

## MEMORANDUM

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To: Brett Hanson, Associate Principal, Mackenzie

From: Mike Hendrix, PE, PTOE  
Tom Steckel, EIT

Date: November 9, 2020

Re: Lynnwood Justice Center Parking Analysis

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## INTRODUCTION

The Lynnwood Justice Center, located on the northeast corner of 44th Avenue W and 194th Street SW, is being expanded and remodeled to accommodate the additional needs of police and court staff. This work will include an addition of parking to accommodate the expansion. The City of Lynnwood requires a parking analysis to determine that the proposed parking is adequate for the facility.

This memorandum documents Perteet's evaluation of the planned parking improvements as well as the planned parking demand changes based on the facility.

## EXISTING AND PROPOSED SITE DESCRIPTION

The site where the expansion will occur is currently undeveloped, consisting mainly of forested landcover. The renovation portion of the project will take place within the boundaries of the current site limits. See Figure 1 for the vicinity map.



Figure 1. Project Vicinity Map.

### Parking Utilization Data

The existing and proposed parking facilities are outlined in Table 1.

Table 1. Justice Center Parking Spaces.

	Staff Parking Space	Public Parking Space	ADA Parking Space	Total Space Availability
Existing Facility	90	5	4	99
Proposed Facility	127	39	6	170
Total Increase	37	34	2	73

Table 1 indicates a *total*/parking space availability of 170 stalls, an increase of 67 stalls over the existing facility condition. In conjunction with the available spaces, the projected facility vehicle composition was used to determine the total number of vehicles that need to use the facility compared to the existing vehicle composition.

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This information was provided by the City of Lynnwood and includes police and court vehicles. This information is shown in Table 2.

**Table 2. Justice Center Staff Parking Vehicle Composition\***

	Police Department			Court		Grand Total
	Police Department Official	Police Department Civilian Staff	Subtotal	Court Staff	Subtotal	
Existing Vehicle Composition	52	41	93	10	10	<b>103</b>
Proposed Vehicle Composition	59	46	105	14	14	<b>119</b>
Total Increase	7	5	12	4	4	<b>16</b>

\* Vehicles stored off site are not included in this analysis.

This indicates a *total/staff* parking demand of 119 stalls during “peak” usage, in which is an increase of 16 stalls over the current condition. Per Table 1, the proposed parking facility provides 127 stalls designated as “staff only,” with an additional 39 stalls for public use, for a total usable stall volume of 166 spaces. In order to accurately assess the suitability of the proposed parking facility, the parking utilization was calculated based on the time when the stalls were occupied. This effort is described in the following section.

**PARKING DEMAND ANALYSIS**

**Parking Utilization Data**

Perteet received data on the court and police vehicle composition from the City as well as details on the shift change policies/timings of the Lynnwood Police Department. Perteet used this data to develop a histogram of the parking utilization over a 24-hour analysis period. In order to determine lot usage as accurately as possible, Perteet used the following assumptions:

- During patrol periods, roughly one-third of patrol vehicles are assumed to be in service and, thus, not utilizing the parking structure. This resulted in the following vehicles being in the field:
  - Five patrol vehicles
  - One K-9 vehicle
  - One traffic car
  - Two traffic motorcycles
  - One radar trailer
  - Two SOS vehicles
  - One UC car
  - One CHSS car
  - Three CID detective cars
  - One CID SGT car

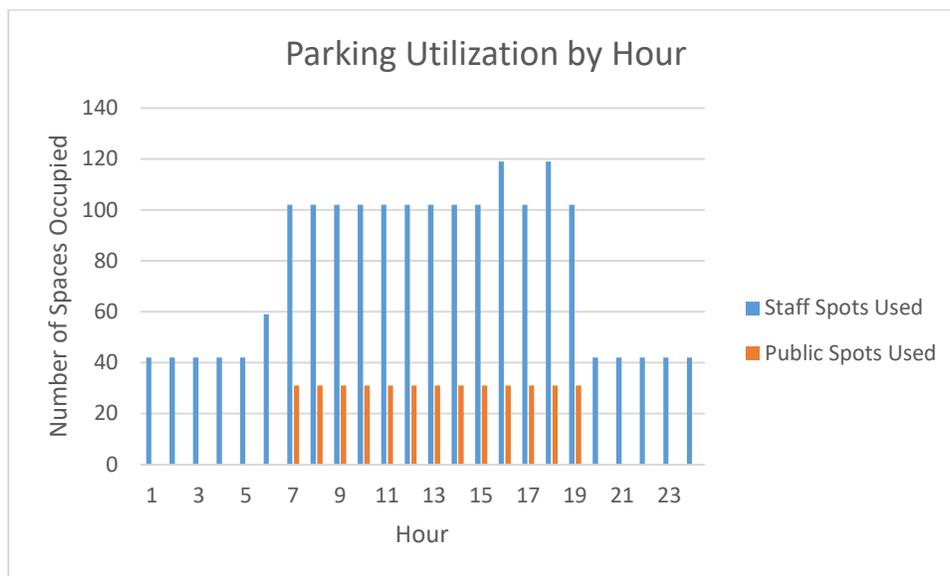
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- One-third of vehicles that were likely specific to an individual were assumed to be parked off site (at home), consisting of:
  - Five patrol vehicles
  - One K-9 vehicle
  - Two traffic motorcycles
  - Two SOS vehicles
  - One CHSS car
  - Three CID detective cars
  - One CID SGT car
- Staff private vehicles are all parked onsite during work hours, assumed to be 6:00 AM - 7:00 PM.

To account for the parking due to court public vehicles (jury members, volunteers, etc.), Perteet used the Institute of Transportation Engineers' *Parking Generation Manual*, to determine the number of parking stalls for peak use. Specifically, we used land code 735- Judicial Complex. This has a parking rate of 3.02 spaces per 1,000 square feet of gross floor area for an urban location. The proposed court related area is 15,000 square feet. This results in a demand for 45 parking stalls. The parking structure includes 14 stalls for court staff and, therefore, this can be deducted from the 45 stalls required for the general public. This results in a need for 31 stalls for public use. Perteet conducted a further review of the Lynnwood City Code in addition to Snohomish County, neither of which provided any additional parking requirements.

**Histogram Development**

A histogram was developed in order to determine the maximum parking demand experienced by the lot at any one point in time. The histogram is shown in Figure 2.



**Figure 2. Parking Utilization Histogram.**

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The maximum parking demand occurs between 3:00-4:00 PM and 5:00-6:00 PM during the afternoon shift change, with the parking utilization of 119 staff stalls and 31 public stalls. The total parking provided is 127 stalls for staff and 39 stalls for the public. As shown, the provided parking can accommodate the projected parking demand.

**CONCLUSIONS AND RECOMMENDATIONS**

The results of the parking analysis show that during the shift change in two one-hour periods, the parking demand is utilizing 150 total spaces (119 staff and 31 public). The proposed staff and public allocated parking spaces are in excess of the peak parking demand.