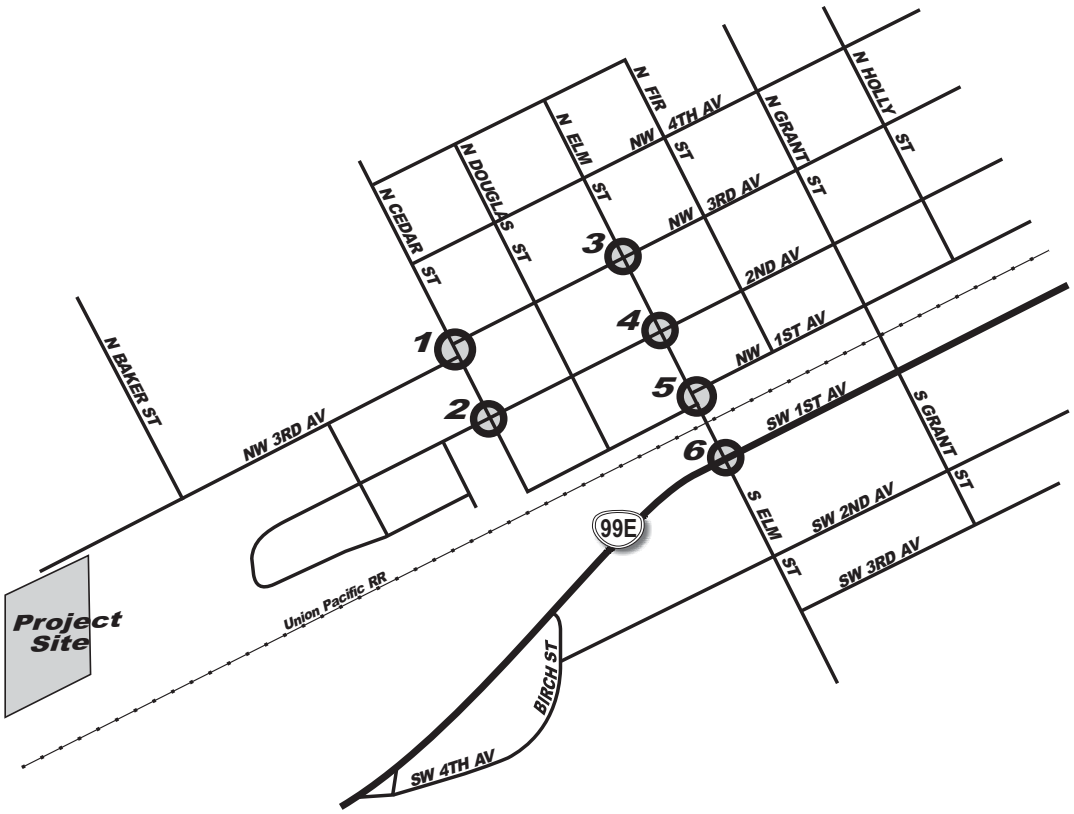
- Study Intersection
- *AM (PM)* - Peak Hour Traffic Volumes
- LT TH RT - Volume Turn Movement
  Left•Thru•Right

NO SCALE

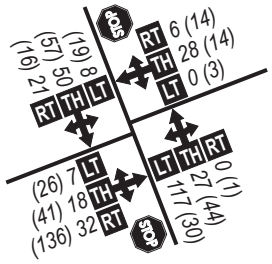
DKS Associates
TRANSPORTATION SOLUTIONS

Figure 4

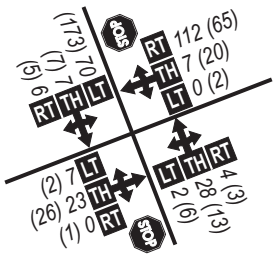
AM/PM PEAK HOUR ADDED PROJECT TRAFFIC VOLUMES



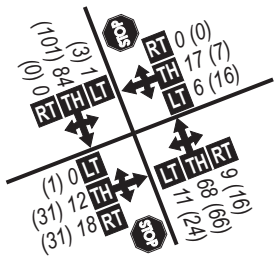
1. *NW 3rd Ave. @ N Cedar St.*



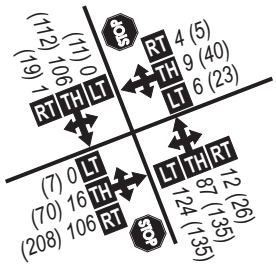
2. *NW 2nd Ave. @ N Cedar St.*



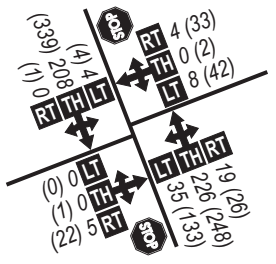
3. *NW 3rd Ave. @ N Elm St.*



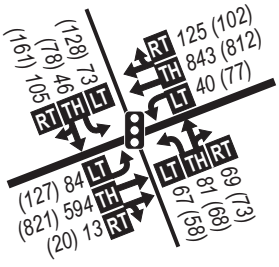
4. *2nd Ave. @ N Elm St.*



5. *NW 1st Ave. @ N Elm St.*



6. *OR 99E @ N Elm St.*



LEGEND

- Study Intersection
- Stop Sign
- Traffic Signal
- Lane Configuration
- *AM (PM)* - Peak Hour Traffic Volumes
- LT TH RT (Left • Thru • Right) - Volume Turn Movement

DKS Associates
TRANSPORTATION SOLUTIONS

NO SCALE

Figure 5

EXISTING PLUS PROJECT AM/PM PEAK HOUR TRAFFIC VOLUMES

Neighborhood Through Traffic

To protect livability in neighborhood areas, the City of Canby has adopted traffic impact thresholds for residential streets. Developments anticipated to add significant traffic levels to residential streets are required to develop mitigations that will reduce the impact. A development is considered to have a significant impact when it adds 30 through-vehicle trips during a peak hour to an adjacent residential street with an average daily traffic (ADT) volume of 1,200 or higher and/or a 85th percentile speed greater than 28 miles per hour.

Based on zoning and fronting land uses, N Cedar Street from NW 3rd Avenue to NW 2nd Avenue and NW 2nd Avenue from N Cedar Street to N Douglas are the only roadways within the study area that would be classified as residential streets and may be significantly impacted by the proposed project. 24-hour bidirectional traffic volume and speed data was collected on both these roadway sections. The data for N Cedar Street showed an ADT volume greater than 1,200 vehicles (2,350 vehicles) and an 85th percentile speed of 24 miles per hour. On NW 2nd Avenue the data showed an ADT volume great than 1,200 vehicles (2,420 vehicles) and an 85th percentile speed of 27 miles per hour.

The proposed police station is expected to add more than 30 vehicles during peak hours to both N Cedar Street and NW 2nd Avenue along the residential portions (see Figure 5). Therefore, mitigation will be needed along these roadways as a result of this project. There are generally two types of potential mitigation strategies that are considered in residential areas for through-trip impacts, speed reduction measures and/or volume reduction measures. Volume reduction measures could include diverters, movement closures, and decrease route speed by modifying geometry and/or traffic control. Speed reduction measures could include speed humps, driver speed feedback signs, and road narrowing. Some speed reduction can also have a secondary effect of reducing traffic volume (by making a route less attractive).

Speed reduction measures were not considered a primary focus for these roadways as the data shows that speeds are already meeting requirements in this area. A volume reduction measure would be most appropriate for the impact from this project as the goal would be to reduce the number of through trips along the residential routes to the site, without negatively impacting other neighborhoods.

For this project, a traffic circle at the intersection of NW 2nd Avenue/N Cedar Street could be an appropriate mitigation. The traffic circle would be much like the traffic circle at the intersection of NW 2nd Avenue/N Aspen Street as shown in the photo to the right. It is expected that the traffic circle will add just enough delay at the intersection to potentially detour some traffic from using NW 2nd Street and N Cedar Street as a through street to access the project site. It is expected that the traffic circle would also have the least amount of

Example Traffic Circle at NW 2nd Avenue/N Aspen Street

impact on the surrounding neighborhood trips, as it is not restricting any movements.

In addition to considering the construction of a traffic circle at NW 2nd Avenue/N Cedar Street, mitigation measures could include providing guide signing to the police station (via NW 3rd Avenue) and working with the police station to educate employees on the appropriate routes for both their commute and emergency response trips. If the guide signing and employee education is successful, a mitigation such as a traffic circle may not be necessary.

Site Access and Circulation

A review of the proposed site access and circulation was conducted to determine if any potential modifications would be needed. The project site plan is provided in the appendix.

Motor Vehicle Access

Access to the site is provided via three driveways on NW 3rd Avenue, which is a two lane collector street. The City of Canby spacing standard for access points (driveways) is based on roadway classifications. Because NW 3rd Avenue is a collector street, it has a minimum spacing standard of 150 feet for access points. All three proposed access points for the project site would meet the minimum spacing standards.

Site access points are also required to meet sight distance requirements outlined in the American Association of State Highway and Transportation Officials (AASHTO).[8] The required sight distance requirements are based on the design speed of the roadway. NW 3rd Avenue is a 25 miles per hour corridor and therefore must meet a minimum of 280 feet of sight distance. Sight distance was evaluated in the field and it was determined that vehicles exiting the project site should have a clear sight distance from the project site to N Cedar Avenue (approximately 1,800 feet). Therefore, the proposed access points are expected to meet the sight distance requirements. Prior to occupancy, intersection sight distance at all access points will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon.

Pedestrian and Bicycle Access

Along the project frontage there are no sidewalks or bike lanes. Developments are required to improve their roadway frontage to the City standards, which for collector streets includes sidewalks and bicycle lanes.

The proposed internal sidewalk system connects building access to parking areas and NW 3rd Avenue. Therefore, the proposed site pedestrian facilities provide convenient connections to likely pedestrian access points.

In the immediate vicinity of the project there are no sidewalks available on the north side of NW 3rd Avenue between N Baker Street and N Cedar Street. Additionally, there is a gap in the sidewalks on the south side of NW 3rd Avenue between the skate park and the proposed site. Sidewalks should be filled in on the south side of NW 3rd Avenue between the site and the skate park to provide a continuous path for pedestrians.

[8] *Geometric Design of Highways and Streets,* AASHTO, 2004; Case B1, p. 661 and Case B2, p. 664.

Emergency Response Traffic

It is expected that there will be times that police vehicles will have to respond to emergency calls from the site. This may result in police vehicles traveling at high speeds through the study area. Therefore, the potential conflict of high-speed vehicles with users of NW 3rd Avenue was evaluated.

Motor Vehicle Conflicts

Police vehicles exiting the site will normally travel through the intersection of NW 3rd Avenue/N Cedar Avenue to access any location within the city. This intersection is required to meet a sight distance minimum of 280 feet for stop controlled approaches; however, it is not currently meeting this required stop distance for eastbound moving looking to the north (190 feet of sight distance) or to the south (180 feet of sight distance). The two photos below show a driver's eye view from a vehicle traveling eastbound at the intersection of NW 3rd Avenue/N Cedar Avenue looking to the north (left photo) and to the south (right photo). As shown, the bushes limit sight distance looking north and a fence limits sight distance looking south.

Driver's Eye View from NW 3rd Avenue Heading Eastbound

These sight distance constraints could be particularly problematic for high-speed vehicles in an emergency response situation. Therefore, it is recommended that the sight distance issues at the intersection of NW 3rd Avenue/N Cedar Avenue be mitigated as a part of this project. Several options for mitigating these conditions were considered, including:

- Trim vegetation and modify the fence - this could be problematic as both sight distance obstructions appear to be located on private right of way
- Modify the intersection control to make NW 3rd Avenue the through movement - this would be consistent with the collector classification as a through route, but would have similar sight distance issues for the southbound approach (limited ability to see eastbound vehicles)
- Implement all-way stop control - while not warranted based on motor vehicle volumes alone, an all-way stop could be a way to mitigate for the sight distance constraints at the intersection

The option to improve sight distance by trimming vegetation and modifying fences would be the preferred mitigation. If that is determined to be infeasible due to private property issues, the implementation of an all-way stop would be recommended.

Pedestrian and Bicycle Conflicts

NW 3rd Avenue does not provide a continuous sidewalk path for pedestrians between the project site and N Cedar Street. As a result, there are potential conflicts for pedestrians to be in the road when a police vehicle is traveling through at high speeds in an emergency response situation. A continuous path should be provided for pedestrians along NW 3rd Avenue from the project site to N Cedar Street by filling in the sidewalk gaps on the south side of NW 3rd Avenue.

Although designated a collector roadway, NW 3rd Avenue does not provide bike lanes between the project site and N Cedar Avenue. To mitigate potential conflicts with bicycles in the roadways when a police vehicle is traveling through at high speeds in an emergency response situation, bike lanes should be striped along NW 3rd Avenue between the project site and N Cedar Avenue. The current cross-section available on NW 3rd Avenue is approximately 40 feet. Therefore, 14-foot travel lanes and 6-foot bike lanes could be striped with no widening. If on-street parking is desired on one-side of the street, the travel lanes would be restricted to 11-feet and the bike lanes would be restricted to 5-feet.

West of N Baker Drive, the south side of NW 3rd Avenue narrows to provide 90-degree parking for the skate park. Therefore, the bike lanes on the south side of NW 3rd Avenue may not be feasible west of N Baker Drive unless they are combined with the off-street path through the skate park.

CHAPTER 5: MITIGATION

Project traffic impacts were evaluated on the surrounding roadway network for a.m. and p.m. peak hour conditions. Based on comparison to City of Canby and ODOT standards for intersection operations, neighborhood through traffic, and access spacing, as well as a review of safety for emergency responses, the following series of mitigation measures are recommended:

Project Site Access and Frontage

- Complete all required frontage improvements on NW 3rd Avenue to City collector standards.
- Ensure adequate sight distance at the site driveways by restricting landscaping or any potential obstructions on the project frontage within sight distance triangles.

Neighborhood Through-Trip Impacts

- Reduce through-traffic on N Cedar Street and NW 2nd Avenue by:
    - Install guide-signing to the police station that routes traffic on NW 3rd Avenue instead of NW 2nd Avenue.
    - Request that the police department works with employees to require commute trips and emergency response (when applicable) to use NW 3rd Avenue to/from reach N Elm Street.

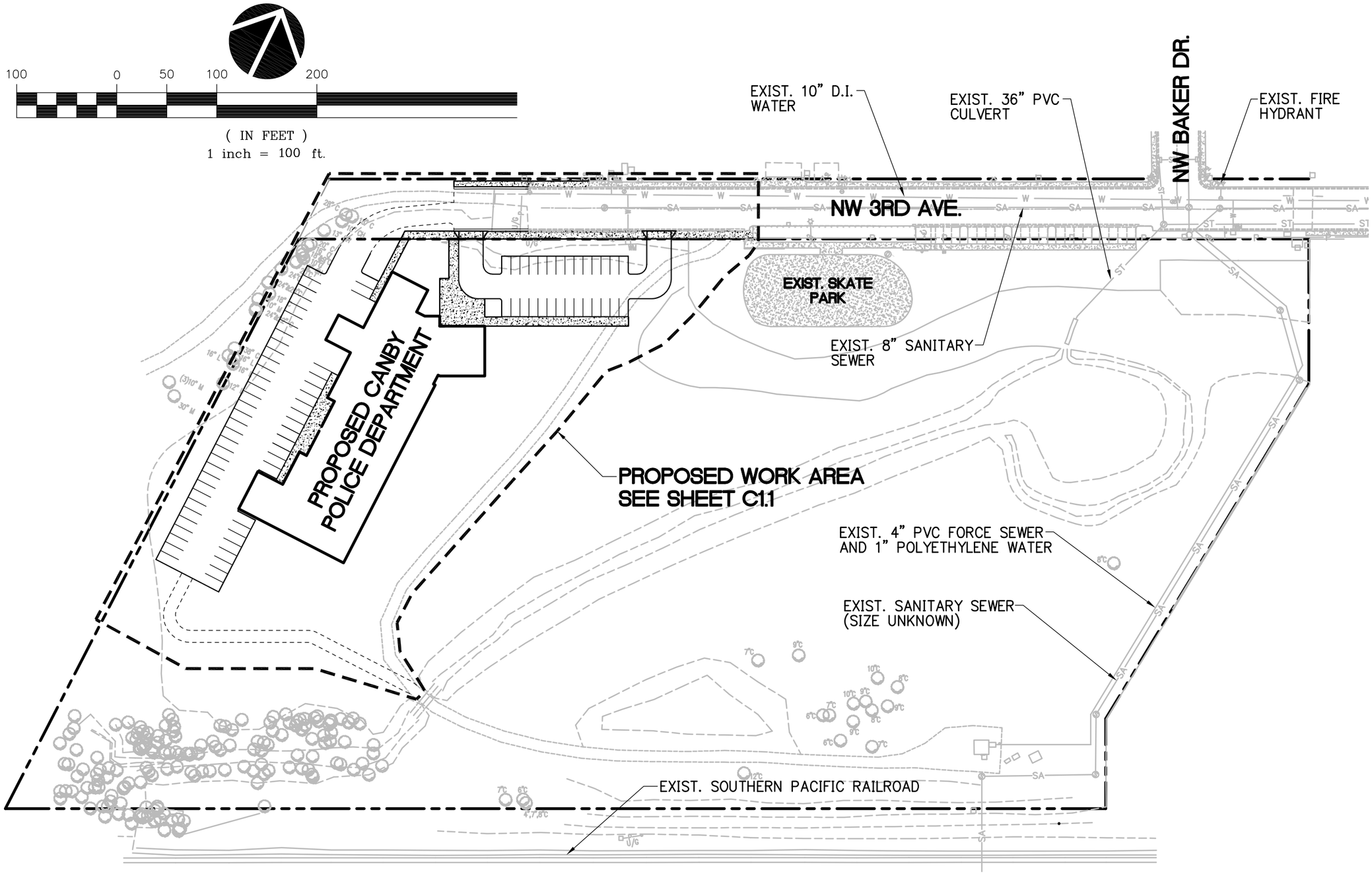
  If the guide-signing and employee education is effective, no further mitigation may be required. However, to provide adequate mitigation in-case the measures are not effective, the following additional measures are recommended:
    - Collect fees equivalent to the design and contruction of a traffic circle at N Cedar Street and NW 2nd Avenue
    - Conduct traffic counts 6-months after occupancy of the site to determine if additional mitigation is required
    - If additional mitigation is required, engage the residents along N Cedar Street and NW 2nd Avenue to determine appropriate mitigation for the through-trip impacts. Construct the mitigation with the fees collected from the applicant.
    - If additional mitigation measures are not required and no complaints are received after a period of 2 years, refund the mitigation fees to the applicant.

Off-Site Safety Improvements

- Complete sidewalks on the south side of NW 3rd Avenue between the project site and NW Cedar Street.
- Stripe bike lanes on NW 3rd Avenue between the project site and NW Cedar Street.
- Address sight distance issues at the intersection of NW 3rd Avenue/N Cedar Street by trimming vegetation (northwest corner) and modifying a fence (southwest corner). If the improvements are determined to be infeasible due to private property issues, install all-way stop control.

Appendix

- Site Map
- Traffic Counts
- Level of Service Description
- HCM Analysis



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CLIENT:
CITY OF CANBY

PROJECT:
CANBY POLICE DEPARTMENT

SHEET TITLE:
OVERALL SITE PLAN

DATE:
02.15.2011
DRAWN BY:
RVS
CHECKED BY:
TWM

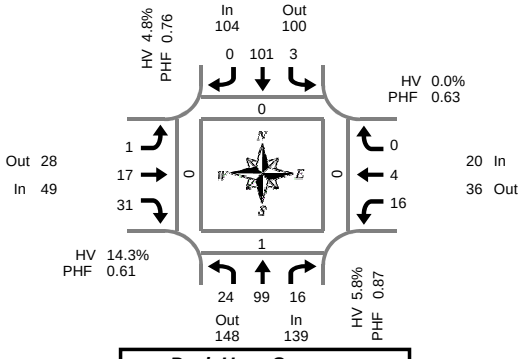
SHEET:
C1.0

JOB NO:
2110061.00

PRE-APPLICATION - 02.17.2011
211006100\CIVIL\061C2.1.DWG: C1.0 RVS 02/17/11 10:06 1:60.00

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:00 PM to 5:00 PM

N Elm St & NW 3rd Ave

Wednesday, March 02, 2011
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	2	4	0	0	0	9	0	0	0	4	2	2	3	0	0	0	24	0	1	0	0
4:05 PM	3	4	2	0	0	10	0	0	0	2	5	0	2	0	0	0	28	0	0	0	0
4:10 PM	3	10	2	0	1	7	0	1	0	5	2	0	0	0	0	0	30	0	0	0	0
4:15 PM	5	9	2	0	0	10	0	0	0	2	1	0	0	0	0	0	29	0	0	0	0
4:20 PM	1	5	3	0	0	13	0	0	0	0	3	0	1	2	0	0	28	0	0	0	0
4:25 PM	1	8	2	0	0	10	0	0	0	1	3	0	1	0	0	0	26	0	0	0	0
4:30 PM	0	12	0	1	0	11	0	0	0	0	2	0	3	0	0	1	28	0	0	0	0
4:35 PM	3	10	1	0	1	10	0	0	0	2	2	0	1	0	0	0	30	0	0	0	0
4:40 PM	1	11	1	0	1	6	0	0	0	1	3	0	3	1	0	0	28	0	0	0	0
4:45 PM	2	4	2	0	0	1	0	0	0	0	1	0	0	1	0	0	11	0	0	0	0
4:50 PM	2	12	0	0	0	7	0	0	1	0	4	0	1	0	0	0	27	0	0	0	0
4:55 PM	1	10	1	0	0	7	0	0	0	0	3	0	1	0	0	1	23	0	0	0	0
5:00 PM	1	9	1	0	0	3	0	0	0	0	2	0	1	0	0	0	17	0	0	0	0
5:05 PM	2	10	3	1	0	8	0	0	0	1	3	0	1	1	0	0	29	0	0	0	0
5:10 PM	2	10	2	0	0	3	0	0	0	2	1	0	1	0	0	0	21	0	0	0	0
5:15 PM	3	10	3	0	0	11	0	0	0	0	3	0	1	0	0	0	31	0	0	0	0
5:20 PM	4	11	1	0	0	4	0	0	0	0	3	0	2	1	0	0	26	0	0	0	0
5:25 PM	0	12	1	0	0	12	0	0	0	1	0	0	0	0	0	0	26	0	0	0	0
5:30 PM	1	8	1	0	0	5	0	0	0	1	2	0	1	0	0	0	19	0	0	0	0
5:35 PM	0	12	1	0	0	6	0	0	0	0	0	0	2	0	0	0	21	0	0	0	0
5:40 PM	3	14	2	0	0	7	0	0	0	0	0	0	2	0	0	0	28	0	0	0	0
5:45 PM	1	5	0	0	0	4	0	0	1	0	3	0	2	0	0	0	16	0	0	0	0
5:50 PM	2	9	1	0	0	4	1	0	0	1	2	0	1	0	0	0	21	0	0	0	0
5:55 PM	3	9	0	0	1	6	0	0	0	0	0	0	1	0	0	0	20	0	0	0	0
Total Survey	46	218	32	2	4	174	1	1	2	23	50	2	31	6	0	2	587	0	1	0	0

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	8	18	4	0	1	26	0	1	0	11	9	2	5	0	0	0	82	0	1	0	0
4:15 PM	7	22	7	0	0	33	0	0	0	3	7	0	2	2	0	0	83	0	0	0	0
4:30 PM	4	33	2	1	2	27	0	0	0	3	7	0	7	1	0	1	86	0	0	0	0
4:45 PM	5	26	3	0	0	15	0	0	1	0	8	0	2	1	0	1	61	0	0	0	0
5:00 PM	5	29	6	1	0	14	0	0	0	3	6	0	3	1	0	0	67	0	0	0	0
5:15 PM	7	33	5	0	0	27	0	0	0	1	6	0	3	1	0	0	83	0	0	0	0
5:30 PM	4	34	4	0	0	18	0	0	0	1	2	0	5	0	0	0	68	0	0	0	0
5:45 PM	6	23	1	0	1	14	1	0	1	1	5	0	4	0	0	0	57	0	0	0	0
Total Survey	46	218	32	2	4	174	1	1	2	23	50	2	31	6	0	2	587	0	1	0	0

Peak Hour Summary
4:00 PM to 5:00 PM

By Approach	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	139	148	287	1	104	100	204	1	49	28	77	2	20	36	56	2	312	0	1	0	0
%HV	5.8%				4.8%				14.3%				0.0%				6.4%				
PHF	0.87				0.76				0.61				0.63				0.90				

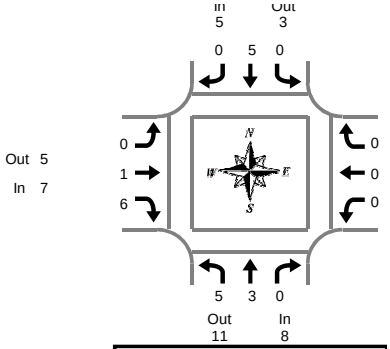
By Movement	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	24	99	16	139	3	101	0	104	1	17	31	49	16	4	0	20	312
%HV	20.8%	3.0%	0.0%	5.8%	0.0%	5.0%	0.0%	4.8%	0.0%	5.9%	19.4%	14.3%	0.0%	0.0%	0.0%	0.0%	6.4%
PHF	0.55	0.75	0.57	0.87	0.38	0.74	0.00	0.76	0.25	0.39	0.86	0.61	0.57	0.50	0.00	0.63	0.90

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	24	99	16	1	3	101	0	1	1	17	31	2	16	4	0	2	312	0	1	0	0
4:15 PM	21	110	18	2	2	89	0	0	1	9	28	0	14	5	0	2	297	0	0	0	0
4:30 PM	21	121	16	2	2	83	0	0	1	7	27	0	15	4	0	2	297	0	0	0	0
4:45 PM	21	122	18	1	0	74	0	0	1	5	22	0	13	3	0	1	279	0	0	0	0
5:00 PM	22	119	16	1	1	73	1	0	1	6	19	0	15	2	0	0	275	0	0	0	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Peak Hour Summary
4:00 PM to 5:00 PM

N Elm St & NW 3rd Ave

Wednesday, March 02, 2011
4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	2	0	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
4:05 PM	1	0	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3
4:10 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
4:15 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
4:20 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	6	3	0	9	0	5	0	5	0	1	9	10	0	0	0	0	24

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	3	2	0	5	0	1	0	1	0	1	2	3	0	0	0	0	9
4:15 PM	2	0	0	2	0	3	0	3	0	0	0	0	0	0	0	0	5
4:30 PM	0	0	0	0	0	1	0	1	0	0	3	3	0	0	0	0	4
4:45 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
5:00 PM	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
Total Survey	6	3	0	9	0	5	0	5	0	1	9	10	0	0	0	0	24

Heavy Vehicle Peak Hour Summary
4:00 PM to 5:00 PM

By Approach	Northbound N Elm St			Southbound N Elm St			Eastbound NW 3rd Ave			Westbound NW 3rd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	8	11	19	5	3	8	7	5	12	0	1	1	20
PHF	0.40			0.42			0.58			0.00			0.56

By Movement	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	5	3	0	8	0	5	0	5	0	1	6	7	0	0	0	0	20
PHF	0.42	0.38	0.00	0.40	0.00	0.42	0.00	0.42	0.00	0.25	0.50	0.58	0.00	0.00	0.00	0.00	0.56

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	5	3	0	8	0	5	0	5	0	1	6	7	0	0	0	0	20
4:15 PM	3	1	0	4	0	4	0	4	0	0	5	5	0	0	0	0	13
4:30 PM	1	1	0	2	0	1	0	1	0	0	5	5	0	0	0	0	8
4:45 PM	1	1	0	2	0	0	0	0	0	0	2	2	0	0	0	0	4
5:00 PM	1	0	0	1	0	0	0	0	0	0	3	3	0	0	0	0	4

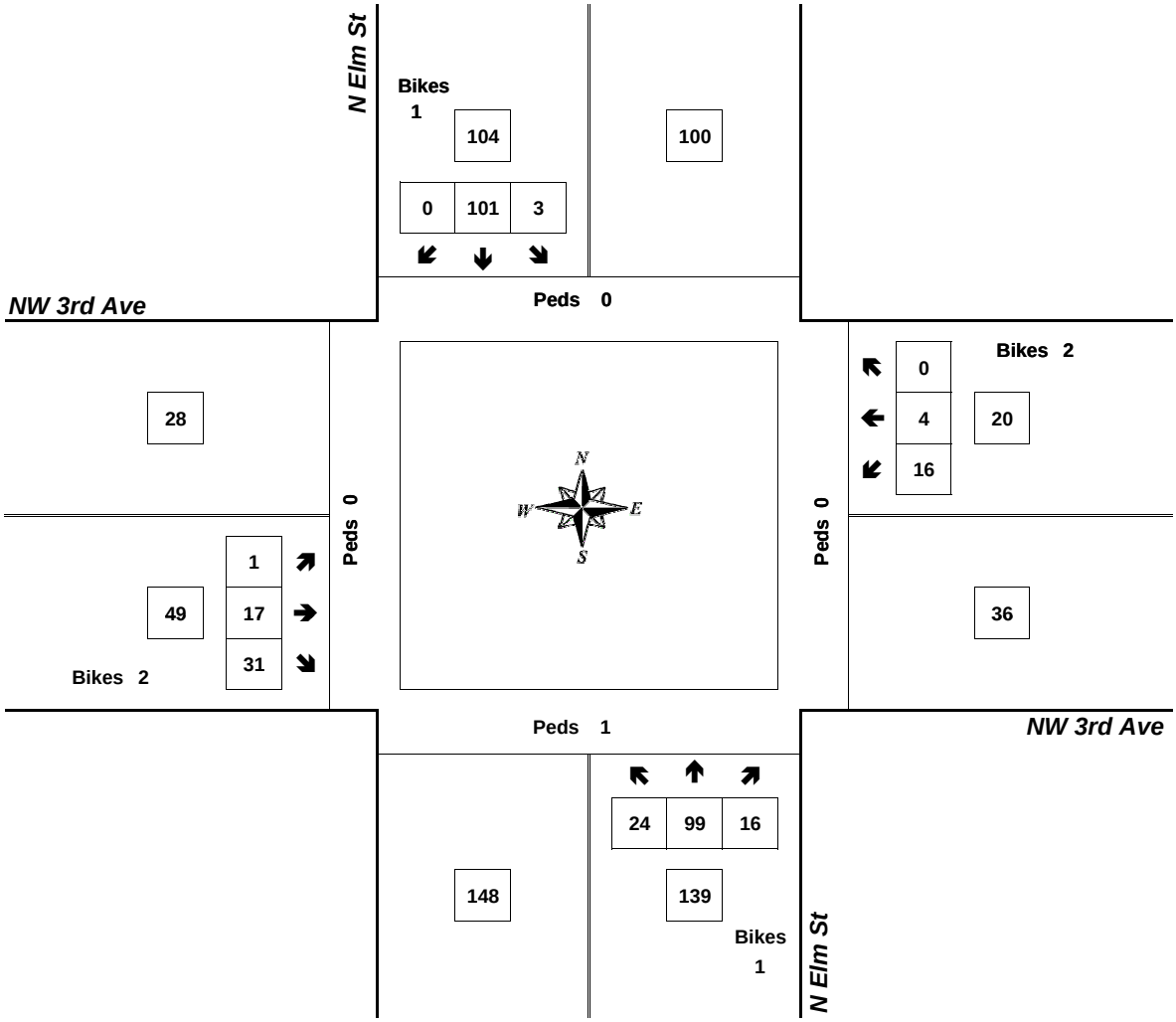
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

N Elm St & NW 3rd Ave

4:00 PM to 5:00 PM
Wednesday, March 02, 2011

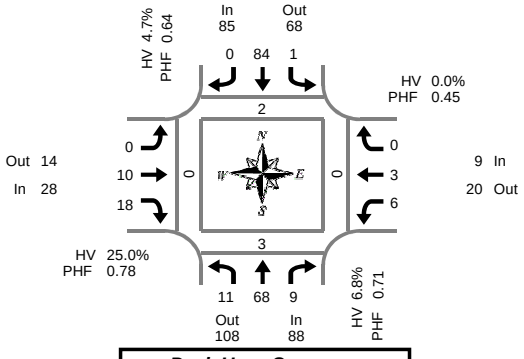


Approach	PHF	HV%	Volume
EB	0.61	14.3%	49
WB	0.63	0.0%	20
NB	0.87	5.8%	139
SB	0.76	4.8%	104
Intersection	0.90	6.4%	312

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:05 AM to 8:05 AM

N Elm St & NW 3rd Ave

Thursday, March 10, 2011
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	4	0	0	0	0
7:05 AM	1	1	0	0	0	7	0	0	0	1	3	0	2	0	0	1	15	0	0	0	0
7:10 AM	0	4	0	0	0	9	0	0	0	1	0	0	1	2	0	0	17	0	1	0	0
7:15 AM	1	3	0	0	0	10	0	0	0	1	0	0	0	0	0	0	15	0	0	0	0
7:20 AM	1	9	0	0	0	12	0	0	0	3	0	0	0	0	0	1	25	0	0	0	0
7:25 AM	2	6	0	0	0	10	0	0	0	2	2	0	0	1	0	0	23	1	1	0	0
7:30 AM	0	6	1	0	0	11	0	0	0	0	2	0	0	0	0	0	20	1	0	0	0
7:35 AM	0	10	0	0	1	10	0	0	0	0	0	0	2	0	0	0	23	0	0	0	0
7:40 AM	2	5	1	0	0	5	0	0	0	1	1	0	0	0	0	0	15	0	0	0	0
7:45 AM	3	9	1	0	0	2	0	0	0	1	2	0	0	0	0	1	18	0	1	0	0
7:50 AM	0	8	2	0	0	3	0	0	0	0	1	0	1	0	0	0	15	0	0	0	0
7:55 AM	1	2	3	0	0	2	0	0	0	0	5	0	0	0	0	0	13	0	0	0	0
8:00 AM	0	5	1	0	0	3	0	0	0	0	2	0	0	0	0	0	11	0	0	0	0
8:05 AM	0	3	2	0	0	6	0	0	0	0	1	0	0	0	0	0	12	0	0	0	0
8:10 AM	0	6	0	0	0	1	0	0	0	0	2	0	1	0	0	0	10	0	0	0	0
8:15 AM	1	2	0	0	0	1	0	2	0	0	0	0	1	0	0	0	5	0	0	0	0
8:20 AM	0	2	0	0	0	3	0	0	0	0	2	0	0	1	0	0	8	0	0	1	0
8:25 AM	0	5	1	0	0	3	0	0	0	2	0	0	0	0	1	0	12	0	0	0	0
8:30 AM	2	5	0	0	0	3	0	0	0	0	0	0	0	2	0	0	12	0	0	0	0
8:35 AM	2	6	0	0	0	2	0	0	0	0	1	0	0	1	0	0	12	0	0	0	0
8:40 AM	4	10	0	0	0	3	0	0	0	1	1	0	0	0	2	0	21	0	0	0	0
8:45 AM	2	7	0	0	0	10	0	0	0	1	0	0	1	2	0	0	23	0	0	0	0
8:50 AM	1	6	0	0	1	13	0	0	0	0	2	0	0	1	0	0	24	0	0	0	0
8:55 AM	1	8	2	0	1	7	0	0	0	1	1	0	2	0	0	0	23	0	0	0	0
Total Survey	24	130	14	0	3	137	0	2	0	15	28	0	11	11	3	3	376	2	3	1	0

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	1	7	0	0	0	17	0	0	0	2	3	0	3	3	0	1	36	0	1	0	0
7:15 AM	4	18	0	0	0	32	0	0	0	6	2	0	0	1	0	1	63	1	1	0	0
7:30 AM	2	21	2	0	1	26	0	0	0	1	3	0	2	0	0	0	58	1	0	0	0
7:45 AM	4	19	6	0	0	7	0	0	0	1	8	0	1	0	0	1	46	0	1	0	0
8:00 AM	0	14	3	0	0	10	0	0	0	0	5	0	1	0	0	0	33	0	0	0	0
8:15 AM	1	9	1	0	0	7	0	2	0	2	2	0	1	1	1	0	25	0	0	1	0
8:30 AM	8	21	0	0	0	8	0	0	0	1	2	0	0	3	2	0	45	0	0	0	0
8:45 AM	4	21	2	0	2	30	0	0	0	2	3	0	3	3	0	0	70	0	0	0	0
Total Survey	24	130	14	0	3	137	0	2	0	15	28	0	11	11	3	3	376	2	3	1	0

Peak Hour Summary
7:05 AM to 8:05 AM

By Approach	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	88	108	196	0	85	68	153	0	28	14	42	0	9	20	29	3	210	2	3	0	0
%HV	6.8%				4.7%				25.0%				0.0%				8.1%				
PHF	0.71				0.64				0.78				0.45				0.77				

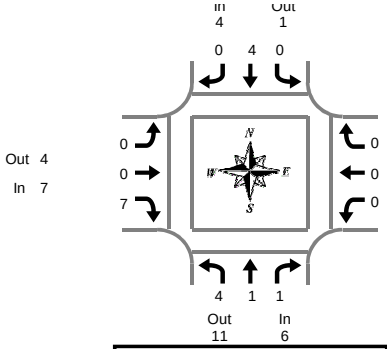
By Movement	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	11	68	9	88	1	84	0	85	0	10	18	28	6	3	0	9	210
%HV	36.4%	1.5%	11.1%	6.8%	0.0%	4.8%	0.0%	4.7%	0.0%	0.0%	38.9%	25.0%	0.0%	0.0%	0.0%	0.0%	8.1%
PHF	0.55	0.71	0.38	0.71	0.25	0.64	0.00	0.64	0.00	0.42	0.56	0.78	0.50	0.38	0.00	0.45	0.77

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	11	65	8	0	1	82	0	0	0	10	16	0	6	4	0	3	203	2	3	0	0
7:15 AM	10	72	11	0	1	75	0	0	0	8	18	0	4	1	0	2	200	2	2	0	0
7:30 AM	7	63	12	0	1	50	0	2	0	4	18	0	5	1	1	1	162	1	1	1	0
7:45 AM	13	63	10	0	0	32	0	2	0	4	17	0	3	4	3	1	149	0	1	1	0
8:00 AM	13	65	6	0	2	55	0	2	0	5	12	0	5	7	3	0	173	0	0	1	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Peak Hour Summary
7:05 AM to 8:05 AM

N Elm St & NW 3rd Ave

Thursday, March 10, 2011
7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	1	0	1	0	0	2	2	0	0	0	0	3
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
7:20 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
7:25 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:40 AM	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
7:45 AM	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
7:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:55 AM	1	0	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3
8:00 AM	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	2
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
8:20 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
8:25 AM	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	3
8:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:35 AM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:40 AM	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:50 AM	0	0	0	0	0	7	0	7	0	0	1	1	0	0	0	0	8
8:55 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
Total Survey	9	2	2	13	0	13	0	13	0	1	10	11	2	1	0	3	40

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	1	0	1	0	0	2	2	0	0	0	0	3
7:15 AM	1	1	0	2	0	3	0	3	0	0	0	0	0	0	0	0	5
7:30 AM	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
7:45 AM	2	0	0	2	0	0	0	0	0	0	3	3	0	0	0	0	5
8:00 AM	0	0	1	1	0	0	0	0	0	0	2	2	0	0	0	0	3
8:15 AM	0	0	1	1	0	1	0	1	0	1	1	2	1	1	0	2	6
8:30 AM	5	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
8:45 AM	0	0	0	0	0	8	0	8	0	0	1	1	1	0	0	1	10
Total Survey	9	2	2	13	0	13	0	13	0	1	10	11	2	1	0	3	40

Heavy Vehicle Peak Hour Summary
7:05 AM to 8:05 AM

By Approach	Northbound N Elm St			Southbound N Elm St			Eastbound NW 3rd Ave			Westbound NW 3rd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	6	11	17	4	1	5	7	4	11	0	1	1	17
PHF	0.75			0.33			0.58			0.00			0.85

By Movement	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	4	1	1	6	0	4	0	4	0	0	7	7	0	0	0	0	17
PHF	0.50	0.25	0.25	0.75	0.00	0.33	0.00	0.33	0.00	0.00	0.58	0.58	0.00	0.00	0.00	0.00	0.85

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Elm St				Southbound N Elm St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	4	1	0	5	0	4	0	4	0	0	6	6	0	0	0	0	15
7:15 AM	4	1	1	6	0	3	0	3	0	0	6	6	0	0	0	0	15
7:30 AM	3	0	2	5	0	1	0	1	0	1	7	8	1	1	0	2	16
7:45 AM	7	1	2	10	0	1	0	1	0	1	6	7	1	1	0	2	20
8:00 AM	5	1	2	8	0	9	0	9	0	1	4	5	2	1	0	3	25

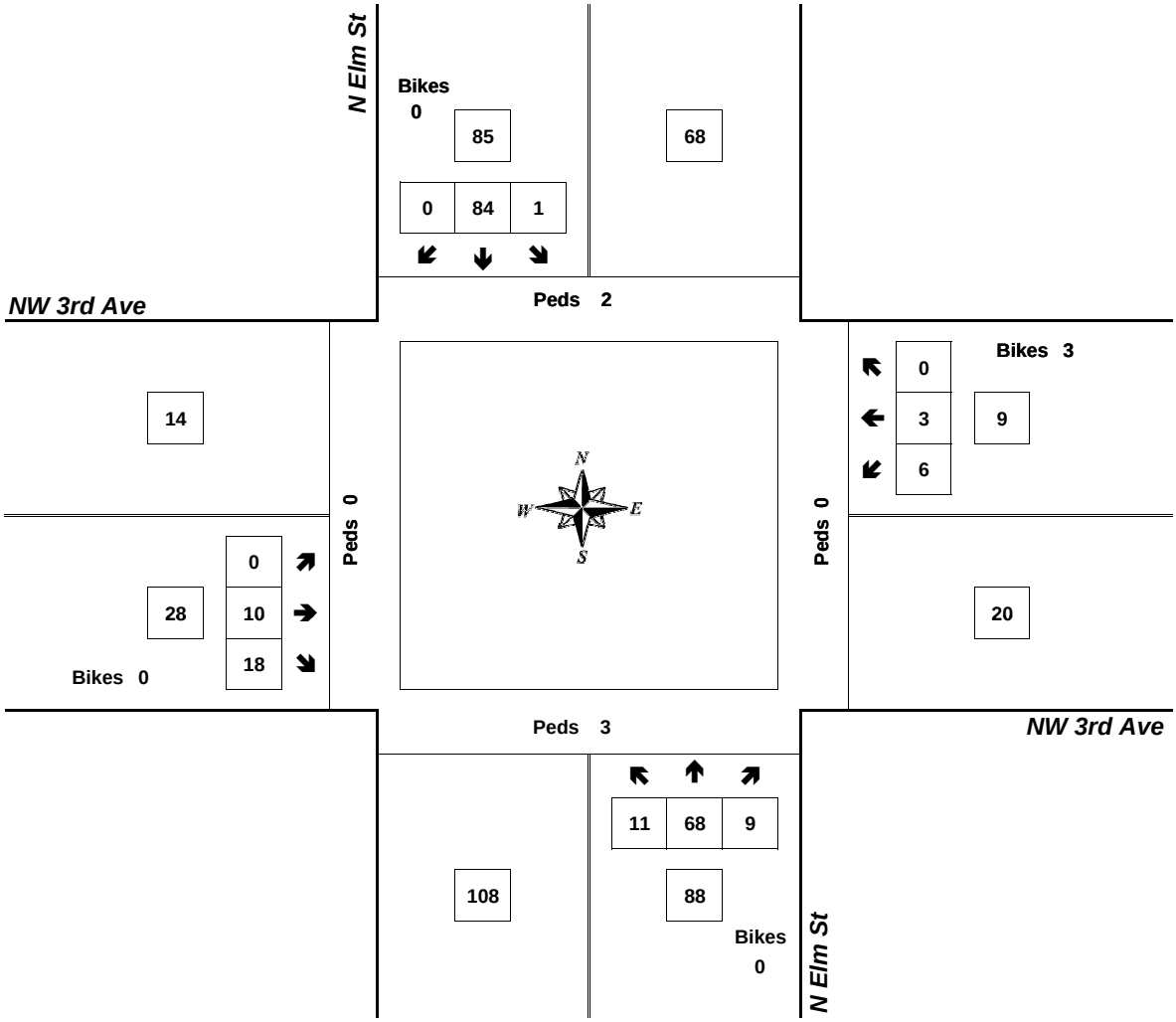
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

N Elm St & NW 3rd Ave

7:05 AM to 8:05 AM
Thursday, March 10, 2011

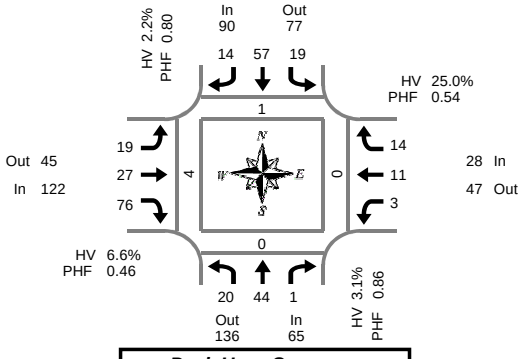


Approach	PHF	HV%	Volume
EB	0.78	25.0%	28
WB	0.45	0.0%	9
NB	0.71	6.8%	88
SB	0.64	4.7%	85
Intersection	0.77	8.1%	210

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:00 PM to 5:00 PM

N Cedar St & NW 3rd Ave

Wednesday, March 09, 2011
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	3	2	0	0	2	2	0	0	2	2	8	0	0	2	0	0	23	0	0	0	1
4:05 PM	1	4	0	0	0	7	2	0	4	10	21	0	0	1	0	0	50	0	0	0	0
4:10 PM	2	3	1	0	1	2	3	0	2	7	10	0	0	1	1	0	33	0	0	0	1
4:15 PM	1	7	0	0	3	3	0	1	2	0	2	0	0	3	2	0	23	0	0	0	1
4:20 PM	1	2	0	0	2	3	1	0	1	0	3	0	1	2	1	0	17	0	0	0	0
4:25 PM	2	4	0	0	3	6	2	0	3	1	10	0	1	0	3	0	35	0	0	0	0
4:30 PM	1	4	0	0	0	5	0	0	1	3	6	0	0	0	0	0	20	0	0	0	0
4:35 PM	1	2	0	0	1	8	1	0	0	0	2	0	0	0	0	0	15	0	0	0	0
4:40 PM	2	3	0	0	2	7	1	0	0	1	5	0	0	1	2	0	24	0	0	0	1
4:45 PM	2	3	0	0	2	5	1	0	1	1	2	0	1	0	2	0	20	0	0	0	0
4:50 PM	1	5	0	1	1	4	1	0	1	0	3	0	0	0	2	0	18	1	0	0	0
4:55 PM	3	5	0	0	2	5	2	0	2	2	4	0	0	1	1	0	27	0	0	0	0
5:00 PM	2	3	0	0	1	7	0	0	2	0	4	0	0	0	1	0	20	0	0	0	0
5:05 PM	2	3	0	0	1	6	1	0	4	1	17	0	1	1	1	0	38	0	0	0	0
5:10 PM	3	7	0	0	0	4	0	0	1	2	8	2	0	1	3	0	29	0	0	0	0
5:15 PM	1	3	0	0	1	3	0	0	2	1	5	0	0	0	0	0	16	0	0	0	0
5:20 PM	1	2	0	0	1	3	1	0	4	0	3	0	0	0	3	0	18	0	0	0	0
5:25 PM	0	8	1	0	1	7	0	0	2	0	1	0	0	1	2	0	23	1	0	0	1
5:30 PM	1	3	1	0	3	7	0	0	3	1	3	0	0	1	2	0	25	0	0	0	0
5:35 PM	1	4	0	0	1	3	0	0	3	1	11	0	1	0	0	0	25	0	0	0	1
5:40 PM	1	6	0	0	1	5	2	0	0	1	7	0	0	0	0	0	23	0	0	0	0
5:45 PM	1	2	0	0	1	5	1	0	0	0	6	0	0	0	2	0	18	0	0	0	0
5:50 PM	3	1	0	0	1	0	1	0	1	3	1	0	0	2	0	0	13	0	0	0	0
5:55 PM	0	2	0	0	0	7	0	0	2	2	4	0	0	0	1	0	18	0	0	0	0
Total Survey	36	88	3	1	31	114	20	1	43	39	146	2	5	17	29	0	571	2	0	0	6

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	6	9	1	0	3	11	5	0	8	19	39	0	0	4	1	0	106	0	0	0	2
4:15 PM	4	13	0	0	8	12	3	1	6	1	15	0	2	5	6	0	75	0	0	0	1
4:30 PM	4	9	0	0	3	20	2	0	1	4	13	0	0	1	2	0	59	0	0	0	1
4:45 PM	6	13	0	1	5	14	4	0	4	3	9	0	1	1	5	0	65	1	0	0	0
5:00 PM	7	13	0	0	2	17	1	0	7	3	29	2	1	2	5	0	87	0	0	0	0
5:15 PM	2	13	1	0	3	13	1	0	8	1	9	0	0	1	5	0	57	1	0	0	1
5:30 PM	3	13	1	0	5	15	2	0	6	3	21	0	1	1	2	0	73	0	0	0	1
5:45 PM	4	5	0	0	2	12	2	0	3	5	11	0	0	2	3	0	49	0	0	0	0
Total Survey	36	88	3	1	31	114	20	1	43	39	146	2	5	17	29	0	571	2	0	0	6

Peak Hour Summary
4:00 PM to 5:00 PM

By Approach	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	65	136	201	1	90	77	167	1	122	45	167	0	28	47	75	0	305	1	0	0	4
%HV	3.1%				2.2%				6.6%				25.0%				6.2%				
PHF	0.86				0.80				0.46				0.54				0.72				

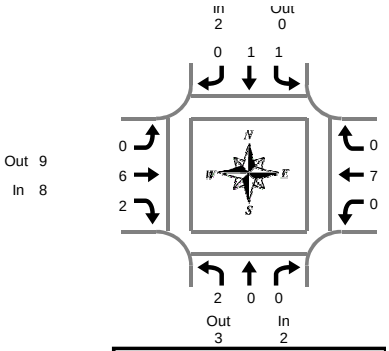
By Movement	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	20	44	1	65	19	57	14	90	19	27	76	122	3	11	14	28	305
%HV	10.0%	0.0%	0.0%	3.1%	5.3%	1.8%	0.0%	2.2%	0.0%	22.2%	2.6%	6.6%	0.0%	63.6%	0.0%	25.0%	6.2%
PHF	0.83	0.79	0.25	0.86	0.59	0.71	0.70	0.80	0.59	0.36	0.49	0.46	0.38	0.46	0.58	0.54	0.72

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	20	44	1	1	19	57	14	1	19	27	76	0	3	11	14	0	305	1	0	0	4
4:15 PM	21	48	0	1	18	63	10	1	18	11	66	2	4	9	18	0	286	1	0	0	2
4:30 PM	19	48	1	1	13	64	8	0	20	11	60	2	2	5	17	0	268	2	0	0	2
4:45 PM	18	52	2	1	15	59	8	0	25	10	68	2	3	5	17	0	282	2	0	0	2
5:00 PM	16	44	2	0	12	57	6	0	24	12	70	2	2	6	15	0	266	1	0	0	2

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Peak Hour Summary
4:00 PM to 5:00 PM

N Cedar St & NW 3rd Ave

Wednesday, March 09, 2011
4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:05 PM	1	0	0	1	0	0	0	0	0	2	0	2	0	1	0	1	4
4:10 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:20 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	3
4:25 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
4:35 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
4:40 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
5:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:05 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
5:10 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	1	0	1	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
5:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
5:55 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
Total Survey	3	0	0	3	1	4	0	5	0	8	5	13	0	8	0	8	29

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	2	0	0	2	0	0	0	0	0	2	0	2	0	3	0	3	7
4:15 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	3	0	3	5
4:30 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	1	0	1	4
4:45 PM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	3
5:00 PM	1	0	0	1	0	1	0	1	0	0	2	2	0	1	0	1	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
5:45 PM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	3
Total Survey	3	0	0	3	1	4	0	5	0	8	5	13	0	8	0	8	29

Heavy Vehicle Peak Hour Summary
4:00 PM to 5:00 PM

By Approach	Northbound N Cedar St			Southbound N Cedar St			Eastbound NW 3rd Ave			Westbound NW 3rd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	2	3	5	2	0	2	8	9	17	7	7	14	19
PHF	0.25			0.50			0.67			0.44			0.68

By Movement	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	2	0	0	2	1	1	0	2	0	6	2	8	0	7	0	7	19
PHF	0.25	0.00	0.00	0.25	0.25	0.25	0.00	0.50	0.00	0.75	0.25	0.67	0.00	0.44	0.00	0.44	0.68

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	2	0	0	2	1	1	0	2	0	6	2	8	0	7	0	7	19
4:15 PM	1	0	0	1	1	2	0	3	0	4	4	8	0	5	0	5	17
4:30 PM	1	0	0	1	0	2	0	2	0	4	3	7	0	2	0	2	12
4:45 PM	1	0	0	1	0	3	0	3	0	2	3	5	0	1	0	1	10
5:00 PM	1	0	0	1	0	3	0	3	0	2	3	5	0	1	0	1	10

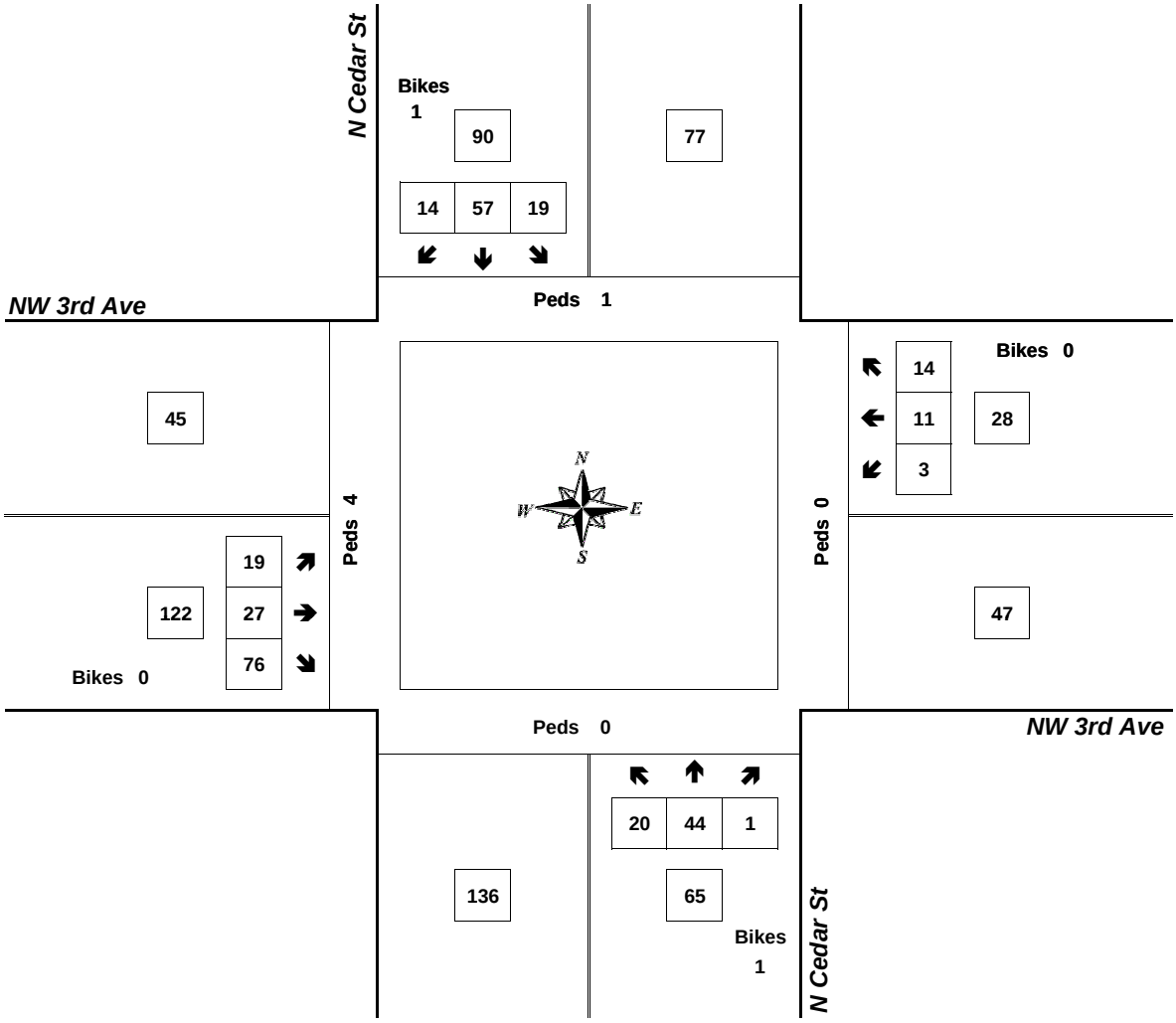
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

N Cedar St & NW 3rd Ave

4:00 PM to 5:00 PM
Wednesday, March 09, 2011

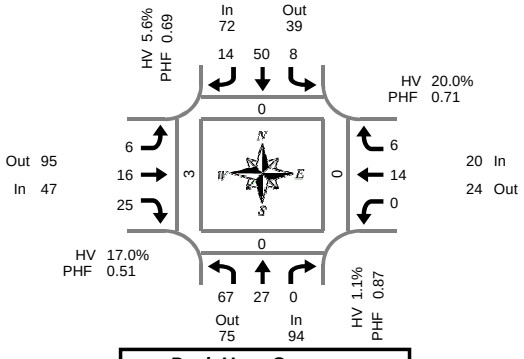


Approach	PHF	HV%	Volume
EB	0.46	6.6%	122
WB	0.54	25.0%	28
NB	0.86	3.1%	65
SB	0.80	2.2%	90
Intersection	0.72	6.2%	305

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



N Cedar St & NW 3rd Ave

Thursday, March 10, 2011
7:00 AM to 9:00 AM

Peak Hour Summary
7:00 AM to 8:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	8	2	0	0	0	4	0	0	0	1	2	0	0	3	0	0	20	0	0	0	0
7:05 AM	6	1	0	0	1	3	3	0	0	1	0	0	0	0	1	0	16	0	0	0	0
7:10 AM	5	2	0	0	0	6	1	0	0	2	1	0	0	3	0	0	20	0	0	0	0
7:15 AM	9	3	0	0	0	5	2	0	0	2	0	0	0	1	0	0	22	0	0	0	0
7:20 AM	5	3	0	0	1	7	1	0	1	1	3	0	0	2	0	0	24	0	0	0	0
7:25 AM	4	1	0	0	2	8	0	0	0	3	1	0	0	0	1	0	20	0	0	0	0
7:30 AM	8	2	0	0	0	5	2	0	1	1	1	0	0	2	1	0	23	0	0	0	2
7:35 AM	2	3	0	0	1	3	0	1	0	0	1	0	0	0	0	0	10	0	0	0	1
7:40 AM	3	3	0	0	1	1	1	0	1	1	0	0	0	1	0	0	12	0	0	0	0
7:45 AM	5	2	0	0	1	1	1	0	1	1	4	0	0	0	2	0	18	0	0	0	0
7:50 AM	9	4	0	0	1	3	1	0	2	1	5	0	0	2	1	0	29	0	0	0	0
7:55 AM	3	1	0	0	0	4	2	0	0	2	7	0	0	0	0	0	19	0	0	0	0
8:00 AM	2	1	0	0	2	2	1	0	3	2	5	0	0	0	0	0	18	0	0	0	0
8:05 AM	2	1	0	0	0	1	1	0	5	1	7	0	0	0	0	0	18	0	0	0	0
8:10 AM	1	1	0	0	0	1	2	0	2	0	4	0	0	0	1	1	12	0	0	0	0
8:15 AM	1	3	0	0	0	4	0	0	2	1	2	0	0	0	0	0	13	0	0	0	0
8:20 AM	3	1	0	0	0	3	0	0	1	2	2	0	0	0	2	0	14	0	0	0	0
8:25 AM	2	3	0	0	0	4	0	0	0	0	2	0	0	0	0	0	11	0	0	0	0
8:30 AM	2	3	0	0	0	3	0	0	0	0	1	0	0	0	0	0	9	0	0	0	0
8:35 AM	1	4	0	0	0	4	1	0	2	0	2	0	0	3	0	0	17	0	0	0	0
8:40 AM	2	2	0	0	1	6	0	1	1	0	2	0	0	4	0	0	18	0	0	0	0
8:45 AM	3	2	0	0	2	3	1	0	2	0	0	0	0	2	2	0	17	0	0	0	0
8:50 AM	1	4	0	0	0	7	1	0	1	1	3	0	0	1	1	0	20	0	0	0	0
8:55 AM	0	2	0	0	0	3	0	0	1	1	1	0	0	1	0	0	9	0	0	0	0
Total Survey	87	54	0	0	13	91	21	2	26	24	56	0	0	25	12	1	409	0	0	0	3

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	19	5	0	0	1	13	4	0	0	4	3	0	0	6	1	0	56	0	0	0	0
7:15 AM	18	7	0	0	3	20	3	0	1	6	4	0	0	3	1	0	66	0	0	0	0
7:30 AM	13	8	0	0	2	9	3	1	2	2	2	0	0	3	1	0	45	0	0	0	3
7:45 AM	17	7	0	0	2	8	4	0	3	4	16	0	0	2	3	0	66	0	0	0	0
8:00 AM	5	3	0	0	2	4	4	0	10	3	16	0	0	0	1	1	48	0	0	0	0
8:15 AM	6	7	0	0	0	11	0	0	3	3	6	0	0	0	2	0	38	0	0	0	0
8:30 AM	5	9	0	0	1	13	1	1	3	0	5	0	0	7	0	0	44	0	0	0	0
8:45 AM	4	8	0	0	2	13	2	0	4	2	4	0	0	4	3	0	46	0	0	0	0
Total Survey	87	54	0	0	13	91	21	2	26	24	56	0	0	25	12	1	409	0	0	0	3

Peak Hour Summary
7:00 AM to 8:00 AM

By Approach	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	94	75	169	0	72	39	111	1	47	95	142	0	20	24	44	0	233	0	0	0	3
%HV	1.1%				5.6%				17.0%				20.0%				7.3%				
PHF	0.87				0.69				0.51				0.71				0.87				

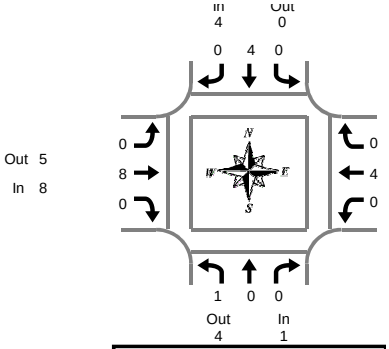
By Movement	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	67	27	0	94	8	50	14	72	6	16	25	47	0	14	6	20	233
%HV	1.5%	0.0%	0.0%	1.1%	0.0%	8.0%	0.0%	5.6%	0.0%	50.0%	0.0%	17.0%	0.0%	28.6%	0.0%	20.0%	7.3%
PHF	0.84	0.75	0.00	0.87	0.67	0.63	0.58	0.69	0.38	0.67	0.39	0.51	0.00	0.58	0.50	0.71	0.87

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	67	27	0	0	8	50	14	1	6	16	25	0	0	14	6	0	233	0	0	0	3
7:15 AM	53	25	0	0	9	41	14	1	16	15	38	0	0	8	6	1	225	0	0	0	3
7:30 AM	41	25	0	0	6	32	11	1	18	12	40	0	0	5	7	1	197	0	0	0	3
7:45 AM	33	26	0	0	5	36	9	1	19	10	43	0	0	9	6	1	196	0	0	0	0
8:00 AM	20	27	0	0	5	41	7	1	20	8	31	0	0	11	6	1	176	0	0	0	0

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



N Cedar St & NW 3rd Ave

Thursday, March 10, 2011
7:00 AM to 9:00 AM

Peak Hour Summary
7:00 AM to 8:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
7:05 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
7:10 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
7:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:25 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:40 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
7:50 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
7:55 AM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	3
8:00 AM	1	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
8:20 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
8:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
8:50 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	2	1	0	3	0	4	0	4	0	14	0	14	0	9	0	9	30

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	1	0	1	0	3	0	3	0	0	0	0	4
7:15 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	3	0	3	5
7:45 AM	0	0	0	0	0	2	0	2	0	3	0	3	0	0	0	0	5
8:00 AM	1	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
8:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	1	0	1	3
Total Survey	2	1	0	3	0	4	0	4	0	14	0	14	0	9	0	9	30

Heavy Vehicle Peak Hour Summary
7:00 AM to 8:00 AM

By Approach	Northbound N Cedar St			Southbound N Cedar St			Eastbound NW 3rd Ave			Westbound NW 3rd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	1	4	5	4	0	4	8	5	13	4	8	12	17
PHF	0.25			0.50			0.67			0.33			0.85

By Movement	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	1	0	0	1	0	4	0	4	0	8	0	8	0	4	0	4	17
PHF	0.25	0.00	0.00	0.25	0.00	0.50	0.00	0.50	0.00	0.67	0.00	0.67	0.00	0.33	0.00	0.33	0.85

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

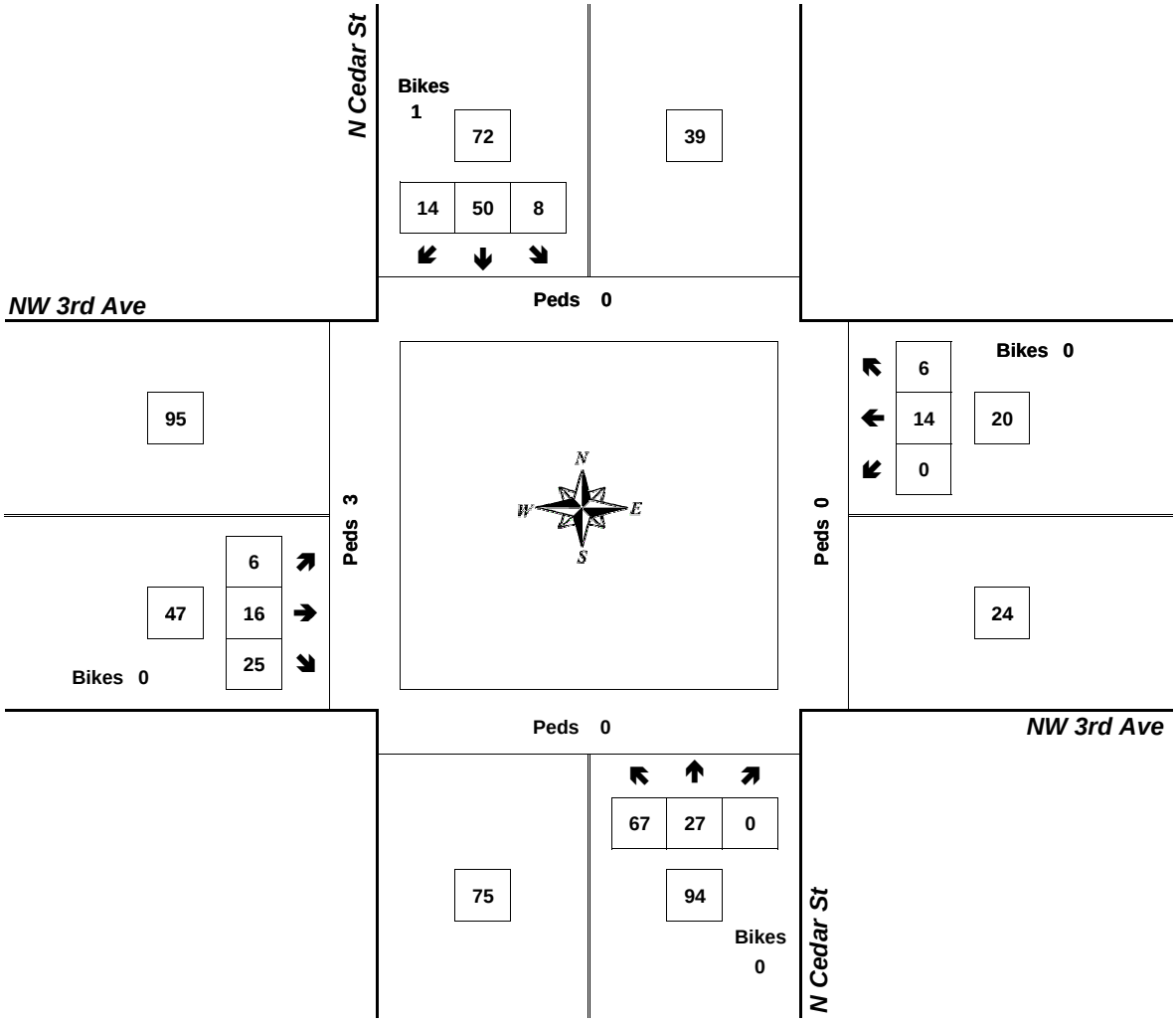
Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound NW 3rd Ave				Westbound NW 3rd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	1	0	0	1	0	4	0	4	0	8	0	8	0	4	0	4	17
7:15 AM	2	0	0	2	0	3	0	3	0	7	0	7	0	4	0	4	16
7:30 AM	1	0	0	1	0	2	0	2	0	10	0	10	0	3	0	3	16
7:45 AM	1	0	0	1	0	2	0	2	0	8	0	8	0	4	0	4	15
8:00 AM	1	1	0	2	0	0	0	0	0	6	0	6	0	5	0	5	13

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

N Cedar St & NW 3rd Ave

7:00 AM to 8:00 AM
Thursday, March 10, 2011

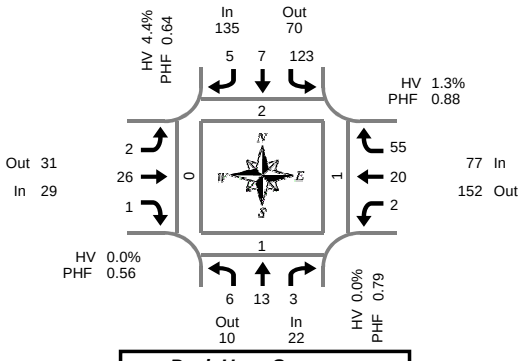


Approach	PHF	HV%	Volume
EB	0.51	17.0%	47
WB	0.71	20.0%	20
NB	0.87	1.1%	94
SB	0.69	5.6%	72
Intersection	0.87	7.3%	233

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:15 PM to 5:15 PM

N Cedar St & 2nd Ave

Wednesday, March 09, 2011
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	0	0	0	0	13	2	0	0	0	0	0	0	0	2	6	0	23	1	1	0	0
4:05 PM	0	0	0	0	21	2	1	0	0	1	0	0	0	1	4	0	30	0	0	0	0
4:10 PM	1	1	0	0	8	1	0	0	0	1	0	0	0	2	4	0	18	0	1	0	0
4:15 PM	2	2	0	0	3	1	0	1	0	2	0	0	0	0	5	0	15	2	0	1	0
4:20 PM	0	1	0	0	14	0	1	0	0	2	0	0	0	1	5	0	24	0	1	0	0
4:25 PM	0	1	1	0	7	1	1	0	0	7	0	0	0	2	4	0	24	0	0	0	0
4:30 PM	0	1	0	0	15	0	0	0	1	2	1	0	0	2	4	0	26	0	0	0	0
4:35 PM	1	0	0	0	7	1	0	0	0	2	0	0	0	3	3	0	17	0	0	0	0
4:40 PM	1	1	0	0	10	0	0	0	0	1	0	0	0	2	3	0	18	0	0	0	0
4:45 PM	0	1	0	0	6	2	0	0	0	0	0	0	0	1	5	0	15	0	0	0	0
4:50 PM	1	1	0	1	5	0	2	0	1	3	0	0	0	3	6	0	22	0	0	0	0
4:55 PM	0	1	1	0	6	0	0	0	0	4	0	0	0	1	5	0	18	0	0	0	0
5:00 PM	0	1	1	0	20	0	1	0	0	0	0	0	0	1	4	0	28	0	0	0	0
5:05 PM	0	1	0	0	19	1	0	0	0	2	0	0	2	2	6	0	33	0	0	0	0
5:10 PM	1	2	0	0	11	1	0	0	0	1	0	0	0	2	5	0	23	0	0	0	0
5:15 PM	0	3	1	0	5	1	0	0	0	2	1	0	0	0	2	0	15	0	3	0	1
5:20 PM	0	1	0	0	3	1	1	0	1	3	0	0	0	1	6	0	17	1	0	0	0
5:25 PM	1	1	0	0	10	1	0	0	0	1	0	0	0	3	3	0	20	1	0	0	0
5:30 PM	0	2	0	0	12	2	0	0	0	4	0	0	0	1	4	0	25	0	0	0	0
5:35 PM	0	2	0	0	9	0	0	0	0	2	0	0	0	7	2	0	22	1	0	0	0
5:40 PM	0	1	0	0	5	2	0	0	0	2	1	0	0	1	4	0	16	0	0	0	0
5:45 PM	0	1	0	0	11	1	2	0	0	0	0	0	0	2	4	0	21	0	0	0	0
5:50 PM	0	1	0	0	5	0	0	0	0	1	0	0	0	4	3	0	14	0	0	0	0
5:55 PM	1	0	0	0	9	1	0	0	0	3	0	0	1	4	1	0	20	0	0	0	0
Total Survey	9	26	4	1	234	21	9	1	3	46	3	0	3	48	98	0	504	6	6	1	1

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	1	1	0	0	42	5	1	0	0	2	0	0	0	5	14	0	71	1	2	0	0
4:15 PM	2	4	1	0	24	2	2	1	0	11	0	0	0	3	14	0	63	2	1	1	0
4:30 PM	2	2	0	0	32	1	0	0	1	5	1	0	0	7	10	0	61	0	0	0	0
4:45 PM	1	3	1	1	17	2	2	0	1	7	0	0	0	5	16	0	55	0	0	0	0
5:00 PM	1	4	1	0	50	2	1	0	0	3	0	0	2	5	15	0	84	0	0	0	0
5:15 PM	1	5	1	0	18	3	1	0	1	6	1	0	0	4	11	0	52	2	3	0	1
5:30 PM	0	5	0	0	26	4	0	0	0	8	1	0	0	9	10	0	63	1	0	0	0
5:45 PM	1	2	0	0	25	2	2	0	0	4	0	0	1	10	8	0	55	0	0	0	0
Total Survey	9	26	4	1	234	21	9	1	3	46	3	0	3	48	98	0	504	6	6	1	1

Peak Hour Summary
4:15 PM to 5:15 PM

By Approach	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	22	10	32	1	135	70	205	1	29	31	60	0	77	152	229	0	263	2	1	1	0
%HV	0.0%				4.4%				0.0%				1.3%				2.7%				
PHF	0.79				0.64				0.56				0.88				0.78				

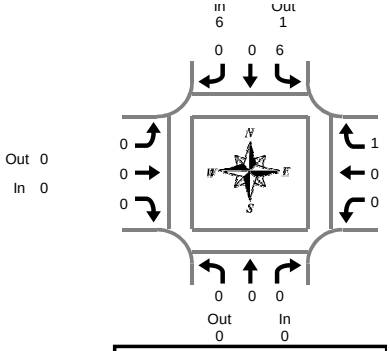
By Movement	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	6	13	3	22	123	7	5	135	2	26	1	29	2	20	55	77	263
%HV	0.0%	0.0%	0.0%	0.0%	4.9%	0.0%	0.0%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	1.3%	2.7%
PHF	0.75	0.81	0.38	0.79	0.62	0.58	0.42	0.64	0.50	0.59	0.25	0.56	0.25	0.71	0.86	0.88	0.78

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	6	10	2	1	115	10	5	1	2	25	1	0	0	20	54	0	250	3	3	1	0
4:15 PM	6	13	3	1	123	7	5	1	2	26	1	0	2	20	55	0	263	2	1	1	0
4:30 PM	5	14	3	1	117	8	4	0	3	21	2	0	2	21	52	0	252	2	3	0	1
4:45 PM	3	17	3	1	111	11	4	0	2	24	2	0	2	23	52	0	254	3	3	0	1
5:00 PM	3	16	2	0	119	11	4	0	1	21	2	0	3	28	44	0	254	3	3	0	1

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



N Cedar St & 2nd Ave

Wednesday, March 09, 2011
4:00 PM to 6:00 PM

Peak Hour Summary
4:15 PM to 5:15 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
5:05 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
5:10 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Survey	0	0	0	0	8	1	0	9	0	0	0	0	0	0	3	3	12

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
4:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	1	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Survey	0	0	0	0	8	1	0	9	0	0	0	0	0	0	3	3	12

Heavy Vehicle Peak Hour Summary
4:15 PM to 5:15 PM

By Approach	Northbound N Cedar St			Southbound N Cedar St			Eastbound 2nd Ave			Westbound 2nd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	6	1	7	0	0	0	1	6	7	7
PHF	0.00			0.50			0.00			0.25			0.44

By Movement	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	0	0	0	6	0	0	6	0	0	0	0	0	0	1	1	7
PHF	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25	0.44

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	2	5
4:15 PM	0	0	0	0	6	0	0	6	0	0	0	0	0	0	1	1	7
4:30 PM	0	0	0	0	5	0	0	5	0	0	0	0	0	0	1	1	6
4:45 PM	0	0	0	0	5	1	0	6	0	0	0	0	0	0	1	1	7
5:00 PM	0	0	0	0	5	1	0	6	0	0	0	0	0	0	1	1	7

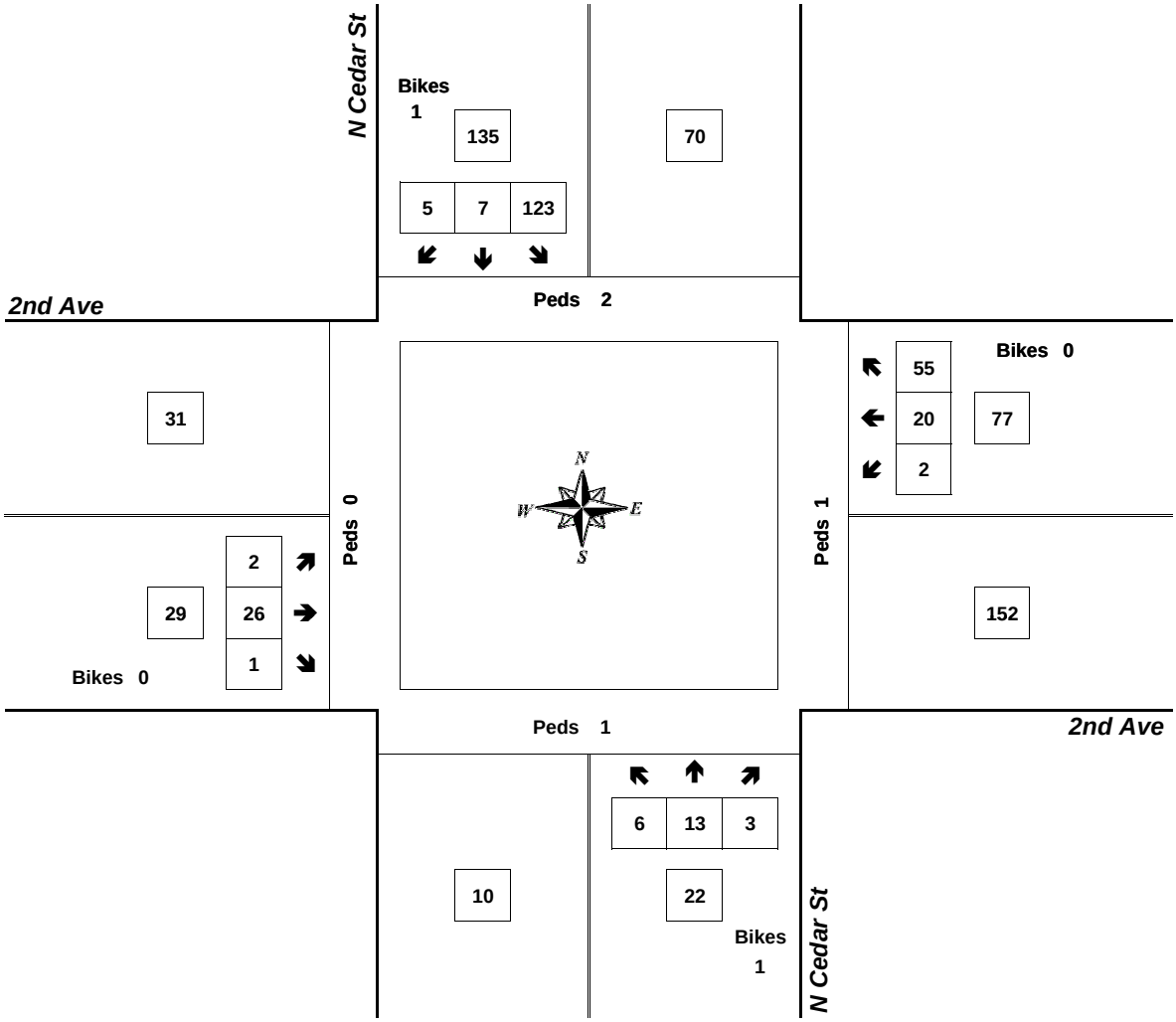
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

N Cedar St & 2nd Ave

4:15 PM to 5:15 PM
Wednesday, March 09, 2011

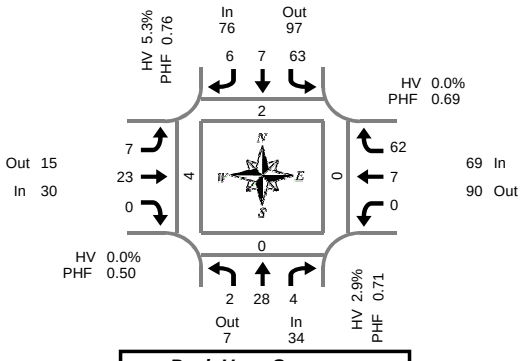


Approach	PHF	HV%	Volume
EB	0.56	0.0%	29
WB	0.88	1.3%	77
NB	0.79	0.0%	22
SB	0.64	4.4%	135
Intersection	0.78	2.7%	263

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:00 AM to 8:00 AM

N Cedar St & 2nd Ave

Thursday, March 10, 2011
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	1	2	1	0	4	1	5	0	0	1	0	0	0	0	4	0	19	1	0	0	0
7:05 AM	0	4	0	0	3	0	0	0	0	0	0	0	0	0	3	0	10	1	0	0	1
7:10 AM	0	0	0	0	5	0	0	0	3	0	0	0	0	2	8	0	18	0	0	0	0
7:15 AM	0	3	2	0	5	1	0	0	0	3	0	0	0	1	10	0	25	0	0	0	0
7:20 AM	0	2	0	0	6	1	1	0	0	6	0	0	0	0	4	0	20	0	0	0	0
7:25 AM	0	5	0	0	9	1	0	0	1	4	0	0	0	0	1	0	21	0	0	0	0
7:30 AM	0	3	1	0	6	1	0	0	1	3	0	0	0	3	4	0	22	0	0	0	3
7:35 AM	0	1	0	0	3	1	0	1	0	2	0	0	0	0	4	0	11	0	0	0	0
7:40 AM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	5	0	8	0	0	0	0
7:45 AM	0	3	0	0	7	0	0	0	1	0	0	0	0	1	7	0	19	0	0	0	0
7:50 AM	1	3	0	0	7	0	0	0	0	1	0	1	0	0	6	0	18	0	0	0	0
7:55 AM	0	0	0	0	8	1	0	0	1	2	0	0	0	0	6	0	18	0	0	0	0
8:00 AM	0	0	0	0	6	0	0	0	1	0	0	0	0	0	1	0	8	0	0	0	0
8:05 AM	0	2	0	0	6	0	0	0	0	4	0	0	0	0	3	0	15	0	0	0	0
8:10 AM	0	0	0	0	6	1	0	0	1	0	0	0	0	0	0	0	8	0	0	0	0
8:15 AM	0	1	0	0	5	3	0	0	0	0	0	0	0	0	6	0	15	0	0	0	0
8:20 AM	1	0	0	0	4	2	0	0	3	1	0	0	0	2	0	0	13	0	0	0	0
8:25 AM	0	0	0	0	2	0	0	0	0	2	0	0	0	0	1	0	5	0	0	0	0
8:30 AM	0	2	2	0	5	0	0	0	0	2	0	0	0	1	6	0	18	0	0	0	0
8:35 AM	0	1	0	0	4	2	0	0	2	2	0	0	0	0	0	0	11	0	1	0	1
8:40 AM	0	3	0	0	3	2	1	1	0	3	0	0	0	0	3	0	15	0	0	0	0
8:45 AM	1	1	0	0	11	1	0	0	1	2	0	0	0	0	1	0	18	0	0	0	0
8:50 AM	0	0	0	0	3	0	0	0	1	1	0	0	1	0	4	0	10	0	0	0	0
8:55 AM	0	2	0	0	2	1	0	0	0	2	0	0	0	2	2	0	11	0	0	0	1
Total Survey	4	40	6	0	120	19	7	2	16	42	0	1	1	12	89	0	356	2	1	0	6

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	1	6	1	0	12	1	5	0	3	1	0	0	0	2	15	0	47	2	0	0	1
7:15 AM	0	10	2	0	20	3	1	0	1	13	0	0	0	1	15	0	66	0	0	0	0
7:30 AM	0	6	1	0	9	2	0	1	1	6	0	0	0	3	13	0	41	0	0	0	3
7:45 AM	1	6	0	0	22	1	0	0	2	3	0	1	0	1	19	0	55	0	0	0	0
8:00 AM	0	2	0	0	18	1	0	0	2	4	0	0	0	0	4	0	31	0	0	0	0
8:15 AM	1	1	0	0	11	5	0	0	3	3	0	0	0	2	7	0	33	0	0	0	0
8:30 AM	0	6	2	0	12	4	1	1	2	7	0	0	0	1	9	0	44	0	1	0	1
8:45 AM	1	3	0	0	16	2	0	0	2	5	0	0	1	2	7	0	39	0	0	0	1
Total Survey	4	40	6	0	120	19	7	2	16	42	0	1	1	12	89	0	356	2	1	0	6

Peak Hour Summary
7:00 AM to 8:00 AM

By Approach	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	34	7	41	0	76	97	173	1	30	15	45	1	69	90	159	0	209	2	0	0	4
%HV	2.9%				5.3%				0.0%				0.0%				2.4%				
PHF	0.71				0.76				0.50				0.69				0.79				

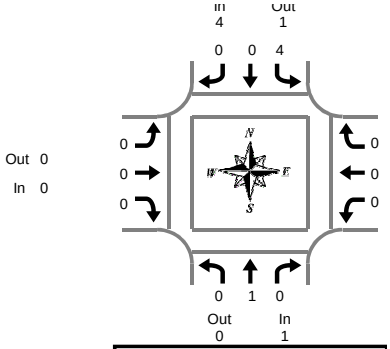
By Movement	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	2	28	4	34	63	7	6	76	7	23	0	30	0	7	62	69	209
%HV	0.0%	3.6%	0.0%	2.9%	6.3%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%
PHF	0.50	0.70	0.50	0.71	0.72	0.58	0.30	0.76	0.58	0.44	0.00	0.50	0.00	0.58	0.70	0.69	0.79

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	2	28	4	0	63	7	6	1	7	23	0	1	0	7	62	0	209	2	0	0	4
7:15 AM	1	24	3	0	69	7	1	1	6	26	0	1	0	5	51	0	193	0	0	0	3
7:30 AM	2	15	1	0	60	9	0	1	8	16	0	1	0	6	43	0	160	0	0	0	3
7:45 AM	2	15	2	0	63	11	1	1	9	17	0	1	0	4	39	0	163	0	1	0	1
8:00 AM	2	12	2	0	57	12	1	1	9	19	0	0	1	5	27	0	147	0	1	0	2

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



N Cedar St & 2nd Ave

Thursday, March 10, 2011
7:00 AM to 9:00 AM

Peak Hour Summary
7:00 AM to 8:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:25 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
7:55 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	1	0	1	4	0	0	4	0	0	0	0	0	0	2	2	7

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
7:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Survey	0	1	0	1	4	0	0	4	0	0	0	0	0	0	2	2	7

Heavy Vehicle Peak Hour Summary
7:00 AM to 8:00 AM

By Approach	Northbound N Cedar St			Southbound N Cedar St			Eastbound 2nd Ave			Westbound 2nd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	1	0	1	4	1	5	0	0	0	0	4	4	5
PHF	0.25			0.50			0.00			0.00			0.63

By Movement	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	1	0	1	4	0	0	4	0	0	0	0	0	0	0	0	5
PHF	0.00	0.25	0.00	0.25	0.50	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Cedar St				Southbound N Cedar St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	1	0	1	4	0	0	4	0	0	0	0	0	0	0	0	5
7:15 AM	0	1	0	1	2	0	0	2	0	0	0	0	0	0	1	1	4
7:30 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	1	3
7:45 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	1	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2

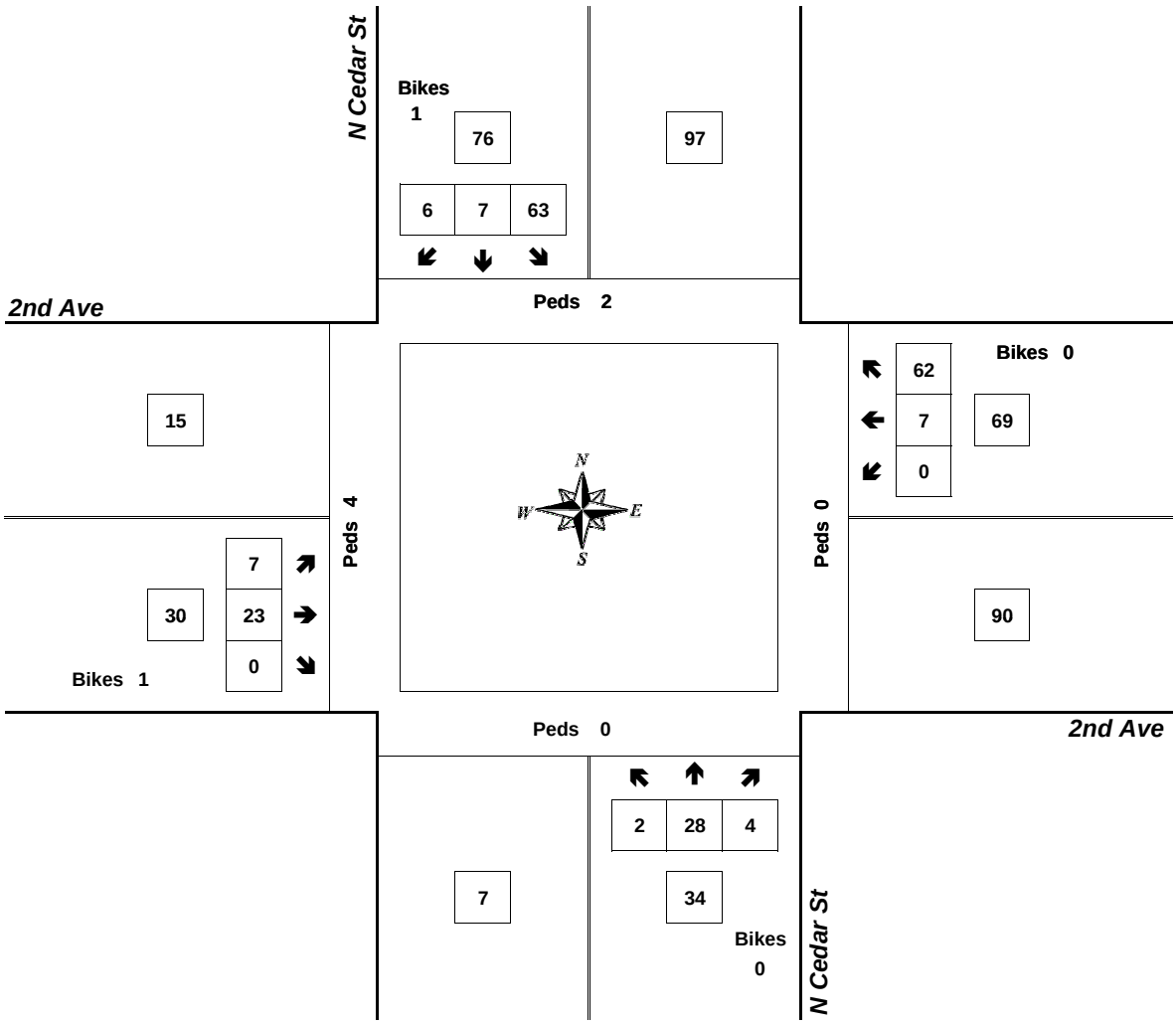
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

N Cedar St & 2nd Ave

7:00 AM to 8:00 AM
Thursday, March 10, 2011

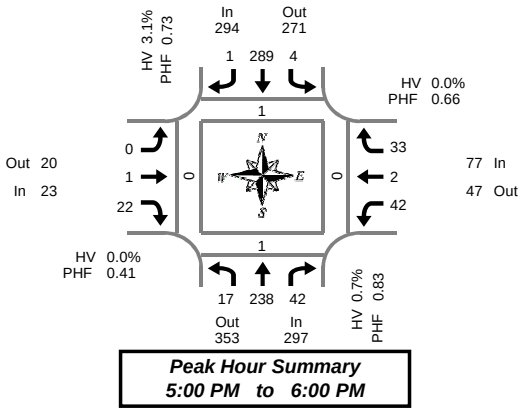


Approach	PHF	HV%	Volume
EB	0.50	0.0%	30
WB	0.69	0.0%	69
NB	0.71	2.9%	34
SB	0.76	5.3%	76
Intersection	0.79	2.4%	209

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
5:00 PM to 6:00 PM

Elm St & NW 1st Ave

Wednesday, March 09, 2011
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	3	13	2	0	0	27	0	0	1	1	2	0	5	0	2	0	56	0	0	0	0
4:05 PM	0	23	4	0	0	35	0	0	0	1	1	0	6	1	5	0	76	0	0	0	0
4:10 PM	6	20	2	0	2	17	1	1	0	0	5	0	7	0	5	0	65	0	0	0	0
4:15 PM	1	15	3	0	1	17	0	0	0	0	4	0	1	1	1	0	44	0	0	0	0
4:20 PM	3	20	3	0	0	18	0	0	0	0	3	0	5	0	2	0	54	0	0	0	0
4:25 PM	2	20	4	0	2	27	0	0	0	0	3	0	0	0	1	0	59	1	0	0	0
4:30 PM	3	22	4	1	2	18	0	0	1	0	0	0	5	0	2	0	57	0	0	0	0
4:35 PM	3	22	4	0	0	22	0	0	0	0	1	0	4	0	2	0	58	0	0	0	0
4:40 PM	1	19	4	0	0	9	0	0	0	0	3	0	1	0	1	0	38	0	0	0	0
4:45 PM	0	12	5	0	0	21	0	0	0	0	3	1	2	0	2	0	45	0	0	0	0
4:50 PM	1	23	3	0	1	12	0	0	0	0	2	0	3	0	1	0	46	0	0	0	0
4:55 PM	0	13	1	0	0	17	0	0	0	0	2	0	3	0	0	0	36	1	0	0	0
5:00 PM	0	10	7	0	0	15	0	0	0	0	0	0	3	0	3	0	38	0	0	0	0
5:05 PM	0	14	4	1	0	32	0	0	0	0	0	0	1	0	4	1	55	0	0	0	0
5:10 PM	0	29	4	0	0	26	1	0	0	0	2	0	3	0	2	0	67	0	0	0	0
5:15 PM	1	22	2	0	0	20	0	0	0	0	4	0	4	0	1	0	54	1	0	0	0
5:20 PM	0	23	8	0	0	29	0	0	0	0	0	0	5	0	4	0	69	0	0	0	0
5:25 PM	1	20	3	0	1	35	0	0	0	0	0	0	3	0	6	0	69	0	0	0	0
5:30 PM	0	19	3	0	3	33	0	0	0	0	0	0	7	1	3	0	69	0	0	0	0
5:35 PM	3	15	4	0	0	22	0	0	0	0	1	0	3	1	2	0	51	0	0	0	0
5:40 PM	3	23	2	0	0	21	0	0	0	0	2	0	5	0	1	0	57	0	0	0	0
5:45 PM	2	15	1	0	0	14	0	0	0	0	4	0	0	0	3	0	39	0	1	0	0
5:50 PM	5	23	3	0	0	17	0	0	0	1	3	0	4	0	3	0	59	0	0	0	0
5:55 PM	2	25	1	0	0	25	0	0	0	0	6	0	4	0	1	0	64	0	0	0	0
Total Survey	40	460	81	2	12	529	2	1	2	3	51	1	84	4	57	1	1,325	3	1	0	0

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	9	56	8	0	2	79	1	1	1	2	8	0	18	1	12	0	197	0	0	0	0
4:15 PM	6	55	10	0	3	62	0	0	0	0	10	0	6	1	4	0	157	1	0	0	0
4:30 PM	7	63	12	1	2	49	0	0	1	0	4	0	10	0	5	0	153	0	0	0	0
4:45 PM	1	48	9	0	1	50	0	0	0	0	7	1	8	0	3	0	127	1	0	0	0
5:00 PM	0	53	15	1	0	73	1	0	0	0	2	0	7	0	9	1	160	0	0	0	0
5:15 PM	2	65	13	0	1	84	0	0	0	0	4	0	12	0	11	0	192	1	0	0	0
5:30 PM	6	57	9	0	3	76	0	0	0	0	3	0	15	2	6	0	177	0	0	0	0
5:45 PM	9	63	5	0	0	56	0	0	0	1	13	0	8	0	7	0	162	0	1	0	0
Total Survey	40	460	81	2	12	529	2	1	2	3	51	1	84	4	57	1	1,325	3	1	0	0

Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	297	353	650	1	294	271	565	0	23	20	43	0	77	47	124	1	691	1	1	0	0
%HV	0.7%				3.1%				0.0%				0.0%				1.6%				
PHF	0.83				0.73				0.41				0.66				0.83				

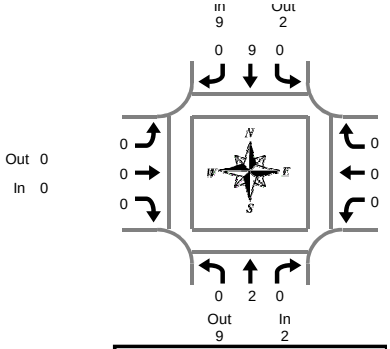
By Movement	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	17	238	42	297	4	289	1	294	0	1	22	23	42	2	33	77	691
%HV	0.0%	0.8%	0.0%	0.7%	0.0%	3.1%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
PHF	0.43	0.80	0.70	0.83	0.25	0.74	0.25	0.73	0.00	0.25	0.42	0.41	0.70	0.25	0.63	0.66	0.83

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	23	222	39	1	8	240	1	1	2	2	29	1	42	2	24	0	634	2	0	0	0
4:15 PM	14	219	46	2	6	234	1	0	1	0	23	1	31	1	21	1	597	2	0	0	0
4:30 PM	10	229	49	2	4	256	1	0	1	0	17	1	37	0	28	1	632	2	0	0	0
4:45 PM	9	223	46	1	5	283	1	0	0	0	16	1	42	2	29	1	656	2	0	0	0
5:00 PM	17	238	42	1	4	289	1	0	0	1	22	0	42	2	33	1	691	1	1	0	0

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
5:00 PM to 6:00 PM

Elm St & NW 1st Ave

Wednesday, March 09, 2011
4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:05 PM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
4:10 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:20 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:25 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:35 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
4:55 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
5:35 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	9	0	9	0	17	0	17	0	0	0	0	0	0	0	0	26

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	2	0	2	0	4	0	4	0	0	0	0	0	0	0	0	6
4:15 PM	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
4:30 PM	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
4:45 PM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
5:00 PM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
5:15 PM	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	9	0	9	0	17	0	17	0	0	0	0	0	0	0	0	26

Heavy Vehicle Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound Elm St			Southbound Elm St			Eastbound NW 1st Ave			Westbound NW 1st Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	2	9	11	9	2	11	0	0	0	0	0	0	11
PHF	0.50			0.45			0.00			0.00			0.46

By Movement	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	2	0	2	0	9	0	9	0	0	0	0	0	0	0	0	11
PHF	0.00	0.50	0.00	0.50	0.00	0.45	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	7	0	7	0	8	0	8	0	0	0	0	0	0	0	0	15
4:15 PM	0	6	0	6	0	6	0	6	0	0	0	0	0	0	0	0	12
4:30 PM	0	5	0	5	0	8	0	8	0	0	0	0	0	0	0	0	13
4:45 PM	0	3	0	3	0	11	0	11	0	0	0	0	0	0	0	0	14
5:00 PM	0	2	0	2	0	9	0	9	0	0	0	0	0	0	0	0	11

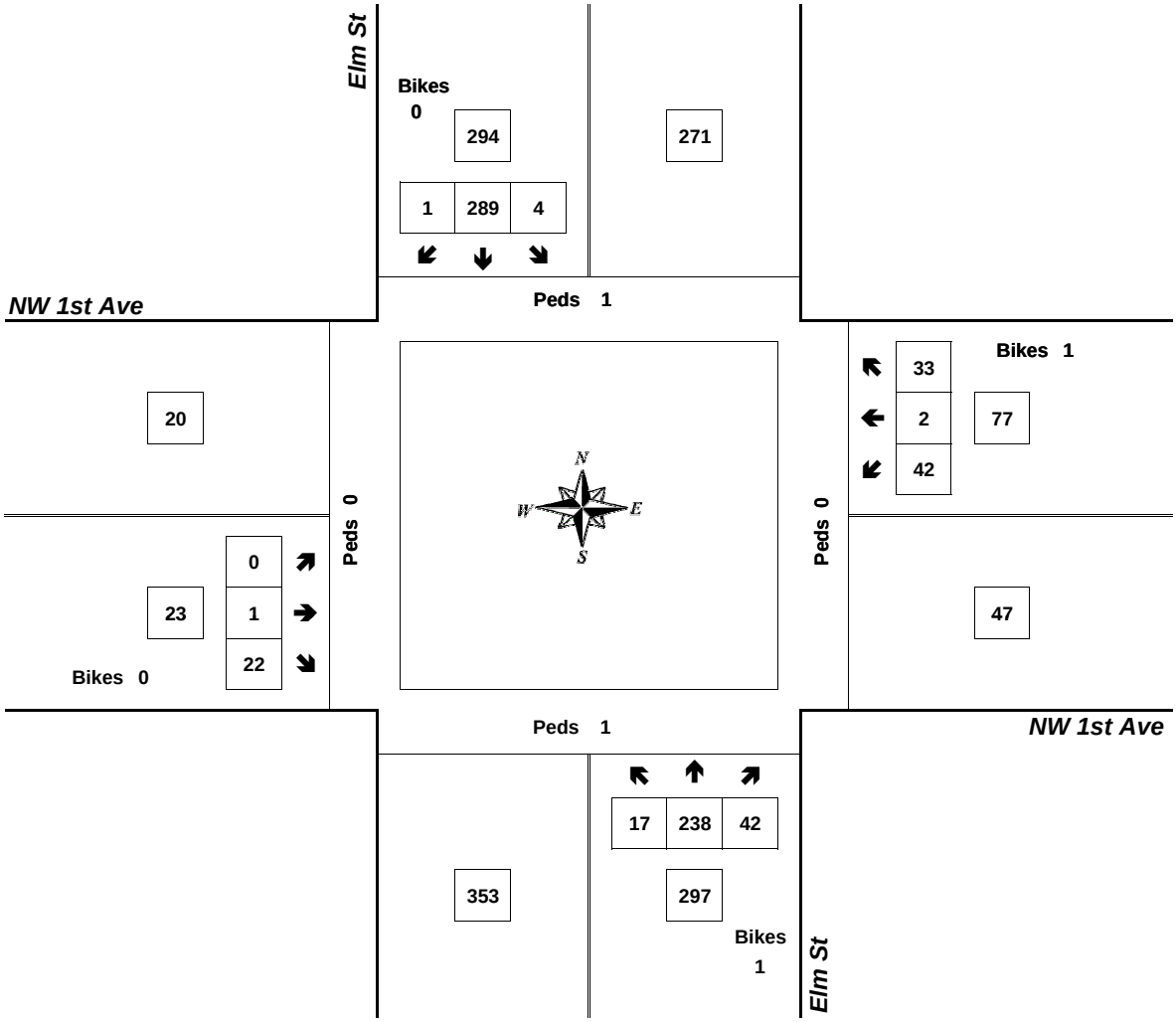
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

Elm St & NW 1st Ave

5:00 PM to 6:00 PM
Wednesday, March 09, 2011

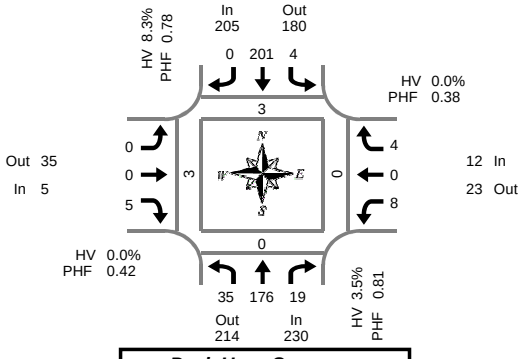


Approach	PHF	HV%	Volume
EB	0.41	0.0%	23
WB	0.66	0.0%	77
NB	0.83	0.7%	297
SB	0.73	3.1%	294
Intersection	0.83	1.6%	691

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:05 AM to 8:05 AM

Elm St & NW 1st Ave

Thursday, March 10, 2011
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	4	7	1	0	0	5	0	0	0	0	1	0	1	1	0	0	20	0	0	0	0
7:05 AM	3	9	3	0	0	13	0	0	0	0	1	0	0	0	0	0	29	0	0	0	2
7:10 AM	3	16	1	0	2	17	0	0	0	0	0	0	1	0	1	0	41	0	0	0	1
7:15 AM	5	9	0	0	0	22	0	0	0	0	0	0	2	0	1	0	39	0	0	0	0
7:20 AM	2	14	1	0	0	22	0	0	0	0	0	0	2	0	1	0	42	1	0	0	0
7:25 AM	4	12	3	0	0	22	0	0	0	0	1	0	0	0	0	0	42	0	0	0	0
7:30 AM	3	18	0	0	0	21	0	0	0	0	0	0	1	0	0	0	43	0	0	0	0
7:35 AM	2	17	1	0	0	13	0	0	0	0	0	1	0	0	0	0	33	0	0	0	0
7:40 AM	2	19	2	0	0	18	0	0	0	0	0	0	0	0	0	0	41	1	0	0	0
7:45 AM	4	18	1	0	0	10	0	0	0	0	0	0	0	0	0	0	33	1	0	0	0
7:50 AM	2	17	6	0	1	13	0	0	0	0	1	0	0	0	1	0	41	0	0	0	0
7:55 AM	2	14	1	0	1	13	0	0	0	0	0	0	1	0	0	0	32	0	0	0	0
8:00 AM	3	13	0	0	0	17	0	0	0	0	2	1	1	0	0	0	36	0	0	0	0
8:05 AM	0	9	2	0	0	16	0	0	0	0	0	0	1	0	0	0	28	0	0	0	0
8:10 AM	1	9	3	0	1	17	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0
8:15 AM	1	4	1	0	0	9	0	0	0	0	1	0	0	0	1	0	17	0	0	0	0
8:20 AM	2	7	1	0	0	7	0	2	0	0	0	0	1	0	4	0	22	0	0	0	0
8:25 AM	1	10	0	0	1	9	1	0	0	0	1	0	1	0	1	0	25	0	0	0	0
8:30 AM	1	11	0	0	0	8	0	0	0	0	1	0	0	0	1	0	22	0	0	0	0
8:35 AM	0	20	5	0	0	13	0	0	0	0	1	0	0	0	0	0	39	0	0	0	0
8:40 AM	0	17	2	0	0	7	0	0	0	0	3	0	1	0	1	0	31	0	1	0	0
8:45 AM	3	8	5	0	0	18	0	0	0	0	0	0	1	0	1	0	36	0	0	0	0
8:50 AM	1	12	2	0	0	23	0	0	0	1	0	0	2	0	1	0	42	0	0	0	0
8:55 AM	0	13	0	0	1	18	0	0	0	0	0	0	1	0	1	0	34	1	0	0	0
Total Survey	49	303	41	0	7	351	1	2	0	1	13	2	17	1	15	0	799	4	1	0	3

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	10	32	5	0	2	35	0	0	0	0	2	0	2	1	1	0	90	0	0	0	3
7:15 AM	11	35	4	0	0	66	0	0	0	0	1	0	4	0	2	0	123	1	0	0	0
7:30 AM	7	54	3	0	0	52	0	0	0	0	0	1	1	0	0	0	117	1	0	0	0
7:45 AM	8	49	8	0	2	36	0	0	0	0	1	0	1	0	1	0	106	1	0	0	0
8:00 AM	4	31	5	0	1	50	0	0	0	0	2	1	2	0	0	0	95	0	0	0	0
8:15 AM	4	21	2	0	1	25	1	2	0	0	2	0	2	0	6	0	64	0	0	0	0
8:30 AM	1	48	7	0	0	28	0	0	0	0	5	0	1	0	2	0	92	0	1	0	0
8:45 AM	4	33	7	0	1	59	0	0	0	1	0	0	4	0	3	0	112	1	0	0	0
Total Survey	49	303	41	0	7	351	1	2	0	1	13	2	17	1	15	0	799	4	1	0	3

Peak Hour Summary
7:05 AM to 8:05 AM

By Approach	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	230	214	444	0	205	180	385	0	5	35	40	2	12	23	35	0	452	3	0	0	3
%HV	3.5%				8.3%				0.0%				0.0%				5.5%				
PHF	0.81				0.78				0.42				0.38				0.89				

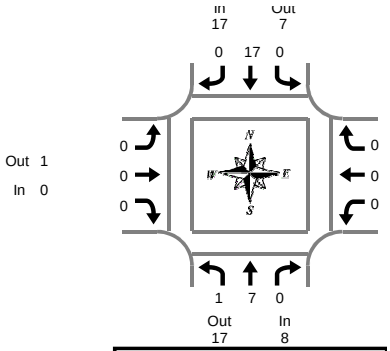
By Movement	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	35	176	19	230	4	201	0	205	0	0	5	5	8	0	4	12	452
%HV	2.9%	4.0%	0.0%	3.5%	0.0%	8.5%	0.0%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%
PHF	0.80	0.81	0.53	0.81	0.50	0.76	0.00	0.78	0.00	0.00	0.42	0.42	0.40	0.00	0.33	0.38	0.89

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	36	170	20	0	4	189	0	0	0	0	4	1	8	1	4	0	436	3	0	0	3
7:15 AM	30	169	20	0	3	204	0	0	0	0	4	2	8	0	3	0	441	3	0	0	0
7:30 AM	23	155	18	0	4	163	1	2	0	0	5	2	6	0	7	0	382	2	0	0	0
7:45 AM	17	149	22	0	4	139	1	2	0	0	10	1	6	0	9	0	357	1	1	0	0
8:00 AM	13	133	21	0	3	162	1	2	0	1	9	1	9	0	11	0	363	1	1	0	0

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Elm St & NW 1st Ave

Thursday, March 10, 2011
7:00 AM to 9:00 AM

Peak Hour Summary
7:05 AM to 8:05 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
7:10 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
7:15 AM	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
7:20 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
7:25 AM	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
7:35 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:40 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
7:55 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
8:00 AM	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:20 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
8:25 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:35 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
8:40 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:50 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
8:55 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
Total Survey	1	12	0	13	0	31	0	31	0	0	0	0	0	0	0	0	44

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	1	0	1	0	4	0	4	0	0	0	0	0	0	0	0	5
7:15 AM	1	4	0	5	0	4	0	4	0	0	0	0	0	0	0	0	9
7:30 AM	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
8:00 AM	0	2	0	2	0	4	0	4	0	0	0	0	0	0	0	0	6
8:15 AM	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
8:30 AM	0	3	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	9	0	9	0	0	0	0	0	0	0	0	9
Total Survey	1	12	0	13	0	31	0	31	0	0	0	0	0	0	0	0	44

Heavy Vehicle Peak Hour Summary
7:05 AM to 8:05 AM

By Approach	Northbound Elm St			Southbound Elm St			Eastbound NW 1st Ave			Westbound NW 1st Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	8	17	25	17	7	24	0	1	1	0	0	0	25
PHF	0.40			0.61			0.00			0.00			0.69

By Movement	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	1	7	0	8	0	17	0	17	0	0	0	0	0	0	0	0	25
PHF	0.25	0.44	0.00	0.40	0.00	0.61	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

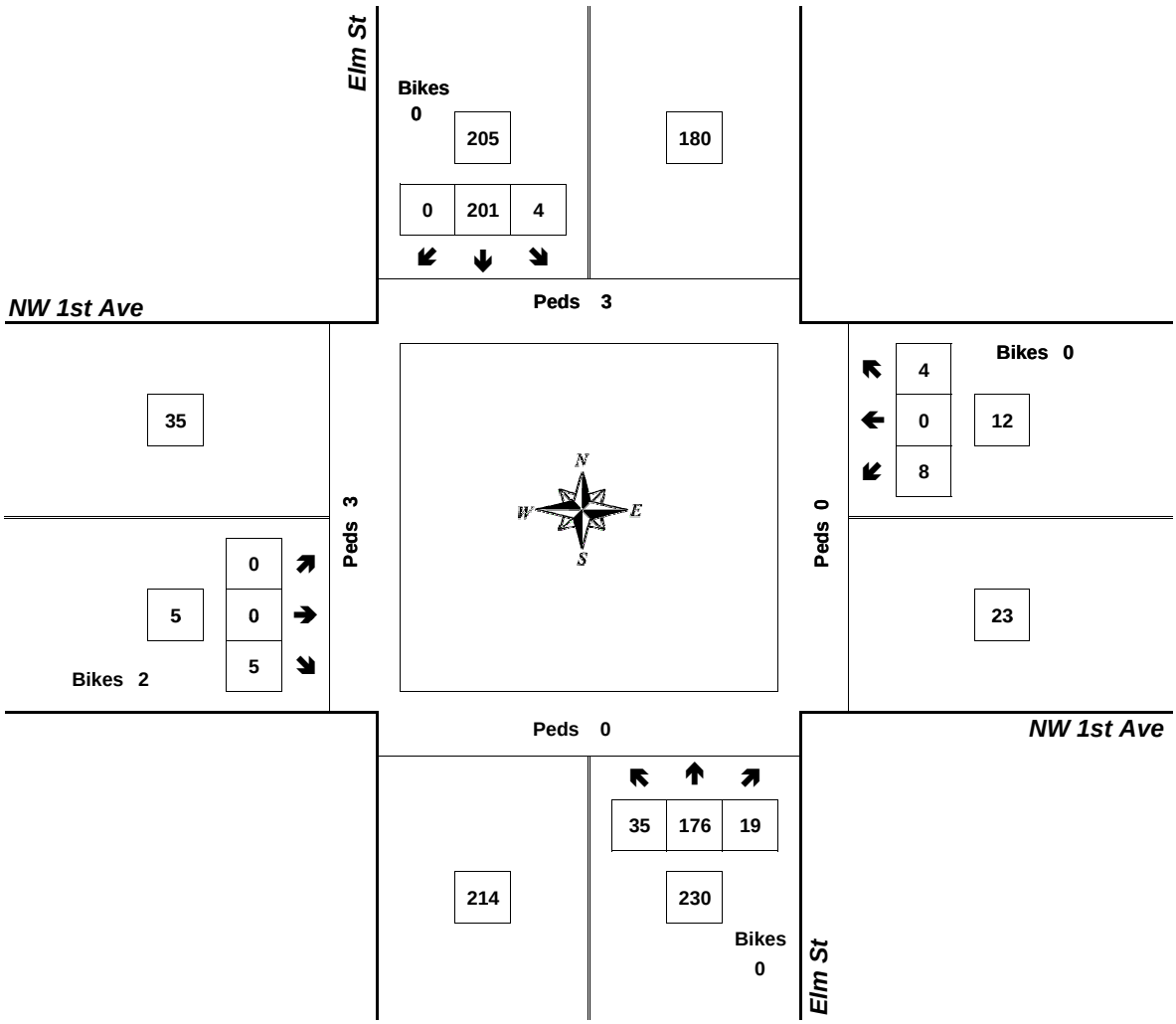
Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound NW 1st Ave				Westbound NW 1st Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	1	6	0	7	0	14	0	14	0	0	0	0	0	0	0	0	21
7:15 AM	1	7	0	8	0	14	0	14	0	0	0	0	0	0	0	0	22
7:30 AM	0	4	0	4	0	13	0	13	0	0	0	0	0	0	0	0	17
7:45 AM	0	6	0	6	0	11	0	11	0	0	0	0	0	0	0	0	17
8:00 AM	0	6	0	6	0	17	0	17	0	0	0	0	0	0	0	0	23

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

Elm St & NW 1st Ave

7:05 AM to 8:05 AM
Thursday, March 10, 2011

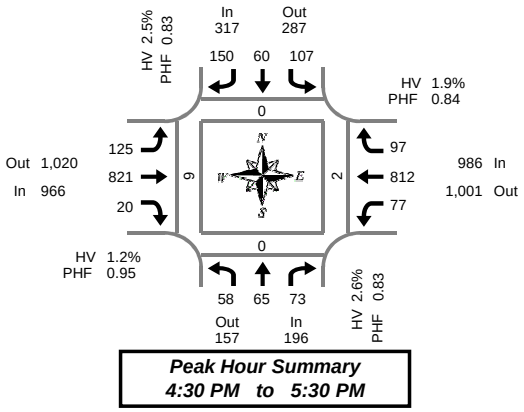


Approach	PHF	HV%	Volume
EB	0.42	0.0%	5
WB	0.38	0.0%	12
NB	0.81	3.5%	230
SB	0.78	8.3%	205
Intersection	0.89	5.5%	452

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:30 PM to 5:30 PM

Elm St & Hwy 99 E

Wednesday, March 09, 2011
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	2	2	4	0	8	11	9	0	8	66	2	0	5	58	6	0	181	0	0	0	1
4:05 PM	7	2	6	0	11	7	15	0	10	66	5	0	5	69	7	0	210	0	0	0	3
4:10 PM	2	18	3	0	10	9	18	1	9	72	2	0	2	42	8	0	195	0	0	0	3
4:15 PM	0	12	5	0	7	9	9	0	8	69	2	0	5	73	9	0	208	0	1	0	0
4:20 PM	4	9	5	0	13	3	14	0	13	63	3	0	4	55	7	0	193	0	0	0	0
4:25 PM	4	2	5	0	14	7	12	0	11	75	2	0	6	56	7	0	201	0	0	0	0
4:30 PM	4	5	6	1	5	6	15	0	11	78	2	0	10	70	8	0	220	0	0	0	0
4:35 PM	7	7	10	0	8	7	9	0	12	68	0	0	5	62	7	0	202	0	0	1	0
4:40 PM	8	5	6	0	6	4	11	0	12	68	2	0	5	60	5	0	192	0	0	0	4
4:45 PM	4	5	7	0	6	4	8	0	10	66	2	0	3	75	5	0	195	0	0	0	0
4:50 PM	5	10	4	0	10	1	13	0	9	63	3	0	6	70	12	0	206	0	0	0	3
4:55 PM	6	6	8	0	13	10	8	0	14	70	2	0	7	50	8	0	202	0	0	1	1
5:00 PM	2	0	4	0	6	8	14	0	10	60	2	0	4	66	6	0	182	0	0	0	0
5:05 PM	6	5	6	1	10	6	14	0	11	69	2	0	5	57	11	0	202	0	0	0	0
5:10 PM	8	4	7	0	7	1	12	0	12	67	0	0	8	100	9	0	235	0	0	0	0
5:15 PM	5	4	4	0	16	1	10	0	9	76	3	0	6	72	5	0	211	0	0	0	0
5:20 PM	2	7	5	0	8	9	14	0	8	69	1	0	10	72	11	0	216	0	0	0	0
5:25 PM	1	7	6	0	12	3	22	0	7	67	1	0	8	58	10	0	202	0	0	0	1
5:30 PM	7	4	7	0	15	6	15	0	12	67	0	0	5	48	8	0	194	0	0	0	0
5:35 PM	3	9	5	0	14	13	11	0	14	63	3	0	10	60	8	0	213	0	0	0	0
5:40 PM	3	8	4	0	14	2	10	0	6	64	4	0	4	53	5	0	177	0	1	2	1
5:45 PM	4	4	3	0	11	6	10	0	11	79	0	0	3	39	2	0	172	0	0	0	0
5:50 PM	3	7	4	0	13	2	7	0	8	53	0	0	11	59	10	0	177	0	0	0	0
5:55 PM	2	6	4	0	6	4	11	0	5	56	2	0	2	63	6	0	167	0	0	1	1
Total Survey	99	148	128	2	243	139	291	1	240	1,614	45	0	139	1,487	180	0	4,753	0	2	5	18

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	11	22	13	0	29	27	42	1	27	204	9	0	12	169	21	0	586	0	0	0	7
4:15 PM	8	23	15	0	34	19	35	0	32	207	7	0	15	184	23	0	602	0	1	0	0
4:30 PM	19	17	22	1	19	17	35	0	35	214	4	0	20	192	20	0	614	0	0	1	4
4:45 PM	15	21	19	0	29	15	29	0	33	199	7	0	16	195	25	0	603	0	0	1	4
5:00 PM	16	9	17	1	23	15	40	0	33	196	4	0	17	223	26	0	619	0	0	0	0
5:15 PM	8	18	15	0	36	13	46	0	24	212	5	0	24	202	26	0	629	0	0	0	1
5:30 PM	13	21	16	0	43	21	36	0	32	194	7	0	19	161	21	0	584	0	1	2	1
5:45 PM	9	17	11	0	30	12	28	0	24	188	2	0	16	161	18	0	516	0	0	1	1
Total Survey	99	148	128	2	243	139	291	1	240	1,614	45	0	139	1,487	180	0	4,753	0	2	5	18

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	196	157	353	2	317	287	604	0	966	1,020	1,986	0	986	1,001	1,987	0	2,465	0	0	2	9
%HV	2.6%				2.5%				1.2%				1.9%				1.8%				
PHF	0.83				0.83				0.95				0.84				0.93				

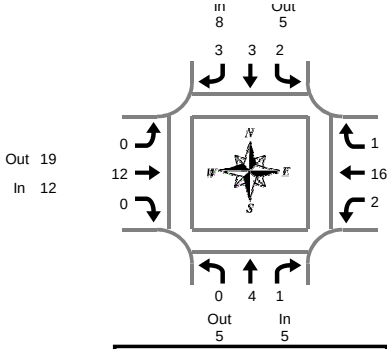
By Movement	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	58	65	73	196	107	60	150	317	125	821	20	966	77	812	97	986	2,465
%HV	0.0%	6.2%	1.4%	2.6%	1.9%	5.0%	2.0%	2.5%	0.0%	1.5%	0.0%	1.2%	2.6%	2.0%	1.0%	1.9%	1.8%
PHF	0.76	0.77	0.79	0.83	0.74	0.63	0.82	0.83	0.89	0.96	0.71	0.95	0.80	0.83	0.93	0.84	0.93

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	53	83	69	1	111	78	141	1	127	824	27	0	63	740	89	0	2,405	0	1	2	15
4:15 PM	58	70	73	2	105	66	139	0	133	816	22	0	68	794	94	0	2,438	0	1	2	8
4:30 PM	58	65	73	2	107	60	150	0	125	821	20	0	77	812	97	0	2,465	0	0	2	9
4:45 PM	52	69	67	1	131	64	151	0	122	801	23	0	76	781	98	0	2,435	0	1	3	6
5:00 PM	46	65	59	1	132	61	150	0	113	790	18	0	76	747	91	0	2,348	0	1	3	3

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Elm St & Hwy 99 E

Wednesday, March 09, 2011
4:00 PM to 6:00 PM

Peak Hour Summary
4:30 PM to 5:30 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	2	0	2	5
4:05 PM	0	0	0	0	1	0	0	1	0	1	0	1	2	4	0	6	8
4:10 PM	1	1	0	2	1	1	1	3	1	0	0	1	0	1	0	1	7
4:15 PM	0	2	0	2	0	0	0	0	0	3	0	3	0	2	0	2	7
4:20 PM	2	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	3
4:25 PM	0	0	1	1	0	0	0	0	0	2	0	2	0	2	0	2	5
4:30 PM	0	1	0	1	0	1	0	1	0	1	0	1	0	2	0	2	5
4:35 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	3	4
4:40 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
4:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	1	2	0	3	4
4:50 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
4:55 PM	0	0	0	0	1	0	0	1	0	2	0	2	0	2	0	2	5
5:00 PM	0	0	1	1	0	1	0	1	0	2	0	2	0	1	0	1	5
5:05 PM	0	1	0	1	0	0	1	1	0	1	0	1	0	1	0	1	4
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
5:20 PM	0	0	0	0	0	1	0	1	0	1	0	1	1	1	0	2	4
5:25 PM	0	1	0	1	0	0	1	1	0	2	0	2	0	1	0	1	5
5:30 PM	0	0	0	0	0	2	0	2	0	1	0	1	0	1	0	1	4
5:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
5:40 PM	0	0	0	0	1	0	0	1	0	1	0	1	0	1	0	1	3
5:45 PM	0	0	1	1	0	0	0	0	0	2	0	2	0	1	0	1	4
5:50 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
5:55 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
Total Survey	3	7	3	13	5	7	5	17	1	27	0	28	4	34	1	39	97

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	1	0	2	2	1	1	4	1	4	0	5	2	7	0	9	20
4:15 PM	2	2	1	5	0	0	1	1	0	5	0	5	0	4	0	4	15
4:30 PM	0	1	0	1	0	1	0	1	0	4	0	4	0	6	1	7	13
4:45 PM	0	1	0	1	1	0	1	2	0	2	0	2	1	5	0	6	11
5:00 PM	0	1	1	2	0	1	1	2	0	3	0	3	0	3	0	3	10
5:15 PM	0	1	0	1	1	1	1	3	0	3	0	3	1	2	0	3	10
5:30 PM	0	0	0	0	1	3	0	4	0	2	0	2	0	3	0	3	9
5:45 PM	0	0	1	1	0	0	0	0	0	4	0	4	0	4	0	4	9
Total Survey	3	7	3	13	5	7	5	17	1	27	0	28	4	34	1	39	97

Heavy Vehicle Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound Elm St			Southbound Elm St			Eastbound Hwy 99 E			Westbound Hwy 99 E			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	5	5	10	8	5	13	12	19	31	19	15	34	44
PHF	0.63			0.67			0.60			0.59			0.79

By Movement	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	4	1	5	2	3	3	8	0	12	0	12	2	16	1	19	44
PHF	0.00	1.00	0.25	0.63	0.50	0.75	0.75	0.67	0.00	0.60	0.00	0.60	0.50	0.67	0.25	0.59	0.79

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

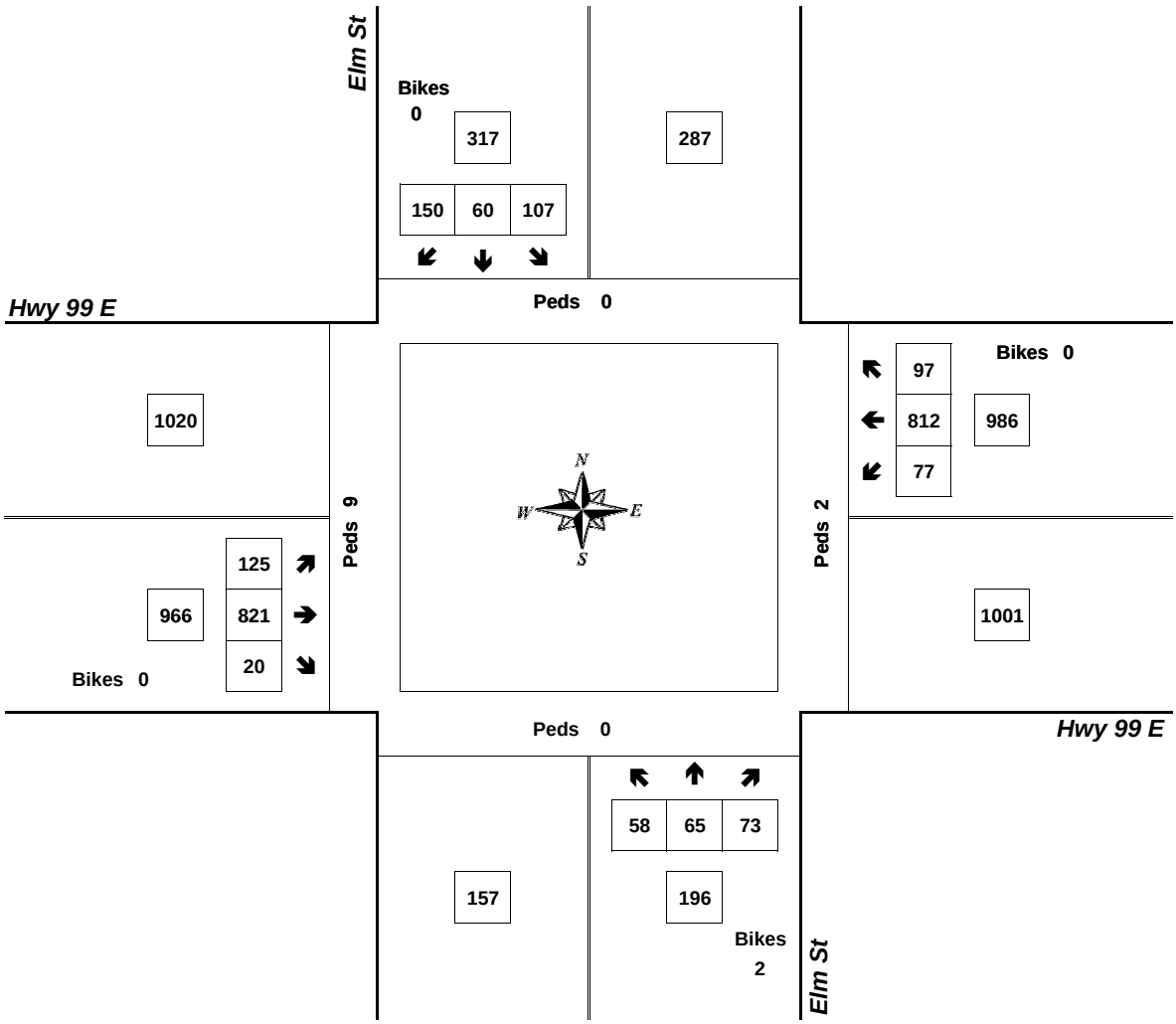
Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	3	5	1	9	3	2	3	8	1	15	0	16	3	22	1	26	59
4:15 PM	2	5	2	9	1	2	3	6	0	14	0	14	1	18	1	20	49
4:30 PM	0	4	1	5	2	3	3	8	0	12	0	12	2	16	1	19	44
4:45 PM	0	3	1	4	3	5	3	11	0	10	0	10	2	13	0	15	40
5:00 PM	0	2	2	4	2	5	2	9	0	12	0	12	1	12	0	13	38

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

Elm St & Hwy 99 E

4:30 PM to 5:30 PM
Wednesday, March 09, 2011

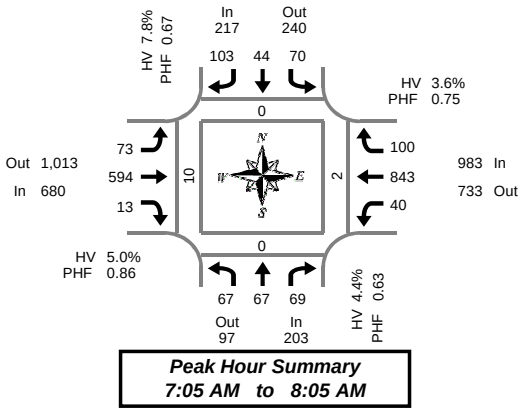


Approach	PHF	HV%	Volume
EB	0.95	1.2%	966
WB	0.84	1.9%	986
NB	0.83	2.6%	196
SB	0.83	2.5%	317
Intersection	0.93	1.8%	2,465

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:05 AM to 8:05 AM

Elm St & Hwy 99 E

Thursday, March 10, 2011
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	2	1	8	0	3	1	2	0	3	38	0	0	2	53	7	0	120	0	0	0	0
7:05 AM	2	4	5	0	7	2	5	0	5	36	1	0	2	69	7	0	145	0	0	0	2
7:10 AM	6	0	3	0	4	1	9	0	10	38	1	0	2	59	10	0	143	0	0	0	3
7:15 AM	2	3	4	0	5	5	10	0	4	36	1	0	3	110	8	0	191	0	0	0	1
7:20 AM	7	6	5	0	9	5	17	0	5	37	0	0	2	90	8	0	191	0	0	0	1
7:25 AM	8	7	14	0	7	4	14	0	7	42	1	0	4	91	10	0	209	0	0	2	2
7:30 AM	9	11	8	0	5	7	13	0	6	62	2	0	3	87	3	0	216	0	0	0	0
7:35 AM	14	6	4	0	4	7	7	0	6	65	0	0	6	63	7	0	189	0	0	0	1
7:40 AM	7	12	7	0	5	3	4	0	4	48	1	0	3	57	7	0	158	0	0	0	0
7:45 AM	1	3	8	1	2	3	2	0	8	62	2	0	4	71	14	0	180	0	0	0	0
7:50 AM	3	7	3	0	8	2	6	0	6	61	2	0	5	54	10	0	167	0	0	0	0
7:55 AM	1	3	4	0	6	1	7	0	8	48	0	0	2	56	8	0	144	0	0	0	0
8:00 AM	7	5	4	0	8	4	9	0	4	59	2	0	4	36	8	0	150	0	0	0	0
8:05 AM	3	0	5	0	5	4	8	0	4	34	1	0	4	46	5	0	119	0	0	0	0
8:10 AM	4	4	4	0	6	3	5	0	4	48	1	0	2	55	5	0	141	0	0	0	0
8:15 AM	2	0	1	0	3	2	4	2	4	35	4	0	2	40	2	0	99	0	0	0	0
8:20 AM	1	2	5	0	2	1	6	0	1	33	1	0	2	40	5	0	99	0	0	0	0
8:25 AM	1	3	6	0	4	2	3	0	3	27	1	0	0	28	4	0	82	0	0	0	0
8:30 AM	4	4	0	0	3	0	6	0	2	41	1	0	1	35	9	0	106	0	0	1	0
8:35 AM	3	5	5	0	4	2	7	0	8	45	2	0	0	35	5	0	121	0	0	0	0
8:40 AM	3	6	2	0	6	1	6	0	6	33	0	0	3	48	6	0	120	0	0	0	0
8:45 AM	3	6	7	0	5	7	8	0	7	31	0	0	1	47	2	0	124	0	0	0	2
8:50 AM	2	6	4	0	11	7	5	0	4	47	1	0	2	49	4	0	142	0	0	0	0
8:55 AM	3	5	5	0	3	12	6	0	5	33	1	0	5	41	9	0	128	0	0	0	1
Total Survey	98	109	121	1	125	86	169	2	124	1,039	26	0	64	1,360	163	0	3,484	0	0	3	13

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	10	5	16	0	14	4	16	0	18	112	2	0	6	181	24	0	408	0	0	0	5
7:15 AM	17	16	23	0	21	14	41	0	16	115	2	0	9	291	26	0	591	0	0	2	4
7:30 AM	30	29	19	0	14	17	24	0	16	175	3	0	12	207	17	0	563	0	0	0	1
7:45 AM	5	13	15	1	16	6	15	0	22	171	4	0	11	181	32	0	491	0	0	0	0
8:00 AM	14	9	13	0	19	11	22	0	12	141	4	0	10	137	18	0	410	0	0	0	0
8:15 AM	4	5	12	0	9	5	13	2	8	95	6	0	4	108	11	0	280	0	0	0	0
8:30 AM	10	15	7	0	13	3	19	0	16	119	3	0	4	118	20	0	347	0	0	1	0
8:45 AM	8	17	16	0	19	26	19	0	16	111	2	0	8	137	15	0	394	0	0	0	3
Total Survey	98	109	121	1	125	86	169	2	124	1,039	26	0	64	1,360	163	0	3,484	0	0	3	13

Peak Hour Summary
7:05 AM to 8:05 AM

By Approach	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	203	97	300	1	217	240	457	0	680	1,013	1,693	0	983	733	1,716	0	2,083	0	0	2	10
%HV	4.4%				7.8%				5.0%				3.6%				4.6%				
PHF	0.63				0.67				0.86				0.75				0.85				

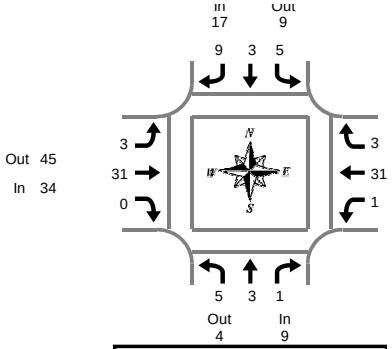
By Movement	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	67	67	69	203	70	44	103	217	73	594	13	680	40	843	100	983	2,083
%HV	7.5%	4.5%	1.4%	4.4%	7.1%	6.8%	8.7%	7.8%	4.1%	5.2%	0.0%	5.0%	2.5%	3.7%	3.0%	3.6%	4.6%
PHF	0.54	0.58	0.64	0.63	0.80	0.61	0.59	0.67	0.83	0.85	0.65	0.86	0.77	0.72	0.78	0.75	0.85

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	62	63	73	1	65	41	96	0	72	573	11	0	38	860	99	0	2,053	0	0	2	10
7:15 AM	66	67	70	1	70	48	102	0	66	602	13	0	42	816	93	0	2,055	0	0	2	5
7:30 AM	53	56	59	1	58	39	74	2	58	582	17	0	37	633	78	0	1,744	0	0	0	1
7:45 AM	33	42	47	1	57	25	69	2	58	526	17	0	29	544	81	0	1,528	0	0	1	0
8:00 AM	36	46	48	0	60	45	73	2	52	466	15	0	26	500	64	0	1,431	0	0	1	3

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Peak Hour Summary
7:05 AM to 8:05 AM

Elm St & Hwy 99 E

Thursday, March 10, 2011
7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	2	3
7:05 AM	0	0	0	0	1	0	1	2	0	0	0	0	0	2	1	3	5
7:10 AM	2	0	0	2	0	0	1	1	1	1	0	2	0	3	0	3	8
7:15 AM	0	0	0	0	0	0	2	2	0	2	0	2	0	7	0	7	11
7:20 AM	1	2	0	3	1	0	1	2	0	1	0	1	0	1	1	2	8
7:25 AM	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	1	3
7:30 AM	0	0	0	0	0	1	0	1	0	2	0	2	0	4	0	4	7
7:35 AM	1	0	0	1	0	0	0	0	1	2	0	3	1	2	0	3	7
7:40 AM	0	0	0	0	1	1	0	2	0	4	0	4	0	6	0	6	12
7:45 AM	0	0	1	1	0	0	1	1	0	6	0	6	0	2	0	2	10
7:50 AM	0	0	0	0	0	0	1	1	0	5	0	5	0	1	0	1	7
7:55 AM	0	0	0	0	0	0	2	2	0	5	0	5	0	2	0	2	9
8:00 AM	1	1	0	2	2	1	0	3	0	2	0	2	0	0	1	1	8
8:05 AM	0	0	0	0	0	0	0	0	0	3	0	3	1	1	0	2	5
8:10 AM	1	0	0	1	0	1	0	1	0	3	0	3	0	2	0	2	7
8:15 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	4	0	4	6
8:20 AM	0	0	0	0	0	0	1	1	0	2	0	2	0	4	0	4	7
8:25 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	1	1	3
8:30 AM	0	0	0	0	0	0	0	0	0	4	0	4	0	2	1	3	7
8:35 AM	1	0	0	1	1	0	0	1	2	2	0	4	0	3	0	3	9
8:40 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	3
8:45 AM	0	0	0	0	1	2	0	3	0	1	0	1	0	2	0	2	6
8:50 AM	0	0	0	0	0	4	1	5	0	5	0	5	0	2	0	2	12
8:55 AM	0	0	0	0	0	1	0	1	0	3	0	3	2	2	0	4	8
Total Survey	7	3	1	11	7	12	13	32	5	58	0	63	4	56	5	65	171

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	2	0	0	2	1	0	3	4	1	1	0	2	0	7	1	8	16
7:15 AM	1	2	0	3	1	0	3	4	1	4	0	5	0	9	1	10	22
7:30 AM	1	0	0	1	1	2	0	3	1	8	0	9	1	12	0	13	26
7:45 AM	0	0	1	1	0	0	4	4	0	16	0	16	0	5	0	5	26
8:00 AM	2	1	0	3	2	2	0	4	0	8	0	8	1	3	1	5	20
8:15 AM	0	0	0	0	0	1	2	3	0	4	0	4	0	8	1	9	16
8:30 AM	1	0	0	1	1	0	0	1	2	8	0	10	0	6	1	7	19
8:45 AM	0	0	0	0	1	7	1	9	0	9	0	9	2	6	0	8	26
Total Survey	7	3	1	11	7	12	13	32	5	58	0	63	4	56	5	65	171

Heavy Vehicle Peak Hour Summary
7:05 AM to 8:05 AM

By Approach	Northbound Elm St			Southbound Elm St			Eastbound Hwy 99 E			Westbound Hwy 99 E			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	9	4	13	17	9	26	34	45	79	35	37	72	95
PHF	0.45			0.71			0.53			0.67			0.82

By Movement	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	5	3	1	9	5	3	9	17	3	31	0	34	1	31	3	35	95
PHF	0.42	0.38	0.25	0.45	0.63	0.38	0.56	0.71	0.38	0.48	0.00	0.53	0.25	0.65	0.75	0.67	0.82

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

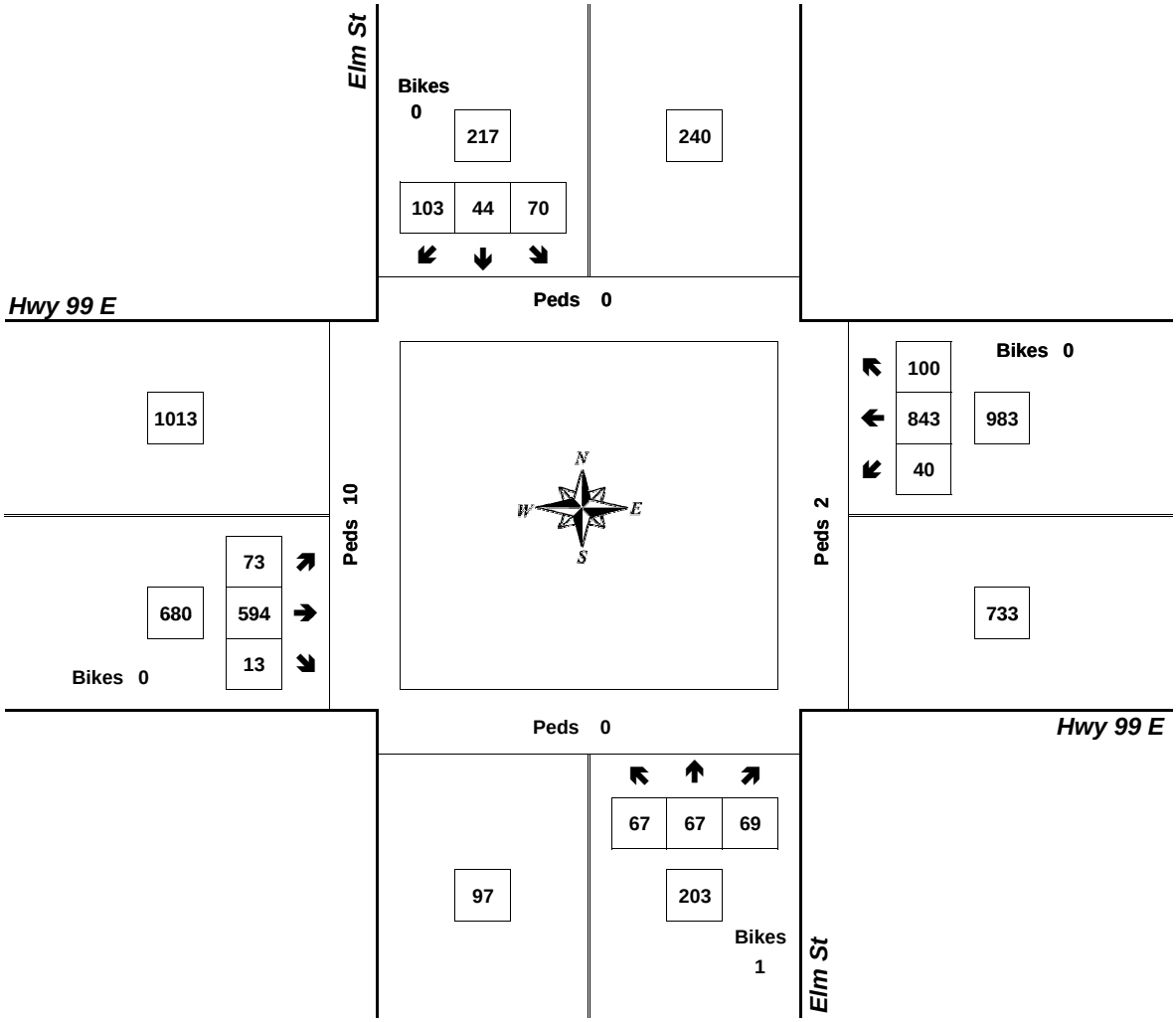
Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound Hwy 99 E				Westbound Hwy 99 E				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	4	2	1	7	3	2	10	15	3	29	0	32	1	33	2	36	90
7:15 AM	4	3	1	8	4	4	7	15	2	36	0	38	2	29	2	33	94
7:30 AM	3	1	1	5	3	5	6	14	1	36	0	37	2	28	2	32	88
7:45 AM	3	1	1	5	3	3	6	12	2	36	0	38	1	22	3	26	81
8:00 AM	3	1	0	4	4	10	3	17	2	29	0	31	3	23	3	29	81

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

Elm St & Hwy 99 E

7:05 AM to 8:05 AM
Thursday, March 10, 2011

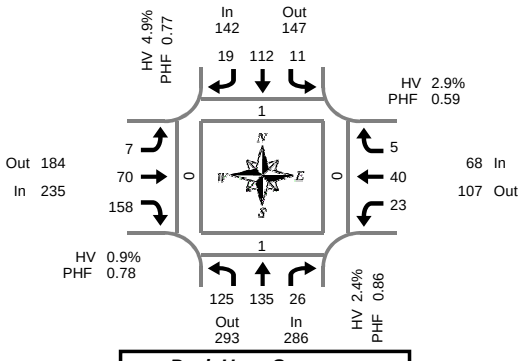


Approach	PHF	HV%	Volume
EB	0.86	5.0%	680
WB	0.75	3.6%	983
NB	0.63	4.4%	203
SB	0.67	7.8%	217
Intersection	0.85	4.6%	2,083

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:10 PM to 5:10 PM

Elm St & 2nd Ave

Wednesday, March 09, 2011
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	5	8	3	0	0	11	1	0	0	10	9	0	4	4	2	0	57	2	0	0	0
4:05 PM	7	11	1	0	1	12	0	0	0	12	15	0	3	2	0	0	64	0	0	0	0
4:10 PM	14	18	2	0	1	11	3	1	1	7	7	0	3	5	1	0	73	0	0	0	0
4:15 PM	9	10	5	0	1	8	1	0	0	4	13	2	1	4	1	0	57	0	1	0	0
4:20 PM	15	10	0	0	2	13	4	0	0	7	14	0	4	10	0	0	79	0	0	0	0
4:25 PM	13	8	1	0	0	9	1	0	0	9	22	0	0	1	0	0	64	0	0	0	0
4:30 PM	7	14	2	1	1	15	1	0	0	5	13	0	5	3	0	0	66	0	0	0	0
4:35 PM	8	11	1	0	0	9	4	0	1	7	7	0	2	5	2	0	57	0	0	0	0
4:40 PM	12	9	2	0	2	8	3	0	0	5	14	0	0	1	1	0	57	0	0	0	0
4:45 PM	10	7	2	0	2	2	0	0	1	5	6	0	3	4	0	0	42	1	0	0	0
4:50 PM	12	14	2	0	0	13	1	0	1	2	9	0	2	1	0	0	57	0	0	0	0
4:55 PM	9	13	3	0	0	10	1	0	1	7	9	0	1	2	0	0	56	0	0	0	0
5:00 PM	5	9	1	0	0	6	0	0	1	7	19	0	2	2	0	0	52	0	0	0	0
5:05 PM	11	12	5	1	2	8	0	0	1	5	25	0	0	2	0	0	71	0	0	0	0
5:10 PM	10	14	1	0	0	5	1	0	0	0	13	0	0	1	0	0	45	0	0	0	0
5:15 PM	3	12	0	0	1	12	1	0	1	1	7	0	2	1	0	0	41	0	4	0	0
5:20 PM	7	12	2	0	0	7	1	0	0	1	6	0	1	2	0	0	39	0	0	0	0
5:25 PM	4	14	3	0	0	12	1	0	0	0	15	0	3	2	0	0	54	0	0	0	0
5:30 PM	10	9	1	0	1	6	0	0	1	4	15	0	0	3	0	0	50	0	0	0	0
5:35 PM	7	16	3	0	0	9	0	0	0	0	12	0	1	2	0	0	50	0	0	0	0
5:40 PM	3	16	1	0	0	7	1	0	1	1	6	0	0	2	0	0	38	0	0	0	1
5:45 PM	5	7	2	0	0	10	0	0	0	4	8	0	2	2	1	0	41	0	0	0	0
5:50 PM	10	16	1	0	0	8	1	0	0	4	3	0	1	1	0	0	45	0	0	0	0
5:55 PM	4	9	1	0	0	5	0	0	0	3	11	0	1	2	1	0	37	0	1	2	0
Total Survey	200	279	45	2	14	216	26	1	10	110	278	2	41	64	9	0	1,292	3	6	2	1

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	26	37	6	0	2	34	4	1	1	29	31	0	10	11	3	0	194	2	0	0	0
4:15 PM	37	28	6	0	3	30	6	0	0	20	49	2	5	15	1	0	200	0	1	0	0
4:30 PM	27	34	5	1	3	32	8	0	1	17	34	0	7	9	3	0	180	0	0	0	0
4:45 PM	31	34	7	0	2	25	2	0	3	14	24	0	6	7	0	0	155	1	0	0	0
5:00 PM	26	35	7	1	2	19	1	0	2	12	57	0	2	5	0	0	168	0	0	0	0
5:15 PM	14	38	5	0	1	31	3	0	1	2	28	0	6	5	0	0	134	0	4	0	0
5:30 PM	20	41	5	0	1	22	1	0	2	5	33	0	1	7	0	0	138	0	0	0	1
5:45 PM	19	32	4	0	0	23	1	0	0	11	22	0	4	5	2	0	123	0	1	2	0
Total Survey	200	279	45	2	14	216	26	1	10	110	278	2	41	64	9	0	1,292	3	6	2	1

Peak Hour Summary
4:10 PM to 5:10 PM

By Approach	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	286	293	579	2	142	147	289	1	235	184	419	2	68	107	175	0	731	1	1	0	0
%HV	2.4%				4.9%				0.9%				2.9%				2.5%				
PHF	0.86				0.77				0.78				0.59				0.87				

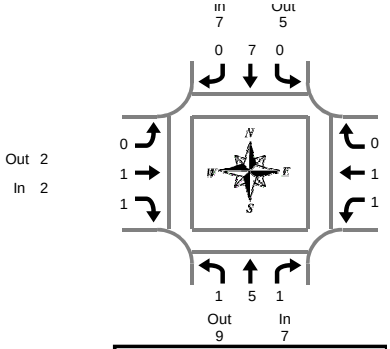
By Movement	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	125	135	26	286	11	112	19	142	7	70	158	235	23	40	5	68	731
%HV	0.8%	3.7%	3.8%	2.4%	0.0%	6.3%	0.0%	4.9%	0.0%	1.4%	0.6%	0.9%	4.3%	2.5%	0.0%	2.9%	2.5%
PHF	0.82	0.89	0.72	0.86	0.69	0.76	0.59	0.77	0.58	0.83	0.75	0.78	0.64	0.53	0.42	0.59	0.87

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	121	133	24	1	10	121	20	1	5	80	138	2	28	42	7	0	729	3	1	0	0
4:15 PM	121	131	25	2	10	106	17	0	6	63	164	2	20	36	4	0	703	1	1	0	0
4:30 PM	98	141	24	2	8	107	14	0	7	45	143	0	21	26	3	0	637	1	4	0	0
4:45 PM	91	148	24	1	6	97	7	0	8	33	142	0	15	24	0	0	595	1	4	0	1
5:00 PM	79	146	21	1	4	95	6	0	5	30	140	0	13	22	2	0	563	0	5	2	1

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Elm St & 2nd Ave

Wednesday, March 09, 2011
4:00 PM to 6:00 PM

Peak Hour Summary
4:10 PM to 5:10 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
4:05 PM	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
4:10 PM	1	2	1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
4:20 PM	0	1	0	1	0	2	0	2	0	0	0	0	1	0	0	1	4
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:40 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:05 PM	0	0	0	0	0	1	0	1	0	1	1	2	0	0	0	0	3
5:10 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	1	0	1	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	1	9	1	11	0	14	0	14	0	1	2	3	1	2	0	3	31

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	5	1	7	0	4	0	4	0	0	0	0	0	0	0	0	11
4:15 PM	0	2	0	2	0	3	0	3	0	0	0	0	1	0	0	1	6
4:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
4:45 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
5:00 PM	0	1	0	1	0	1	0	1	0	1	2	3	0	2	0	2	7
5:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Survey	1	9	1	11	0	14	0	14	0	1	2	3	1	2	0	3	31

Heavy Vehicle Peak Hour Summary
4:10 PM to 5:10 PM

By Approach	Northbound Elm St			Southbound Elm St			Eastbound 2nd Ave			Westbound 2nd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	7	9	16	7	5	12	2	2	4	2	2	4	18
PHF	0.29			0.58			0.25			0.50			0.45

By Movement	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	1	5	1	7	0	7	0	7	0	1	1	2	1	1	0	2	18
PHF	0.25	0.31	0.25	0.29	0.00	0.58	0.00	0.58	0.00	0.25	0.25	0.25	0.25	0.25	0.00	0.50	0.45

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

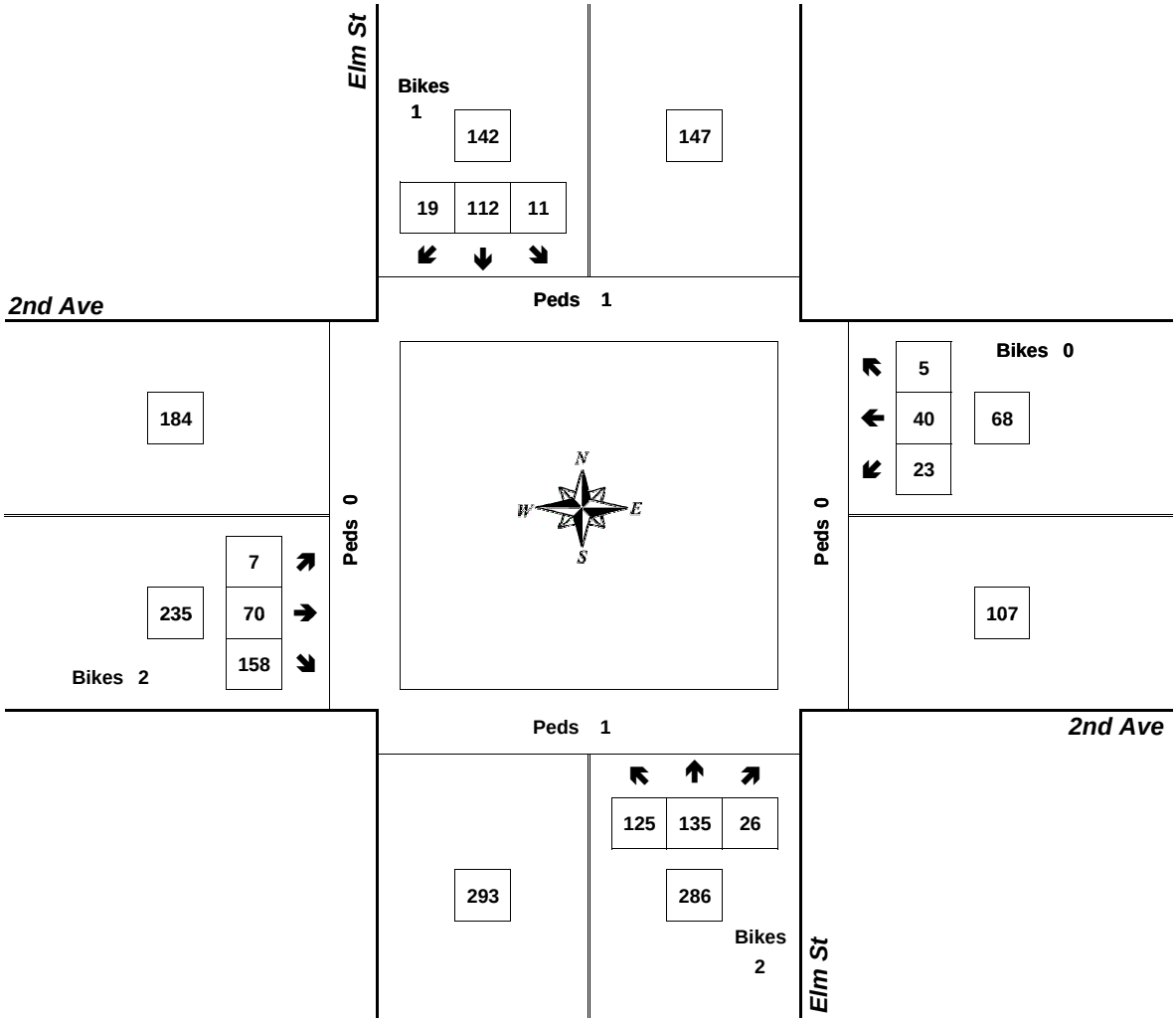
Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	8	1	10	0	10	0	10	0	0	0	0	1	0	0	1	21
4:15 PM	0	4	0	4	0	7	0	7	0	1	2	3	1	2	0	3	17
4:30 PM	0	2	0	2	0	5	0	5	0	1	2	3	0	2	0	2	12
4:45 PM	0	2	0	2	0	4	0	4	0	1	2	3	0	2	0	2	11
5:00 PM	0	1	0	1	0	4	0	4	0	1	2	3	0	2	0	2	10

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

Elm St & 2nd Ave

4:10 PM to 5:10 PM
Wednesday, March 09, 2011

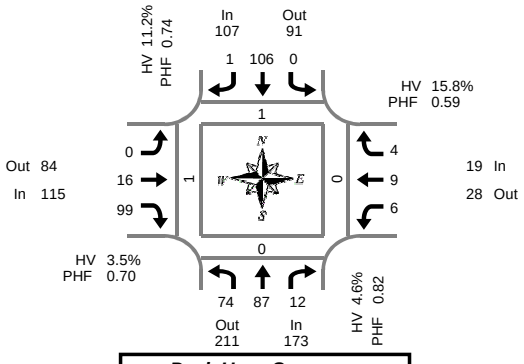


Approach	PHF	HV%	Volume
EB	0.78	0.9%	235
WB	0.59	2.9%	68
NB	0.86	2.4%	286
SB	0.77	4.9%	142
Intersection	0.87	2.5%	731

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:10 AM to 8:10 AM

Elm St & 2nd Ave

Thursday, March 10, 2011
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	5	5	0	0	0	0	0	0	0	1	5	0	0	1	0	0	17	0	0	0	0
7:05 AM	6	2	1	0	0	11	1	0	0	0	3	0	1	0	0	0	25	0	0	0	0
7:10 AM	11	5	1	0	0	11	0	0	0	0	4	0	0	2	0	0	34	1	0	0	0
7:15 AM	5	4	0	0	0	12	0	0	0	0	10	0	0	2	0	0	33	0	0	0	0
7:20 AM	5	8	1	0	0	12	0	0	0	2	10	0	2	1	1	0	42	0	0	0	0
7:25 AM	9	9	0	0	0	11	0	0	0	4	13	0	0	0	0	0	46	0	0	0	1
7:30 AM	4	7	2	0	0	13	0	0	0	2	10	0	1	0	0	0	39	0	0	0	0
7:35 AM	5	10	2	0	0	12	0	0	0	2	5	0	1	0	1	0	38	0	0	0	0
7:40 AM	8	8	1	0	0	7	0	0	0	0	2	0	0	1	0	1	27	0	0	0	0
7:45 AM	8	10	1	0	0	4	0	0	0	1	6	0	0	0	1	0	31	0	0	0	0
7:50 AM	6	10	1	0	0	5	0	0	0	1	9	0	1	0	1	0	34	0	0	0	0
7:55 AM	5	4	0	0	0	5	1	0	0	1	8	0	0	1	0	0	25	0	0	0	0
8:00 AM	6	7	1	0	0	5	0	0	0	3	11	0	1	0	0	0	34	0	0	0	0
8:05 AM	2	5	2	0	0	9	0	0	0	0	11	0	0	2	0	0	31	0	0	0	0
8:10 AM	2	6	0	0	0	3	0	0	0	1	13	0	1	1	0	0	27	0	0	0	0
8:15 AM	1	3	0	0	0	2	0	2	0	0	6	0	0	2	0	0	14	0	0	0	0
8:20 AM	7	4	1	0	0	5	0	0	0	1	3	0	0	0	0	0	21	0	0	0	0
8:25 AM	4	6	0	0	0	4	0	0	0	1	4	0	0	1	0	0	20	0	0	0	0
8:30 AM	5	7	1	0	0	2	1	0	0	1	6	0	0	1	1	0	25	0	0	0	0
8:35 AM	5	10	2	0	0	7	0	0	2	4	7	0	2	2	0	0	41	1	0	0	0
8:40 AM	1	12	2	0	0	3	1	0	0	3	3	0	0	0	1	0	26	0	0	0	0
8:45 AM	3	7	0	0	0	14	0	0	0	3	3	0	0	1	0	0	31	0	0	0	0
8:50 AM	5	8	1	0	0	13	1	0	1	3	8	0	0	1	0	0	41	0	0	0	0
8:55 AM	4	12	1	0	0	15	0	0	0	2	5	0	0	2	0	0	41	0	0	0	0
Total Survey	122	169	21	0	0	185	5	2	3	36	165	0	10	21	6	1	743	2	0	0	1

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	22	12	2	0	0	22	1	0	0	1	12	0	1	3	0	0	76	1	0	0	0
7:15 AM	19	21	1	0	0	35	0	0	0	6	33	0	2	3	1	0	121	0	0	0	1
7:30 AM	17	25	5	0	0	32	0	0	0	4	17	0	2	1	1	1	104	0	0	0	0
7:45 AM	19	24	2	0	0	14	1	0	0	3	23	0	1	1	2	0	90	0	0	0	0
8:00 AM	10	18	3	0	0	17	0	0	0	4	35	0	2	3	0	0	92	0	0	0	0
8:15 AM	12	13	1	0	0	11	0	2	0	2	13	0	0	3	0	0	55	0	0	0	0
8:30 AM	11	29	5	0	0	12	2	0	2	8	16	0	2	3	2	0	92	1	0	0	0
8:45 AM	12	27	2	0	0	42	1	0	1	8	16	0	0	4	0	0	113	0	0	0	0
Total Survey	122	169	21	0	0	185	5	2	3	36	165	0	10	21	6	1	743	2	0	0	1

Peak Hour Summary
7:10 AM to 8:10 AM

By Approach	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	173	211	384	0	107	91	198	0	115	84	199	0	19	28	47	1	414	1	0	0	1
%HV	4.6%				11.2%				3.5%				15.8%				6.5%				
PHF	0.82				0.74				0.70				0.59				0.81				

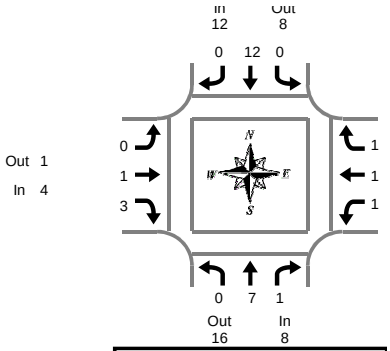
By Movement	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	74	87	12	173	0	106	1	107	0	16	99	115	6	9	4	19	414
%HV	0.0%	8.0%	8.3%	4.6%	0.0%	11.3%	0.0%	11.2%	0.0%	6.3%	3.0%	3.5%	16.7%	11.1%	25.0%	15.8%	6.5%
PHF	0.84	0.78	0.60	0.82	0.00	0.74	0.25	0.74	0.00	0.50	0.75	0.70	0.50	0.45	0.50	0.59	0.81

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	77	82	10	0	0	103	2	0	0	14	85	0	6	8	4	1	391	1	0	0	1
7:15 AM	65	88	11	0	0	98	1	0	0	17	108	0	7	8	4	1	407	0	0	0	1
7:30 AM	58	80	11	0	0	74	1	2	0	13	88	0	5	8	3	1	341	0	0	0	0
7:45 AM	52	84	11	0	0	54	3	2	2	17	87	0	5	10	4	0	329	1	0	0	0
8:00 AM	45	87	11	0	0	82	3	2	3	22	80	0	4	13	2	0	352	1	0	0	0

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Elm St & 2nd Ave

Thursday, March 10, 2011
7:00 AM to 9:00 AM

Peak Hour Summary
7:10 AM to 8:10 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
7:10 AM	0	1	0	1	0	1	0	1	0	0	2	2	0	0	0	0	4
7:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
7:20 AM	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
7:25 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
7:35 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
7:40 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 AM	0	0	0	0	0	1	0	1	0	1	1	2	1	0	1	2	5
7:55 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
8:00 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
8:05 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	0	0	0	3
8:10 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
8:20 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:25 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
8:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:35 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
8:40 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
8:50 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
8:55 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total Survey	0	11	1	12	0	26	0	26	0	1	4	5	1	1	1	3	46

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	1	0	1	0	3	0	3	0	0	2	2	0	0	0	0	6
7:15 AM	0	4	0	4	0	3	0	3	0	0	0	0	0	0	0	0	7
7:30 AM	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	0	2	0	2	0	1	1	2	1	1	1	3	7
8:00 AM	0	1	1	2	0	4	0	4	0	0	0	0	0	0	0	0	6
8:15 AM	0	1	0	1	0	2	0	2	0	0	1	1	0	0	0	0	4
8:30 AM	0	3	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	0	0	0	8
Total Survey	0	11	1	12	0	26	0	26	0	1	4	5	1	1	1	3	46

Heavy Vehicle Peak Hour Summary
7:10 AM to 8:10 AM

By Approach	Northbound Elm St			Southbound Elm St			Eastbound 2nd Ave			Westbound 2nd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	8	16	24	12	8	20	4	1	5	3	2	5	27
PHF	0.50			0.75			0.50			0.25			0.75

By Movement	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	7	1	8	0	12	0	12	0	1	3	4	1	1	1	3	27
PHF	0.00	0.44	0.25	0.50	0.00	0.75	0.00	0.75	0.00	0.25	0.38	0.50	0.25	0.25	0.25	0.25	0.75

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

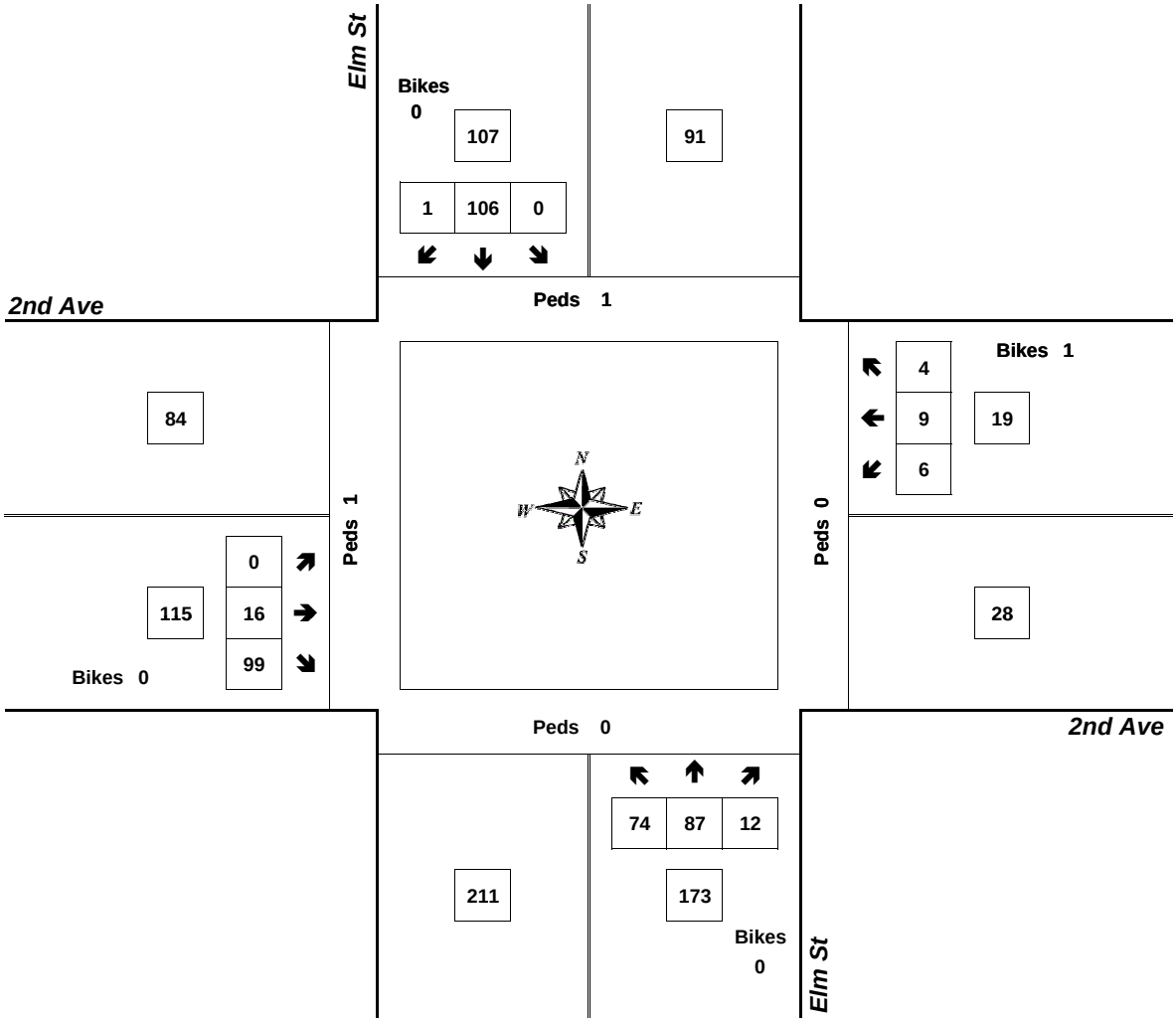
Interval Start Time	Northbound Elm St				Southbound Elm St				Eastbound 2nd Ave				Westbound 2nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	6	0	6	0	11	0	11	0	1	3	4	1	1	1	3	24
7:15 AM	0	6	1	7	0	12	0	12	0	1	1	2	1	1	1	3	24
7:30 AM	0	3	1	4	0	11	0	11	0	1	2	3	1	1	1	3	21
7:45 AM	0	5	1	6	0	9	0	9	0	1	2	3	1	1	1	3	21
8:00 AM	0	5	1	6	0	15	0	15	0	0	1	1	0	0	0	0	22

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

Elm St & 2nd Ave

7:10 AM to 8:10 AM
Thursday, March 10, 2011



Approach	PHF	HV%	Volume
EB	0.70	3.5%	115
WB	0.59	15.8%	19
NB	0.82	4.6%	173
SB	0.74	11.2%	107
Intersection	0.81	6.5%	414

Count Period: 7:00 AM to 9:00 AM

All Traffic Data Services, Inc.
15105 SE 17th St. Vancouver, WA. 98683
503-833-2740

Site Code: 8

NB — N Cedar St S-O NW 3rd Ave

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
3/10/11	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4	25	26
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	18	18
02:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4	21	22
03:00	2	2	3	0	0	0	0	0	0	0	0	0	0	0	7	22	23
04:00	3	21	13	1	0	0	0	0	0	0	0	0	0	0	38	23	25
05:00	1	9	18	2	0	0	0	0	0	0	0	0	0	0	30	24	25
06:00	3	41	28	3	0	0	0	0	0	0	0	0	0	0	75	24	25
07:00	**12**	**48**	**31**	**9**	0	0	0	0	0	0	0	0	0	0	**100**	24	27
08:00	5	25	22	1	0	0	0	0	0	0	0	0	0	0	53	24	25
09:00	3	24	16	2	0	0	0	0	0	0	0	0	0	0	45	24	25
10:00	7	28	18	0	0	0	0	0	0	0	0	0	0	0	53	23	24
11:00	4	20	18	2	0	0	0	0	0	0	0	0	0	0	44	24	25
12 PM	9	36	28	4	0	0	0	0	0	0	0	0	0	0	77	24	25
13:00	3	30	18	2	0	0	0	0	0	0	0	0	0	0	53	23	25
14:00	**12**	33	16	2	0	0	0	0	0	0	0	0	0	0	63	23	25
15:00	8	32	**30**	**11**	0	0	0	0	0	0	0	0	0	0	**81**	25	28
16:00	9	39	21	1	0	0	0	0	0	0	0	0	0	0	70	23	25
17:00	6	**46**	18	2	0	0	0	0	0	0	0	0	0	0	72	23	25
18:00	8	14	18	4	0	0	0	0	0	0	0	0	0	0	44	24	27
19:00	6	18	14	4	**1**	0	0	0	0	0	0	0	0	0	43	25	28
20:00	2	13	7	6	0	0	0	0	0	0	0	0	0	0	28	26	29
21:00	1	14	7	0	0	0	0	0	0	0	0	0	0	0	22	22	24
22:00	1	11	12	2	0	0	0	0	0	0	0	0	0	0	26	24	26
23:00	2	15	6	2	0	0	0	0	0	0	0	0	0	0	25	23	26
Total	107	526	365	61	1	0	0	0	0	0	0	0	0	0	1060		
Percent	10.1%	49.6%	34.4%	5.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	07:00											07:00		
Vol.	12	48	31	9											100		
PM Peak	14:00	17:00	15:00	15:00	19:00										15:00		
Vol.	12	46	30	11	1										81		
Grand Total	107	526	365	61	1	0	0	0	0	0	0	0	0	0	1060		
Percent	10.1%	49.6%	34.4%	5.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	16 MPH
50th Percentile :	20 MPH
85th Percentile :	24 MPH
95th Percentile :	26 MPH

Statistics

10 MPH Pace Speed :	16-25 MPH
Number in Pace :	891
Percent in Pace :	84.1%
Number of Vehicles > 25 MPH :	62
Percent of Vehicles > 25 MPH :	5.8%
Mean Speed(Average) :	19 MPH

All Traffic Data Services, Inc.
15105 SE 17th St. Vancouver, WA. 98683
503-833-2740

Site Code: 8

SB N Cedar St S-O NW 3rd Ave

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
3/10/11	3	15	3	1	0	0	0	0	0	0	0	0	0	0	22	21	23
01:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4	18	21
02:00	1	1	2	0	0	0	0	0	0	0	0	0	0	0	4	21	22
03:00	0	5	3	0	0	0	0	0	0	0	0	0	0	0	8	22	23
04:00	1	5	3	1	0	0	0	0	0	0	0	0	0	0	10	22	23
05:00	1	7	5	1	0	0	0	0	0	0	0	0	0	0	14	24	25
06:00	2	9	17	4	1	0	0	0	0	0	0	0	0	0	33	25	28
07:00	7	38	26	**11**	**2**	0	0	0	0	0	0	0	0	0	**84**	25	29
08:00	5	**41**	22	7	0	0	0	0	0	0	0	0	0	0	75	24	27
09:00	**8**	24	27	5	0	0	0	0	0	0	0	0	0	0	64	24	27
10:00	5	24	18	5	0	0	0	0	0	0	0	0	0	0	52	24	27
11:00	4	13	**44**	11	0	0	0	0	0	0	0	0	0	0	72	25	28
12 PM	5	45	33	11	0	0	0	0	0	0	0	0	0	0	94	25	28
13:00	7	21	36	10	0	0	0	0	0	0	0	0	0	0	74	25	28
14:00	10	26	33	14	0	0	0	0	0	0	0	0	0	0	83	26	29
15:00	11	33	47	14	0	0	0	0	0	0	0	0	0	0	105	25	28
16:00	**12**	59	**52**	**18**	**1**	0	0	0	0	0	0	0	0	0	**142**	25	28
17:00	11	**61**	48	12	0	0	0	0	0	0	0	0	0	0	132	25	27
18:00	7	29	35	13	0	0	0	0	0	0	0	0	0	0	84	25	28
19:00	4	18	23	4	0	0	0	0	0	0	0	0	0	0	49	25	27
20:00	2	7	24	2	0	0	0	0	0	0	0	0	0	0	35	25	25
21:00	3	6	5	6	0	0	0	0	0	0	0	0	0	0	20	27	29
22:00	0	3	3	2	0	0	0	0	0	0	0	0	0	0	8	26	27
23:00	1	17	5	1	0	0	0	0	0	0	0	0	0	0	24	22	25
Total	110	510	515	153	4	0	0	0	0	0	0	0	0	0	1292		
Percent	8.5%	39.5%	39.9%	11.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	08:00	11:00	07:00	07:00										07:00		
Vol.	8	41	44	11	2										84		
PM Peak	16:00	17:00	16:00	16:00	16:00										16:00		
Vol.	12	61	52	18	1										142		
Grand Total	110	510	515	153	4	0	0	0	0	0	0	0	0	0	1292		
Percent	8.5%	39.5%	39.9%	11.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	16 MPH
50th Percentile :	21 MPH
85th Percentile :	25 MPH
95th Percentile :	28 MPH

Statistics

10 MPH Pace Speed :	16-25 MPH
Number in Pace :	1025
Percent in Pace :	79.3%
Number of Vehicles > 25 MPH :	157
Percent of Vehicles > 25 MPH :	12.2%
Mean Speed(Average) :	20 MPH

All Traffic Data Services, Inc.
15105 SE 17th St. Vancouver, WA. 98683
503-833-2740

Site Code: 8

NB — N Cedar St S-O NW 3rd Ave

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
3/10/11	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	4	3	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	27	8	0	3	0	0	0	0	0	0	0	0	0	38
05:00	0	22	7	0	1	0	0	0	0	0	0	0	0	0	30
06:00	0	51	16	0	7	0	0	0	0	0	0	0	0	1	75
07:00	0	67	25	0	7	1	0	0	0	0	0	0	0	0	100
08:00	0	37	13	0	3	0	0	0	0	0	0	0	0	0	53
09:00	0	25	15	0	3	0	0	0	0	0	0	0	0	2	45
10:00	0	35	13	0	4	0	0	0	0	0	0	0	0	1	53
11:00	0	28	13	0	2	0	0	0	0	0	0	0	0	1	44
12 PM	1	44	25	0	6	1	0	0	0	0	0	0	0	0	77
13:00	0	32	16	0	3	0	0	0	0	0	0	0	0	2	53
14:00	0	46	12	0	4	0	0	1	0	0	0	0	0	0	63
15:00	0	53	18	0	6	0	0	1	0	0	0	0	0	3	81
16:00	1	52	14	0	3	0	0	0	0	0	0	0	0	0	70
17:00	0	53	16	0	1	0	0	0	0	0	0	0	0	2	72
18:00	1	29	12	0	1	0	0	0	0	0	0	0	0	1	44
19:00	0	26	14	0	1	0	0	0	0	0	0	0	0	2	43
20:00	0	20	7	0	1	0	0	0	0	0	0	0	0	0	28
21:00	0	18	3	0	1	0	0	0	0	0	0	0	0	0	22
22:00	0	20	5	0	1	0	0	0	0	0	0	0	0	0	26
23:00	0	22	3	0	0	0	0	0	0	0	0	0	0	0	25
Total	3	720	260	0	58	2	0	2	0	0	0	0	0	15	1060
Percent	0.3%	67.9%	24.5%	0.0%	5.5%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	
AM Peak		07:00	07:00		06:00	07:00								09:00	
Vol.		67	25		7	1								2	
PM Peak	12:00	15:00	12:00		12:00	12:00		14:00						15:00	
Vol.	1	53	25		6	1		1						3	
Grand Total	3	720	260	0	58	2	0	2	0	0	0	0	0	15	1060
Percent	0.3%	67.9%	24.5%	0.0%	5.5%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	

All Traffic Data Services, Inc.
15105 SE 17th St. Vancouver, WA. 98683
503-833-2740

Site Code: 8

SB — N Cedar St S-O NW 3rd Ave

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
3/10/11	0	19	2	0	1	0	0	0	0	0	0	0	0	0	22
01:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	3	5	0	0	0	0	0	0	0	0	0	0	0	8
04:00	0	5	4	0	1	0	0	0	0	0	0	0	0	0	10
05:00	0	11	1	0	2	0	0	0	0	0	0	0	0	0	14
06:00	0	21	8	0	4	0	0	0	0	0	0	0	0	0	33
07:00	0	48	20	2	13	0	0	0	0	0	0	0	0	1	84
08:00	0	46	21	1	5	0	0	0	0	0	0	0	0	2	75
09:00	2	31	18	0	11	2	0	0	0	0	0	0	0	0	64
10:00	0	34	11	0	6	0	0	1	0	0	0	0	0	0	52
11:00	0	45	21	0	5	0	0	0	0	0	0	0	0	1	72
12 PM	0	49	35	0	9	0	0	0	0	0	0	0	0	1	94
13:00	1	42	20	1	7	1	0	1	0	0	0	0	0	1	74
14:00	0	51	21	1	8	0	0	0	0	0	0	0	0	2	83
15:00	1	65	28	0	10	0	0	1	0	0	0	0	0	0	105
16:00	0	88	37	2	12	0	0	0	0	0	0	0	0	3	142
17:00	0	93	28	1	9	0	0	1	0	0	0	0	0	0	132
18:00	0	54	22	0	5	0	0	1	0	0	0	0	0	2	84
19:00	0	30	13	0	5	0	0	0	0	0	0	0	0	1	49
20:00	0	26	7	0	2	0	0	0	0	0	0	0	0	0	35
21:00	1	16	1	0	1	1	0	0	0	0	0	0	0	0	20
22:00	0	7	1	0	0	0	0	0	0	0	0	0	0	0	8
23:00	0	17	6	0	1	0	0	0	0	0	0	0	0	0	24
Total	5	806	333	8	117	4	0	5	0	0	0	0	0	14	1292
Percent	0.4%	62.4%	25.8%	0.6%	9.1%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	
AM Peak	09:00	07:00	08:00	07:00	07:00	09:00		10:00						08:00	
Vol.	2	48	21	2	13	2		1						2	
PM Peak	13:00	17:00	16:00	16:00	16:00	13:00		13:00						16:00	
Vol.	1	93	37	2	12	1		1						3	
Grand Total	5	806	333	8	117	4	0	5	0	0	0	0	0	14	1292
Percent	0.4%	62.4%	25.8%	0.6%	9.1%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	

All Traffic Data Services, Inc.
15105 SE 17th St. Vancouver, WA. 98683
503-833-2740

Site Code: 7
2nd Ave W-O NW Cedar St

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
3/10/11	2	6	9	3	0	0	0	0	0	0	0	0	0	0	20	25	27
01:00	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	23	23
02:00	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4	22	23
03:00	1	1	5	2	0	0	0	0	0	0	0	0	0	0	9	26	27
04:00	0	4	6	1	0	0	0	0	0	0	0	0	0	0	11	24	25
05:00	1	4	12	4	0	0	0	0	0	0	0	0	0	0	21	26	28
06:00	2	9	26	15	**1**	0	0	0	0	0	0	0	0	0	53	28	30
07:00	6	15	**57**	13	1	0	0	0	0	0	0	0	0	0	**92**	25	28
08:00	9	17	42	13	0	0	0	0	0	0	0	0	0	0	81	26	28
09:00	12	15	30	7	0	0	0	0	0	0	0	0	0	0	64	25	27
10:00	**15**	17	25	5	0	0	0	0	0	0	0	0	0	0	62	25	27
11:00	11	**19**	27	**17**	0	0	0	0	0	0	0	0	0	0	74	27	29
12 PM	14	25	45	18	1	0	0	0	0	0	0	0	0	0	103	26	29
13:00	15	18	30	10	0	0	0	0	0	0	0	0	0	0	73	25	28
14:00	7	17	50	12	0	0	0	0	0	0	0	0	0	0	86	25	28
15:00	18	30	70	24	0	0	0	0	0	0	0	0	0	0	142	26	29
16:00	**21**	**32**	73	21	2	0	0	0	0	0	0	0	0	0	**149**	26	29
17:00	9	21	**81**	**33**	**4**	0	0	0	0	0	0	0	0	0	148	28	30
18:00	7	12	44	15	2	0	0	0	0	0	0	0	0	0	80	27	30
19:00	1	5	29	12	4	0	0	0	0	0	0	0	0	0	51	28	31
20:00	2	4	19	10	0	0	0	0	0	0	0	0	0	0	35	28	29
21:00	2	2	9	5	2	0	0	0	0	0	0	0	0	0	20	29	31
22:00	0	0	4	1	1	0	0	0	0	0	0	0	0	0	6	30	31
23:00	0	2	15	5	1	0	0	0	0	0	0	0	0	0	23	28	30
Total	155	276	714	246	19	0	0	0	0	0	0	0	0	0	1410		
Percent	11.0%	19.6%	50.6%	17.4%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	07:00	11:00	06:00										07:00		
Vol.	15	19	57	17	1										92		
PM Peak	16:00	16:00	17:00	17:00	17:00										16:00		
Vol.	21	32	81	33	4										149		
Grand Total	155	276	714	246	19	0	0	0	0	0	0	0	0	0	1410		
Percent	11.0%	19.6%	50.6%	17.4%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	17 MPH
50th Percentile :	22 MPH
85th Percentile :	27 MPH
95th Percentile :	29 MPH

Statistics

10 MPH Pace Speed :	16-25 MPH
Number in Pace :	990
Percent in Pace :	70.2%
Number of Vehicles > 25 MPH :	265
Percent of Vehicles > 25 MPH :	18.8%
Mean Speed(Average) :	21 MPH

All Traffic Data Services, Inc.
15105 SE 17th St. Vancouver, WA. 98683
503-833-2740

Site Code: 7

WB 2nd Ave W-O NW Cedar St

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
3/10/11	2	2	2	0	0	0	0	0	0	0	0	0	0	0	6	21	22
01:00	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4	22	26
02:00	2	0	2	0	0	0	0	0	0	0	0	0	0	0	4	21	22
03:00	1	0	5	2	0	0	0	0	0	0	0	0	0	0	8	26	27
04:00	3	3	15	4	**1**	0	0	0	0	0	0	0	0	0	26	26	29
05:00	1	2	13	6	0	0	0	0	0	0	0	0	0	0	22	27	29
06:00	3	**11**	32	8	0	0	0	0	0	0	0	0	0	0	54	25	28
07:00	5	9	**39**	**17**	1	0	0	0	0	0	0	0	0	0	**71**	27	29
08:00	6	6	17	6	0	0	0	0	0	0	0	0	0	0	35	26	28
09:00	4	10	16	4	0	0	0	0	0	0	0	0	0	0	34	25	27
10:00	10	10	32	6	1	0	0	0	0	0	0	0	0	0	59	25	28
11:00	**13**	7	29	5	1	0	0	0	0	0	0	0	0	0	55	25	28
12 PM	**17**	**20**	35	10	1	0	0	0	0	0	0	0	0	0	**83**	25	29
13:00	13	14	30	7	0	0	0	0	0	0	0	0	0	0	64	25	27
14:00	5	15	30	10	0	0	0	0	0	0	0	0	0	0	60	26	29
15:00	7	13	41	**13**	0	0	0	0	0	0	0	0	0	0	74	26	28
16:00	9	17	**47**	5	1	0	0	0	0	0	0	0	0	0	79	25	27
17:00	16	10	43	9	0	0	0	0	0	0	0	0	0	0	78	25	28
18:00	2	11	25	11	1	0	0	0	0	0	0	0	0	0	50	27	29
19:00	3	6	21	9	1	**1**	0	0	0	0	0	0	0	0	41	28	30
20:00	2	8	24	4	**2**	0	0	0	0	0	0	0	0	0	40	25	29
21:00	1	6	14	4	0	0	0	0	0	0	0	0	0	0	25	25	28
22:00	2	2	12	3	0	0	0	0	0	0	0	0	0	0	19	25	27
23:00	2	3	13	3	0	0	0	0	0	0	0	0	0	0	21	25	27
Total	129	186	539	147	10	1	0	0	0	0	0	0	0	0	1012		
Percent	12.7%	18.4%	53.3%	14.5%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	06:00	07:00	07:00	04:00										07:00		
Vol.	13	11	39	17	1										71		
PM Peak	12:00	12:00	16:00	15:00	20:00	19:00									12:00		
Vol.	17	20	47	13	2	1									83		
Grand Total	129	186	539	147	10	1	0	0	0	0	0	0	0	0	1012		
Percent	12.7%	18.4%	53.3%	14.5%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	16 MPH
50th Percentile :	22 MPH
85th Percentile :	26 MPH
95th Percentile :	29 MPH

Statistics

10 MPH Pace Speed :	16-25 MPH
Number in Pace :	725
Percent in Pace :	71.6%
Number of Vehicles > 25 MPH :	158
Percent of Vehicles > 25 MPH :	15.6%
Mean Speed(Average) :	21 MPH

All Traffic Data Services, Inc.
15105 SE 17th St. Vancouver, WA. 98683
503-833-2740

Site Code: 7
2nd Ave W-O N Cedar St

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
3/10/11	0	18	2	0	0	0	0	0	0	0	0	0	0	0	20
01:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	4	5	0	0	0	0	0	0	0	0	0	0	0	9
04:00	0	5	5	0	1	0	0	0	0	0	0	0	0	0	11
05:00	0	16	3	0	2	0	0	0	0	0	0	0	0	0	21
06:00	0	32	17	0	4	0	0	0	0	0	0	0	0	0	53
07:00	3	61	18	0	10	0	0	0	0	0	0	0	0	0	92
08:00	1	57	19	0	3	0	0	0	0	0	0	0	0	1	81
09:00	0	37	13	0	10	0	0	0	1	0	0	0	0	3	64
10:00	0	38	14	0	6	0	0	2	0	0	0	0	0	2	62
11:00	0	45	23	0	4	2	0	0	0	0	0	0	0	0	74
12 PM	1	58	34	0	9	0	0	0	0	0	0	0	0	1	103
13:00	4	46	15	1	6	1	0	0	0	0	0	0	0	0	73
14:00	0	54	22	0	6	0	0	0	0	0	0	0	0	4	86
15:00	5	81	38	0	15	1	0	1	0	0	0	0	0	1	142
16:00	1	100	40	0	8	0	0	0	0	0	0	0	0	0	149
17:00	1	95	41	0	8	0	0	0	0	0	0	0	0	3	148
18:00	1	51	21	0	7	0	0	0	0	0	0	0	0	0	80
19:00	0	30	16	0	4	0	0	0	0	0	0	0	0	1	51
20:00	0	26	8	0	1	0	0	0	0	0	0	0	0	0	35
21:00	0	15	3	0	1	0	0	0	1	0	0	0	0	0	20
22:00	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
23:00	0	17	6	0	0	0	0	0	0	0	0	0	0	0	23
Total	17	895	367	1	105	4	0	3	2	0	0	0	0	16	1410
Percent	1.2%	63.5%	26.0%	0.1%	7.4%	0.3%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	1.1%	
AM Peak	07:00	07:00	11:00		07:00	11:00		10:00	09:00					09:00	
Vol.	3	61	23		10	2		2	1					3	
PM Peak	15:00	16:00	17:00	13:00	15:00	13:00		15:00	21:00					14:00	
Vol.	5	100	41	1	15	1		1	1					4	
Grand Total	17	895	367	1	105	4	0	3	2	0	0	0	0	16	1410
Percent	1.2%	63.5%	26.0%	0.1%	7.4%	0.3%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	1.1%	

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Site Code: 7
2nd Ave W-O N Cedar St

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
3/10/11	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
01:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	3	5	0	0	0	0	0	0	0	0	0	0	0	8
04:00	1	20	4	0	1	0	0	0	0	0	0	0	0	0	26
05:00	1	16	3	0	2	0	0	0	0	0	0	0	0	0	22
06:00	0	39	11	0	4	0	0	0	0	0	0	0	0	0	54
07:00	1	46	19	0	3	0	0	1	0	0	0	0	0	1	71
08:00	0	25	8	0	1	1	0	0	0	0	0	0	0	0	35
09:00	0	20	11	0	2	0	0	0	0	0	0	0	0	1	34
10:00	0	37	16	0	6	0	0	0	0	0	0	0	0	0	59
11:00	3	30	14	0	6	0	0	0	0	0	0	0	0	2	55
12 PM	4	52	21	0	5	0	0	0	1	0	0	0	0	0	83
13:00	2	37	20	0	3	0	0	0	0	0	0	0	0	2	64
14:00	0	38	17	0	4	0	0	1	0	0	0	0	0	0	60
15:00	0	54	11	0	5	0	0	1	0	0	0	0	0	3	74
16:00	2	50	21	0	4	1	0	0	0	0	0	0	0	1	79
17:00	3	55	15	0	3	2	0	0	0	0	0	0	0	0	78
18:00	0	30	16	0	3	1	0	0	0	0	0	0	0	0	50
19:00	0	27	12	0	1	0	0	0	0	0	0	0	0	1	41
20:00	0	27	12	0	1	0	0	0	0	0	0	0	0	0	40
21:00	0	17	8	0	0	0	0	0	0	0	0	0	0	0	25
22:00	0	14	4	0	1	0	0	0	0	0	0	0	0	0	19
23:00	0	17	4	0	0	0	0	0	0	0	0	0	0	0	21
Total	17	664	256	0	55	5	0	3	1	0	0	0	0	11	1012
Percent	1.7%	65.6%	25.3%	0.0%	5.4%	0.5%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	1.1%	
AM Peak	11:00	07:00	07:00		10:00	08:00		07:00						11:00	
Vol.	3	46	19		6	1		1						2	
PM Peak	12:00	17:00	12:00		12:00	17:00		14:00	12:00					15:00	
Vol.	4	55	21		5	2		1	1					3	
Grand Total	17	664	256	0	55	5	0	3	1	0	0	0	0	11	1012
Percent	1.7%	65.6%	25.3%	0.0%	5.4%	0.5%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	1.1%	

TRAFFIC LEVELS OF SERVICE

Analysis of traffic volumes is useful in understanding the general nature of traffic in an area, but by itself indicates neither the ability of the street network to carry additional traffic nor the quality of service afforded by the street facilities. For this, the concept of *level of service* has been developed to subjectively describe traffic performance. Level of service can be measured at intersections and along key roadway segments.

Level of service categories are similar to report card ratings for traffic performance. Intersections are typically the controlling bottlenecks of traffic flow and the ability of a roadway system to carry traffic efficiently is generally diminished in their vicinities. Levels of Service A, B and C indicate conditions where traffic moves without significant delays over periods of peak travel demand. Level of service D and E are progressively worse peak hour operating conditions and F conditions represent where demand exceeds the capacity of an intersection. Most urban communities set level of service D as the minimum acceptable level of service for peak hour operation and plan for level of service C or better for all other times of the day. The *Highway Capacity Manual* provides level of service calculation methodology for both intersections and arterials.[1] The following two sections provide interpretations of the analysis approaches.

[1] *2000 Highway Capacity Manual*, Transportation Research Board, Washington D.C., 2000, Chapters 16 and 17.

UNSIGNALIZED INTERSECTIONS (Two-Way Stop Controlled)

Unsignalized intersection level of service is reported for the major street and minor street (generally, left turn movements). The method assesses available and critical gaps in the traffic stream which make it possible for side street traffic to enter the main street flow. The *2000 Highway Capacity Manual* describes the detailed methodology. It is not unusual for an intersection to experience level of service E or F conditions for the minor street left turn movement. It should be understood that, often, a poor level of service is experienced by only a few vehicles and the intersection as a whole operates acceptably.

Unsignalized intersection levels of service are described in the following table.

Level of Service	Expected Delay	(Sec/Veh)
A	Little or no delay	0-10.0
B	Short traffic delay	>10.1-15.0
C	Average traffic delays	>15.1-25.0
D	Long traffic delays	>25.1-35.0
E	Very long traffic delays	>35.1-50.0
F	Extreme delays potentially affecting other traffic movements in the intersection	> 50

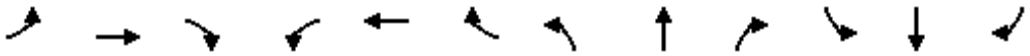
Source: 2000 *Highway Capacity Manual*, Transportation Research Board Washington, D.C.

SIGNALIZED INTERSECTIONS

For signalized intersections, level of service is evaluated based upon average vehicle delay experienced by vehicles entering an intersection. Control delay (or signal delay) includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. In previous versions of this chapter of the HCM (1994 and earlier), delay included only stopped delay. As delay increases, the level of service decreases. Calculations for signalized and unsignalized intersections are different due to the variation in traffic control. The *2000 Highway Capacity Manual* provides the basis for these calculations.

Level of Service	Delay (secs.)	Description
A	≤10.00	**Free Flow/Insignificant Delays:** No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Most vehicles do not stop at all. Progression is extremely favorable and most vehicles arrive during the green phase.
B	10.1-20.0	**Stable Operation/Minimal Delays:** An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles. This level generally occurs with good progression, short cycle lengths, or both.
C	20.1-35.0	**Stable Operation/Acceptable Delays:** Major approach phases fully utilized. Most drivers feel somewhat restricted. Higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, and the number of vehicles stopping is significant.
D	35.1-55.0	**Approaching Unstable/Tolerable Delays:** The influence of congestion becomes more noticeable. Drivers may have to wait through more than one red signal indication. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. The proportion of vehicles not stopping declines, and individual cycle failures are noticeable.
E	55.1-80.0	**Unstable Operation/Significant Delays:** Volumes at or near capacity. Vehicles may wait though several signal cycles. Long queues form upstream from intersection. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are a frequent occurrence.
F	≥80.0	**Forced Flow/Excessive Delays:** Represents jammed conditions. Queues may block upstream intersections. This level occurs when arrival flow rates exceed intersection capacity, and is considered to be unacceptable to most drivers. Poor progression, long cycle lengths, and v/c ratios approaching 1.0 may contribute to these high delay levels.

Source: *2000 Highway Capacity Manual*, Transportation Research Board, Washington D.C.

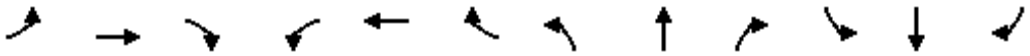


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	73	594	13	40	843	100	67	67	69	70	44	103
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.98		1.00	0.92		1.00	0.90	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1599	3160		1630	3177		1554	1558		1554	1424	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1599	3160		1630	3177		1554	1558		1554	1424	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	86	699	15	47	992	118	79	79	81	82	52	121
RTOR Reduction (vph)	0	1	0	0	7	0	0	41	0	0	93	0
Lane Group Flow (vph)	86	713	0	47	1103	0	79	119	0	82	80	0
Confl. Peds. (#/hr)							10		2	2		10
Heavy Vehicles (%)	4%	5%	0%	2%	3%	3%	7%	4%	2%	7%	7%	8%
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	8.5	52.1		11.5	55.6		7.8	12.6		7.8	12.6	
Effective Green, g (s)	8.5	52.6		11.5	55.6		7.8	12.1		7.8	12.1	
Actuated g/C Ratio	0.08	0.53		0.12	0.56		0.08	0.12		0.08	0.12	
Clearance Time (s)	4.0	4.5		4.0	4.0		4.0	3.5		4.0	3.5	
Vehicle Extension (s)	2.3	4.3		2.3	4.3		2.3	2.3		2.3	2.3	
Lane Grp Cap (vph)	136	1662		187	1766		121	189		121	172	
v/s Ratio Prot	c0.05	0.23		0.03	c0.35		0.05	c0.08		c0.05	0.06	
v/s Ratio Perm												
v/c Ratio	0.63	0.43		0.25	0.62		0.65	0.63		0.68	0.46	
Uniform Delay, d1	44.2	14.5		40.3	15.1		44.8	41.8		44.9	40.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.6	0.8		0.4	1.7		10.1	5.2		12.2	1.2	
Delay (s)	51.9	15.3		40.7	16.8		54.9	47.0		57.1	42.1	
Level of Service	D	B		D	B		D	D		E	D	
Approach Delay (s)		19.2			17.8			49.6			46.9	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM Average Control Delay	24.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		

Description: 3. Elm St -- Hwy 99E

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	5	8	0	4	35	176	19	4	201	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	0	6	9	0	4	39	198	21	4	226	0
Pedestrians		3									3	
Lane Width (ft)		12.0									12.0	
Walking Speed (ft/s)		4.0									4.0	
Percent Blockage		0									0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								239				
pX, platoon unblocked												
vC, conflicting volume	532	536	229	528	525	211	229			219		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	532	536	229	528	525	211	229			219		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	98	100	99	97			100		
cM capacity (veh/h)	444	438	813	449	444	832	1330			1362		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	6	13	258	230
Volume Left	0	9	39	4
Volume Right	6	4	21	0
cSH	813	530	1330	1362
Volume to Capacity	0.01	0.03	0.03	0.00
Queue Length 95th (ft)	1	2	2	0
Control Delay (s)	9.5	12.0	1.4	0.2
Lane LOS	A	B	A	A
Approach Delay (s)	9.5	12.0	1.4	0.2
Approach LOS	A	B		

Intersection Summary				
Average Delay	1.2			
Intersection Capacity Utilization	41.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	16	99	6	9	4	74	87	12	0	106	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	0	20	122	7	11	5	91	107	15	0	131	1
Pedestrians		1									1	
Lane Width (ft)		12.0									12.0	
Walking Speed (ft/s)		4.0									4.0	
Percent Blockage		0									0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								560				
pX, platoon unblocked												
vC, conflicting volume	442	437	132	561	431	116	133			122		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	442	437	132	561	431	116	133			122		
tC, single (s)	7.1	6.6	6.2	7.3	6.6	6.5	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.1	3.3	3.6	4.1	3.5	2.2			2.2		
p0 queue free %	100	96	87	98	98	99	94			100		
cM capacity (veh/h)	491	475	913	333	472	877	1463			1478		

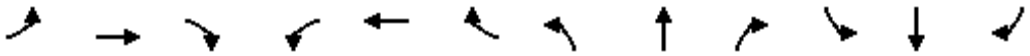
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	142	23	214	132
Volume Left	0	7	91	0
Volume Right	122	5	15	1
cSH	809	457	1463	1478
Volume to Capacity	0.18	0.05	0.06	0.00
Queue Length 95th (ft)	16	4	5	0
Control Delay (s)	10.4	13.3	3.6	0.0
Lane LOS	B	B	A	
Approach Delay (s)	10.4	13.3	3.6	0.0
Approach LOS	B	B		

Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	29.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	10	18	6	3	0	11	68	9	1	84	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Hourly flow rate (vph)	0	13	23	8	4	0	14	88	12	1	109	0
Pedestrians		3			3			3			2	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								884				
pX, platoon unblocked												
vC, conflicting volume	241	246	115	270	240	99	112			103		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	241	246	115	270	240	99	112			103		
tC, single (s)	7.1	6.5	6.6	7.1	6.5	6.2	4.5			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.7	3.5	4.0	3.3	2.5			2.2		
p0 queue free %	100	98	97	99	99	100	99			100		
cM capacity (veh/h)	702	648	842	645	653	958	1288			1498		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	36	12	114	110
Volume Left	0	8	14	1
Volume Right	23	0	12	0
cSH	761	648	1288	1498
Volume to Capacity	0.05	0.02	0.01	0.00
Queue Length 95th (ft)	4	1	1	0
Control Delay (s)	10.0	10.7	1.1	0.1
Lane LOS	A	B	A	A
Approach Delay (s)	10.0	10.7	1.1	0.1
Approach LOS	A	B		

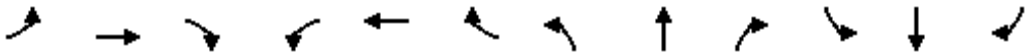
Intersection Summary				
Average Delay	2.3			
Intersection Capacity Utilization	24.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	23	0	0	7	62	2	28	4	63	7	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	9	29	0	0	9	78	3	35	5	80	9	8
Pedestrians		4			2			4			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	308	224	21	236	225	46	20			43		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	308	224	21	236	225	46	20			43		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.2		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.3		
p0 queue free %	98	95	100	100	99	92	100			95		
cM capacity (veh/h)	561	639	1056	664	638	1022	1603			1538		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	38	87	43	96
Volume Left	9	0	3	80
Volume Right	0	78	5	8
cSH	619	964	1603	1538
Volume to Capacity	0.06	0.09	0.00	0.05
Queue Length 95th (ft)	5	7	0	4
Control Delay (s)	11.2	9.1	0.4	6.3
Lane LOS	B	A	A	A
Approach Delay (s)	11.2	9.1	0.4	6.3
Approach LOS	B	A		

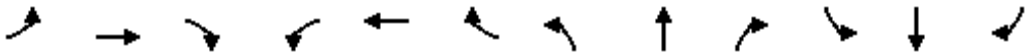
Intersection Summary				
Average Delay	7.0			
Intersection Capacity Utilization	25.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	16	25	0	14	6	67	27	0	8	50	14
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	7	18	29	0	16	7	77	31	0	9	57	16
Pedestrians		3						3			3	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		4.0						4.0			4.0	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	290	272	72	310	280	34	77			31		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	290	272	72	310	280	34	77			31		
tC, single (s)	7.1	7.0	6.2	7.1	6.8	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.5	3.3	3.5	4.3	3.3	2.2			2.2		
p0 queue free %	99	97	97	100	97	99	95			99		
cM capacity (veh/h)	615	529	991	583	553	1042	1525			1595		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	54	23	108	83
Volume Left	7	0	77	9
Volume Right	29	7	0	16
cSH	720	643	1525	1595
Volume to Capacity	0.07	0.04	0.05	0.01
Queue Length 95th (ft)	6	3	4	0
Control Delay (s)	10.4	10.8	5.4	0.8
Lane LOS	B	B	A	A
Approach Delay (s)	10.4	10.8	5.4	0.8
Approach LOS	B	B		

Intersection Summary				
Average Delay	5.5			
Intersection Capacity Utilization	28.0%	ICU Level of Service	A	
Analysis Period (min)	15			
Description: 15. N Cedar St -- NW 3rd Ave				

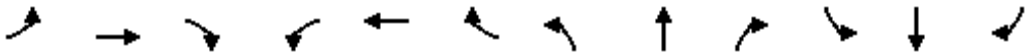


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	594	13	40	843	100	67	81	69	73	46	105
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.98		1.00	0.93		1.00	0.90	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1599	3160		1630	3177		1554	1569		1554	1424	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1599	3160		1630	3177		1554	1569		1554	1424	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	99	699	15	47	992	118	79	95	81	86	54	124
RTOR Reduction (vph)	0	1	0	0	7	0	0	34	0	0	91	0
Lane Group Flow (vph)	99	713	0	47	1103	0	79	142	0	86	87	0
Confl. Peds. (#/hr)							10		2	2		10
Heavy Vehicles (%)	4%	5%	0%	2%	3%	3%	7%	4%	2%	7%	7%	8%
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	8.9	51.0		11.5	54.1		7.7	13.6		7.9	13.8	
Effective Green, g (s)	8.9	51.5		11.5	54.1		7.7	13.1		7.9	13.3	
Actuated g/C Ratio	0.09	0.52		0.12	0.54		0.08	0.13		0.08	0.13	
Clearance Time (s)	4.0	4.5		4.0	4.0		4.0	3.5		4.0	3.5	
Vehicle Extension (s)	2.3	4.3		2.3	4.3		2.3	2.3		2.3	2.3	
Lane Grp Cap (vph)	142	1627		187	1719		120	206		123	189	
v/s Ratio Prot	c0.06	0.23		0.03	c0.35		0.05	c0.09		c0.06	0.06	
v/s Ratio Perm												
v/c Ratio	0.70	0.44		0.25	0.64		0.66	0.69		0.70	0.46	
Uniform Delay, d1	44.2	15.2		40.3	16.1		44.9	41.5		44.9	40.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	12.3	0.9		0.4	1.9		10.4	8.1		14.1	1.0	
Delay (s)	56.5	16.0		40.7	18.0		55.3	49.6		59.0	41.1	
Level of Service	E	B		D	B		E	D		E	D	
Approach Delay (s)		21.0			18.9			51.4			46.9	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM Average Control Delay	25.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

Description: 3. Elm St -- Hwy 99E

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	5	8	0	4	35	226	19	4	208	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	0	6	9	0	4	39	254	21	4	234	0
Pedestrians		3									3	
Lane Width (ft)		12.0									12.0	
Walking Speed (ft/s)		4.0									4.0	
Percent Blockage		0									0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								239				
pX, platoon unblocked												
vC, conflicting volume	596	600	237	592	589	268	237			275		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	596	600	237	592	589	268	237			275		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	98	100	99	97			100		
cM capacity (veh/h)	402	403	805	407	408	774	1321			1299		

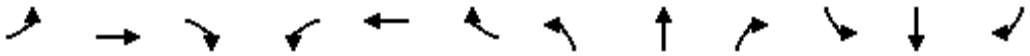
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	6	13	315	238
Volume Left	0	9	39	4
Volume Right	6	4	21	0
cSH	805	483	1321	1299
Volume to Capacity	0.01	0.03	0.03	0.00
Queue Length 95th (ft)	1	2	2	0
Control Delay (s)	9.5	12.7	1.2	0.2
Lane LOS	A	B	A	A
Approach Delay (s)	9.5	12.7	1.2	0.2
Approach LOS	A	B		

Intersection Summary				
Average Delay	1.1			
Intersection Capacity Utilization	44.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	16	106	6	9	4	124	87	12	0	106	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	0	20	131	7	11	5	153	107	15	0	131	1
Pedestrians		1									1	
Lane Width (ft)		12.0									12.0	
Walking Speed (ft/s)		4.0									4.0	
Percent Blockage		0									0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								560				
pX, platoon unblocked												
vC, conflicting volume	565	561	132	693	554	116	133			122		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	565	561	132	693	554	116	133			122		
tC, single (s)	7.1	6.6	6.2	7.3	6.6	6.5	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.1	3.3	3.6	4.1	3.5	2.2			2.2		
p0 queue free %	100	95	86	97	97	99	90			100		
cM capacity (veh/h)	392	386	913	257	383	877	1463			1478		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	151	23	275	132
Volume Left	0	7	153	0
Volume Right	131	5	15	1
cSH	774	370	1463	1478
Volume to Capacity	0.19	0.06	0.10	0.00
Queue Length 95th (ft)	18	5	9	0
Control Delay (s)	10.8	15.4	4.7	0.0
Lane LOS	B	C	A	
Approach Delay (s)	10.8	15.4	4.7	0.0
Approach LOS	B	C		

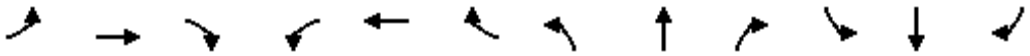
Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	32.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	12	18	6	17	0	11	68	9	1	84	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Hourly flow rate (vph)	0	16	23	8	22	0	14	88	12	1	109	0
Pedestrians		3			3			3			2	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								884				
pX, platoon unblocked												
vC, conflicting volume	250	246	115	272	240	99	112			103		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	250	246	115	272	240	99	112			103		
tC, single (s)	7.1	6.5	6.6	7.1	6.5	6.2	4.5			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.7	3.5	4.0	3.3	2.5			2.2		
p0 queue free %	100	98	97	99	97	100	99			100		
cM capacity (veh/h)	677	648	842	642	653	958	1288			1498		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	39	30	114	110
Volume Left	0	8	14	1
Volume Right	23	0	12	0
cSH	752	650	1288	1498
Volume to Capacity	0.05	0.05	0.01	0.00
Queue Length 95th (ft)	4	4	1	0
Control Delay (s)	10.0	10.8	1.1	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	10.0	10.8	1.1	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay	2.9			
Intersection Capacity Utilization	24.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	23	0	0	7	112	2	28	4	70	7	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	9	29	0	0	9	142	3	35	5	89	9	8
Pedestrians		4			2			4			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	389	241	21	253	243	46	20			43		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	389	241	21	253	243	46	20			43		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.2		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.3		
p0 queue free %	98	95	100	100	99	86	100			94		
cM capacity (veh/h)	461	621	1056	643	620	1022	1603			1538		

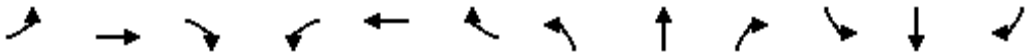
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	38	151	43	105
Volume Left	9	0	3	89
Volume Right	0	142	5	8
cSH	575	985	1603	1538
Volume to Capacity	0.07	0.15	0.00	0.06
Queue Length 95th (ft)	5	13	0	5
Control Delay (s)	11.7	9.3	0.4	6.4
Lane LOS	B	A	A	A
Approach Delay (s)	11.7	9.3	0.4	6.4
Approach LOS	B	A		

Intersection Summary				
Average Delay	7.5			
Intersection Capacity Utilization	26.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	18	32	0	28	6	117	27	0	8	50	21
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	8	21	37	0	32	7	134	31	0	9	57	24
Pedestrians		3						3			3	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		4.0						4.0			4.0	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	417	391	76	438	403	34	85			31		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	417	391	76	438	403	34	85			31		
tC, single (s)	7.1	7.0	6.2	7.1	6.8	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.5	3.3	3.5	4.3	3.3	2.2			2.2		
p0 queue free %	98	95	96	100	93	99	91			99		
cM capacity (veh/h)	476	431	986	456	450	1042	1515			1595		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	66	39	166	91
Volume Left	8	0	134	9
Volume Right	37	7	0	24
cSH	641	500	1515	1595
Volume to Capacity	0.10	0.08	0.09	0.01
Queue Length 95th (ft)	8	6	7	0
Control Delay (s)	11.3	12.8	6.3	0.8
Lane LOS	B	B	A	A
Approach Delay (s)	11.3	12.8	6.3	0.8
Approach LOS	B	B		

Intersection Summary				
Average Delay	6.5			
Intersection Capacity Utilization	32.5%	ICU Level of Service	A	
Analysis Period (min)	15			
Description: 15. N Cedar St -- NW 3rd Ave				

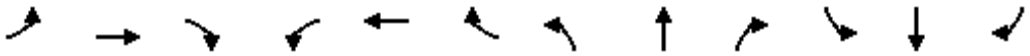


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	125	821	20	77	812	97	58	65	73	107	60	150
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.98		1.00	0.92		1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1662	3249		1630	3211		1662	1538		1630	1489	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1662	3249		1630	3211		1662	1538		1630	1489	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	134	883	22	83	873	104	62	70	78	115	65	161
RTOR Reduction (vph)	0	1	0	0	8	0	0	45	0	0	95	0
Lane Group Flow (vph)	134	904	0	83	969	0	62	103	0	115	131	0
Confl. Peds. (#/hr)									2			9
Heavy Vehicles (%)	0%	2%	0%	2%	2%	1%	0%	6%	2%	2%	5%	2%
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	12.0	50.4		10.0	48.9		7.1	12.9		10.7	16.5	
Effective Green, g (s)	12.0	50.9		10.0	48.9		7.1	12.4		10.7	16.0	
Actuated g/C Ratio	0.12	0.51		0.10	0.49		0.07	0.12		0.11	0.16	
Clearance Time (s)	4.0	4.5		4.0	4.0		4.0	3.5		4.0	3.5	
Vehicle Extension (s)	2.3	4.3		2.3	4.3		2.3	2.3		2.3	2.3	
Lane Grp Cap (vph)	199	1654		163	1570		118	191		174	238	
v/s Ratio Prot	c0.08	0.28		0.05	c0.30		0.04	0.07		c0.07	c0.09	
v/s Ratio Perm												
v/c Ratio	0.67	0.55		0.51	0.62		0.53	0.54		0.66	0.55	
Uniform Delay, d1	42.1	16.7		42.7	18.7		44.8	41.1		42.9	38.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.5	1.3		1.5	1.8		2.7	2.1		7.8	1.9	
Delay (s)	49.6	18.0		44.1	20.5		47.5	43.3		50.7	40.6	
Level of Service	D	B		D	C		D	D		D	D	
Approach Delay (s)		22.1			22.4			44.5			44.0	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	26.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		

Description: 3. Elm St -- Hwy 99E

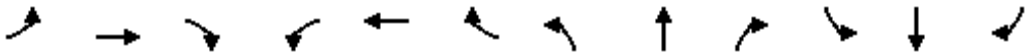
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1	22	42	2	33	17	238	42	4	289	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	1	27	51	2	40	20	287	51	5	348	1
Pedestrians		1			1			1			1	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								239				
pX, platoon unblocked												
vC, conflicting volume	754	739	351	741	714	314	350			338		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	754	739	351	741	714	314	350			338		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	96	84	99	95	98			100		
cM capacity (veh/h)	303	340	696	315	351	730	1219			1231		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	28	93	358	354
Volume Left	0	51	20	5
Volume Right	27	40	51	1
cSH	666	418	1219	1231
Volume to Capacity	0.04	0.22	0.02	0.00
Queue Length 95th (ft)	3	21	1	0
Control Delay (s)	10.6	16.0	0.6	0.1
Lane LOS	B	C	A	A
Approach Delay (s)	10.6	16.0	0.6	0.1
Approach LOS	B	C		

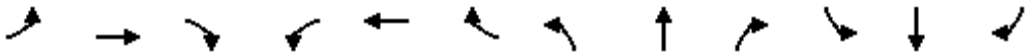
Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	43.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	70	158	23	40	5	125	135	26	11	112	19
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	8	80	182	26	46	6	144	155	30	13	129	22
Pedestrians		1			1			1			1	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								560				
pX, platoon unblocked												
vC, conflicting volume	653	639	142	846	635	172	152			186		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	653	639	142	846	635	172	152			186		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	77	80	84	87	99	90			99		
cM capacity (veh/h)	314	350	907	169	352	875	1434			1399		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	270	78	329	163
Volume Left	8	26	144	13
Volume Right	182	6	30	22
cSH	593	266	1434	1399
Volume to Capacity	0.46	0.29	0.10	0.01
Queue Length 95th (ft)	59	30	8	1
Control Delay (s)	16.0	24.0	3.9	0.7
Lane LOS	C	C	A	A
Approach Delay (s)	16.0	24.0	3.9	0.7
Approach LOS	C	C		

Intersection Summary				
Average Delay	9.0			
Intersection Capacity Utilization	48.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	17	31	16	4	0	24	99	16	3	101	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	19	34	18	4	0	27	110	18	3	112	0
Pedestrians		1						1				
Lane Width (ft)		12.0						12.0				
Walking Speed (ft/s)		4.0						4.0				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								884				
pX, platoon unblocked												
vC, conflicting volume	294	301	114	336	292	119	113			128		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	294	301	114	336	292	119	113			128		
tC, single (s)	7.1	6.6	6.4	7.1	6.5	6.2	4.3			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.1	3.5	3.5	4.0	3.3	2.4			2.2		
p0 queue free %	100	97	96	97	99	100	98			100		
cM capacity (veh/h)	646	591	893	573	608	938	1370			1471		

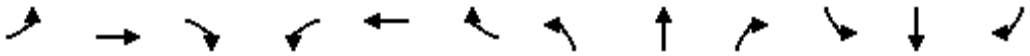
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	54	22	154	116
Volume Left	1	18	27	3
Volume Right	34	0	18	0
cSH	754	579	1370	1471
Volume to Capacity	0.07	0.04	0.02	0.00
Queue Length 95th (ft)	6	3	1	0
Control Delay (s)	10.1	11.5	1.5	0.2
Lane LOS	B	B	A	A
Approach Delay (s)	10.1	11.5	1.5	0.2
Approach LOS	B	B		

Intersection Summary				
Average Delay	3.1			
Intersection Capacity Utilization	28.6%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	26	1	2	20	55	6	13	3	123	7	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Hourly flow rate (vph)	3	33	1	3	26	71	8	17	4	158	9	6
Pedestrians		2			3			2			3	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	450	368	16	384	370	25	17			24		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	450	368	16	384	370	25	17			24		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	93	100	99	95	93	100			90		
cM capacity (veh/h)	428	503	1065	500	502	1052	1610			1568		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	37	99	28	173
Volume Left	3	3	8	158
Volume Right	1	71	4	6
cSH	506	801	1610	1568
Volume to Capacity	0.07	0.12	0.00	0.10
Queue Length 95th (ft)	6	10	0	8
Control Delay (s)	12.7	10.1	2.0	6.9
Lane LOS	B	B	A	A
Approach Delay (s)	12.7	10.1	2.0	6.9
Approach LOS	B	B		

Intersection Summary				
Average Delay	8.1			
Intersection Capacity Utilization	26.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	19	27	76	3	11	14	20	44	1	19	57	14
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	26	38	106	4	15	19	28	61	1	26	79	19
Pedestrians		5			1			4			5	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	296	266	98	388	275	68	104			64		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	296	266	98	388	275	68	104			64		
tC, single (s)	7.1	6.7	6.2	7.1	7.1	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.2	3.3	3.5	4.6	3.3	2.3			2.2		
p0 queue free %	96	94	89	99	97	98	98			98		
cM capacity (veh/h)	608	582	951	468	519	996	1433			1519		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	169	39	90	125
Volume Left	26	4	28	26
Volume Right	106	19	1	19
cSH	774	672	1433	1519
Volume to Capacity	0.22	0.06	0.02	0.02
Queue Length 95th (ft)	21	5	1	1
Control Delay (s)	10.9	10.7	2.4	1.7
Lane LOS	B	B	A	A
Approach Delay (s)	10.9	10.7	2.4	1.7
Approach LOS	B	B		

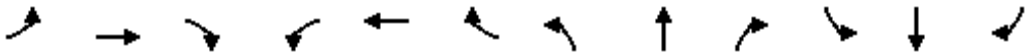
Intersection Summary				
Average Delay	6.4			
Intersection Capacity Utilization	26.2%	ICU Level of Service	A	
Analysis Period (min)	15			
Description: 15. N Cedar St -- NW 3rd Ave				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	821	20	77	812	102	58	68	73	128	78	161
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.98		1.00	0.92		1.00	0.90	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1662	3249		1630	3209		1662	1541		1630	1498	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1662	3249		1630	3209		1662	1541		1630	1498	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	137	883	22	83	873	110	62	73	78	138	84	173
RTOR Reduction (vph)	0	2	0	0	9	0	0	42	0	0	77	0
Lane Group Flow (vph)	137	903	0	83	974	0	62	109	0	138	180	0
Confl. Peds. (#/hr)									2			9
Heavy Vehicles (%)	0%	2%	0%	2%	2%	1%	0%	6%	2%	2%	5%	2%
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	11.9	48.4		10.2	47.2		7.1	13.8		11.6	18.3	
Effective Green, g (s)	11.9	48.9		10.2	47.2		7.1	13.3		11.6	17.8	
Actuated g/C Ratio	0.12	0.49		0.10	0.47		0.07	0.13		0.12	0.18	
Clearance Time (s)	4.0	4.5		4.0	4.0		4.0	3.5		4.0	3.5	
Vehicle Extension (s)	2.3	4.3		2.3	4.3		2.3	2.3		2.3	2.3	
Lane Grp Cap (vph)	198	1589		166	1515		118	205		189	267	
v/s Ratio Prot	c0.08	0.28		0.05	c0.30		0.04	0.07		c0.08	c0.12	
v/s Ratio Perm												
v/c Ratio	0.69	0.57		0.50	0.64		0.53	0.53		0.73	0.67	
Uniform Delay, d1	42.3	18.1		42.5	20.0		44.8	40.4		42.7	38.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.8	1.5		1.4	2.1		2.7	1.6		12.4	5.6	
Delay (s)	51.1	19.6		43.9	22.1		47.5	42.0		55.1	44.0	
Level of Service	D	B		D	C		D	D		E	D	
Approach Delay (s)		23.7			23.8			43.6			47.9	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

Description: 3. Elm St -- Hwy 99E

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	26	41	126	3	14	14	30	44	1	19	57	16
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	36	57	175	4	19	19	42	61	1	26	79	22
Pedestrians		5			1			4			5	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	327	295	99	497	305	68	106			64		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	327	295	99	497	305	68	106			64		
tC, single (s)	7.1	6.7	6.2	7.1	7.1	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.2	3.3	3.5	4.6	3.3	2.3			2.2		
p0 queue free %	94	90	82	99	96	98	97			98		
cM capacity (veh/h)	571	555	949	351	493	996	1430			1519		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	268	43	104	128
Volume Left	36	4	42	26
Volume Right	175	19	1	22
cSH	765	608	1430	1519
Volume to Capacity	0.35	0.07	0.03	0.02
Queue Length 95th (ft)	39	6	2	1
Control Delay (s)	12.2	11.4	3.2	1.6
Lane LOS	B	B	A	A
Approach Delay (s)	12.2	11.4	3.2	1.6
Approach LOS	B	B		

Intersection Summary				
Average Delay	7.9			
Intersection Capacity Utilization	33.0%	ICU Level of Service	A	
Analysis Period (min)	15			
Description: 15. N Cedar St -- NW 3rd Ave				

Exhibit C - Neighborhood Meeting Minutes

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MEETING MINUTES

PROJECT NUMBER:	2110061.00	ISSUE DATE:	March 15, 2011
PROJECT NAME:	Canby Police		

RECORDED BY:	Brett Hanson
TO:	City of Canby

SUBJECT: Public Meeting Minutes (March 15, 2011)

1. The Urban Renewal Agency, in conjunction with Group Mackenzie, put on a 3-part public design charette for City of Canby residents. All meetings were advertised to the general public in an effort to engage residents in the development of the new Police Department facility. In addition to advertisements, the Urban Renewal Agency sent invitations to residents and businesses within 500' area of the project.

2. The first meeting hosted centered on development and documentation of goal setting, character realization, and visioning for the appearance of the facility. The attendees were invited to participate in the visioning by placing red or green dots on image boards to identify building images that were liked or disliked. This exercise results in building types or images more strongly identified over others. These buildings are then discussed among the group and comments recorded that best reflect the character, look, and image that participants associate as a public facility for the City of Canby. For reflected images strongly identified as representative of the character and image of a new public facility see "Visioning" page (attached).

3. The second meeting hosted centered on the presentation of three massing concepts to the attendees. These massing concepts were developed based upon comments from the visioning meeting and represented a building that responded to the site, topography, neighbors, access, and constructability. The three massing options reflected three roofing schemes offering options for solar technology integration, visual interest, scale management and response to both industrial and residential neighbors. Upon review of the three massing schemes, the attendees identified Option 1 as the primary option with integration of Option 2 (entryway and corner windows). See attachment "Massing Development" page for selected massing design.

4. The third meeting hosted centered on the presentation of a final preliminary design and was targeted to serve as the Neighborhood Meeting. Group Mackenzie presented the completed work to date, including site design, floor plate orientation, and refined concept design. Upon completion of the presentation the community was asked to provide comment. The following was recorded:
   a. Integration of solar technology was an important aspect that should be considered for the project and the design made in a manner that best takes advantage of the technology. Group Mackenzie confirmed that solar systems would be incorporated into the project and the metal roofing was targeted for installation.
   b. Material selection focused on materials that are maintainable, long lasting, and reflective of a civic building. Group Mackenzie discussed the requirements for security, protection, and expansion, which additionally impact the selection of materials. The group discussed the use of masonry as the primary material, while aluminum paneling and metal roofing were utilized for the roofing elements and public entry, differentiating it from the police department proper. In addition to material choice, the color palette was identified to be warmer tones that would contrast and be complementary to the tree line background and expanse of the remaining site.

c. Public way finding was discussed and the importance of positioning the facility and public parking in a way that clearly identifies public entry and community room.
d. Incorporation of natural daylighting was discussed. The group discussed the use of the shed roofing forms and blended saw tooth to allow for clerestory windows and daylighting into the core of the facility. Group Mackenzie indicated that these forms were serving multiple purposes; to serve as a mechanical penthouse and clerestory lighting.
e. The group indicated a desire to utilize local materials and manufacturers to bolster the local economy and reduce the amount of trucking required to bring product in from outside resources.
f. The question of mechanical units came up regarding visual impact of the units mounted on the roof. Group Mackenzie indicated the roofing forms were serving as penthouses to house the mechanical units. This strategy would limit any exterior roof mounted units to small units that would be screened by parapet.
g. An individual inquired about the smaller windows on the southeast façade and their purpose given they were distinctly different than the others. Group Mackenzie indicated this area of the building houses locker rooms, which required visual privacy. This requirement limited the use of lower windows; however, Group Mackenzie indicated that incorporating clerestory windows and natural light into the space remained important.
h. The group inquired into the different glazing anticipated for the building and if bullet resistant glass would be utilized. Group Mackenzie indicated they have employed different strategies in the past, all dependent on the requirements of the specific Police Department. However, in this instance, it could be expected that bullet resistant glazing would be incorporated on the north and east windows, while the public windows may receive blast guard film.

Every effort has been made to accurately record this meeting. If any errors or omissions are noted, please provide written response within five days of receipt.

Enclosure: Public meeting presentation images