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**LONG RANGE PLANNING
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Consider Revisions to Standards Regarding Car Washes

Issues

The 2013 Work Program included as a Tier One task the development of an Issue Paper regarding potential revisions to standards relating to car washes. This task was in response to a citizen request that the County review its queuing standards for car washes. Current County Community Development Code (CDC) standards (Section 413-7.3.B) require “...*waiting space for autos to accommodate...50% of the hourly rate of capacity.*” This standard is out of sync with standards in other jurisdictions and doesn’t address advances in car wash technology, the range of car wash facility types and service speeds, and whether hourly capacity alone is a sufficient indicator of car wash queuing demand. Citizens opposed to the request asked that the county consider prohibiting car washes in commercial areas adjacent to or across the street from residential land.

This issue paper reviews the current queuing standards against those of other jurisdictions, Community Development Code history relevant to car washes and related standards, and the nature of technological improvements since the adoption of our current queuing standard in 1974. It also considers the impacts of car washes on adjacent land uses and includes potential ways to address these impacts.

The issue paper concludes with recommendations for potential ways to address both the queuing standards issues as well as reducing impacts to neighbors.

Recommendations

Release the issue paper with the draft 2014-15 Work Program. After receiving input on the Work Program, decide to either include the recommendations at the end of the issue paper as a Tier 1 or a Tier 2 task.

Background

The Parking and Loading standard for car washes, requiring “...*waiting space for autos to accommodate... 50% of the hourly rate of capacity,*” first appeared in the Community Development Code in 1974. The intent of Parking and Loading standards overall, is described in the 1974 Code (Section 1601) as “...*for the purposes of promoting safe and efficient storage of motor vehicles; to avoid unnecessary congestion and interference with public use of streets; and to provide for safe and stable environmental conditions and the prevention of future blighted areas.*” Staff research into ordinances of that era, however, found no documentation as to why the particular requirement for “*waiting space*” at 50% of hourly capacity was adopted, or why it was applied to car washes only (not to other business types – even those with drive-through

service). Staff members employed by the county in and around that time, however, indicate that much of the early code was directly borrowed from standards of Portland and Beaverton. Neither city's code includes the 50% queuing standard today, however it remains within Washington County's CDC (under Section 413-7.3.B).

A 2013 Work Program Request, submitted by the operator of a local service station, asked the Board to consider updating this standard. The citizen who submitted the request operates a service station in the Office Commercial (OC) district, on the northeast corner of SW 91st Avenue and Beaverton Hillsdale Highway. Though it once included a car wash, the original car wash no longer exists. The service station was confirmed a lawful nonconforming use via land use Casefile 10-369-SU/D(C)/NC/AMP. It is nonconforming due only to a setback issue and hours of operation that originated prior to the county's adoption of conflicting standards. A lawful nonconforming use is one that may not be permitted as a new use by today's standards, but that was allowed under the standards in effect when the use was new. Nonconforming uses generally remain subject to standards that originally applied, rather than code changes that occur afterward.

Since 2006 (via Casefiles 06-106, 08-025, 10-369, and 11-205) the service station operator has undergone several land use reviews to add a car wash. Each time, however, the request for a car wash has been denied, mainly due to the above "*waiting space*" requirement. His 2013 request to the Board suggested that the standard has not kept pace with improvements in mechanized car wash technology, including increased operation speeds that reduce vehicle wait times.

In response to public notice of the above noted 2013 Work Program request, staff received 24 opposition letters and a petition signed by over 200 residents of the Club Meadow neighborhood. That neighborhood lies just north of the service station operator's Office Commercial site, separated by a road. Respondents opposed potential relaxation of queuing standards for car washes. Further, they submitted a Work Program request of their own, including a proposed CDC amendment drafted by their attorney.* If adopted it would prohibit a car wash on OC land when "*adjacent to or separated by a street from property in a residential... district.*" Primary neighborhood concerns included potential traffic congestion, noise, motor vehicle, pedestrian, and bicyclist safety, and general impacts on livability.

Although the service station operator's original Work Program request was withdrawn due to neighborhood reaction, it was felt that the issues raised warranted further review. During 2013 Work Program development, staff recommended that the Board direct staff to prepare an issue paper to frame the issues for the Board and to lay the groundwork for a possible 2014 ordinance. The Board adopted that recommendation as a Tier 1 Task on the 2013 Work Program (task #32).

* *The neighborhood group's proposed revision mistakenly referenced CDC Section 311.-3.15, which applies to service stations on NC land. Since their neighborhood lies adjacent to OC land, and there is no NC land nearby, staff has verified that the revision was intended for OC district standards of Section 312-3.19.*

Analysis

Car Wash Technology and the CDC's Current Queuing Standard

Research indicates that well into the 1980s, car washes were commonly designed as “rollover” facilities. A rollover car wash is characterized by a mechanical rack with washing equipment that “rolls over” a parked vehicle. A rollover facility generally requires several minutes to wash each car, and at best may wash a maximum of 20 to 30 cars per hour. In such cases, (then and today) Washington County would require 10 to 15 queuing spaces, based on the existing standard that calls for waiting space to accommodate half of hourly capacity.

Since the 1970s and 80s, however, car wash technology has changed significantly. Current technology includes modern drive-through and conveyor operations. Such operations may be capable of processing up to 140 cars per hour, according to submitted information. Per the existing CDC requirement for waiting space sufficient to accommodate half of hourly capacity, this would require up to 70 queuing spaces (or 1,400 feet.). The model of car wash proposed by the aforementioned service station operator had an hourly maximum of 100 cars (per its manufacturer), for which the CDC would require 50 queuing spaces or 1,000 feet. As noted in the March 26, 2013 Staff Report to the Board, staff believes that this standard results in a near prohibition of automated car washes.

“Capacity” and Queuing Demand

The CDC includes no definition of “capacity.” In hearings for the service station operator’s previously proposed car wash, the hearings officer interpreted capacity as the hourly maximum indicated by manufacturer’s information. However, in his 2013 Work Program request, the service station operator claimed that hourly “capacity” is subjective, impacted by many factors - and therefore that the existing CDC standard is subjective. He explained that maximums specified by car wash manufacturers assume a factory setting, with cars sent through in assembly line fashion (as at an automobile production facility). In the case of commercial car washes, he also noted, capacity may be impacted by factors such as demand, price point, location, customer service rates, competition, traffic, and operational safety.

Staff agrees that “hourly capacity” may be open to interpretation, and may not in itself be a sufficient indicator of car wash queuing demand. Staff believes that ability to wash a car faster may not mean an automatic spike in the number of cars that line up to be washed. Further, the ability to wash arriving cars more quickly means that wait times may be reduced for others - and therefore that queuing needs may also decrease. Staff also agrees that other variables likely impact demand for a car wash, and the rate at which cars can be run through it. For instance, local competition, price, weather, location, and traffic, may all influence whether a customer chooses the car wash at all; while time needed for payment collection and customer assistance may affect the rate at which each car is serviced (and therefore the true hourly capacity).

What Other Jurisdictions Require

County staff has researched current car wash standards of a number of Oregon jurisdictions and several outside of Oregon. These are shown in the table below.

| Car Wash Queuing Standards by Jurisdiction | | | |
|---|--|---|--|
| | Specific Queuing Space Quantity or Distance Required | Analyses/ Discretionary Standards | Other |
| Washington County | 50% of Hourly Capacity (1000 – 1,400’ if Based on Manufacturer’s Specs for Modern Systems) | | |
| Beaverton | Not Prescribed | Enough queuing to protect rights-of-way; shared driveways; pedestrian, bicycle, and vehicle circulation from obstruction. Applicant must propose amount and show it’s sufficient. | |
| Sherwood | | | |
| Tualatin | 2 – 8 Vehicle Lengths (40 – 160’) | Quantity between 2 and 8 spaces determined through Architectural Review. | Addressed as “Drive-Up” use (car washes are not separated out) |
| Portland | If Single Queuing Lane: 150’ Minimum If More than One Queuing Lane: 80’ Minimum | Queuing lane design must prevent interference with parking and vehicle circulation. | |
| Hillsboro | | Drive-through lane and associated access drive(s) must be designed to minimize disruption of on- and off-site pedestrian and bicycle traffic. | |
| Forest Grove | 3 Spaces per Washing Unit: 60’ Minimum | | |
| Tigard | 75’ | | |
| Lynwood, WA | Automatic Full Service Wash: 2 Spaces Entering, 3 at Exit Self-Wash: 1 Space Entering | Reduction of required minimums may be allowed with engineer’s study or other empirical evidence showing reduced amount is adequate to support use. | |

Based on this research, there does not appear to be one particular standard that is universally accepted. Unlike Washington County, however, none of these municipalities requires queuing at 50% of hourly capacity, or otherwise applies rigid formulas that lead to what could be considered prohibitive queuing requirements. Washington County’s required 1,000 to 1,400-foot queuing distance for modern mechanical car washes appears to exceed the most significant queuing standards of other jurisdictions surveyed by 850 feet or more (or at least 45 parking space lengths).

Zoning differs by jurisdiction, therefore we have not been able to make direct comparison as to land use districts where car washes may be allowed.

Alternative for Determination of Queuing Needs

To more accurately assess queuing needs unique to a specific car wash proposal, the Washington County Traffic Analyst recommends requirement of a traffic engineer's analysis, using a commonly accepted "Poisson Distribution" model. Factors considered in this analysis method are project-specific. They include probable arrival rates, service times, and other factors. Following review and approval by the County Traffic Analyst, the application site plan would need to show queuing as indicated in the analysis. This analysis method is recognized by the Institute of Traffic Engineers (ITE) and appears to be used widely to determine adequate queuing for all types of retail uses where service speeds and waiting lines are potential issues.

This option would not rely on an undefined "capacity." Instead, it would rely on project-specific data. This option would better address individual differences in service speeds/capacities of a variety of operations, including modern drive-through or conveyor operations, hand wash detailing businesses, self-wash stalls, or combinations of these. This analysis option would also offer some longevity, not quickly becoming obsolete with future advancements in car wash technology. As such, the need for periodic CDC updates may be minimized. *Note: This analysis option could potentially be applied in other sections of the CDC that address different types of drive-through facilities as well (such as drive-through pharmacies and restaurants).*

Since there is no agreed upon standard, staff does not necessarily recommend complete removal of the existing queuing standard, but at a minimum recommends adoption of the engineer's analysis as an alternative. Applicants could then choose to either meet the current standard or to submit an engineer's queuing analysis.

The analysis allows for targeted assessment of queuing needs regardless of car wash type (conveyor, "rollover," self-wash, etc.), without arbitrarily "relaxing" standards (a concern of neighbors). It should also serve to better address neighborhood traffic and safety concerns related to a project.

A change to Parking and Loading standards of CDC Section 413 to allow this alternative would remain consistent with the intent of Parking and Loading standards as included in the 1974 Code, continuing to "...promote safe and efficient storage of motor vehicles; to avoid unnecessary congestion and interference with public use of streets; and to provide for safe and stable environmental conditions and the prevention of future blighted areas." Further, it would not affect requirements for a Type II review, included under District standards of the current code; and would remain consistent with Type II review procedures for related analyses. For example, Access Management Plans are Type II reviews; and Traffic Engineers' Speed Studies may be included in Type II development applications when "Design Exceptions" to road/access standards are requested. Consistent with the latter, staff suggests that inclusion of the recommended queuing analysis as part of a Type II development application – rather than as a separate Type II action – would suffice.

In the absence of a local standard that is universally applied by neighboring jurisdictions, staff did not feel that local standards could necessarily be recommended as alternatives to the above.

Car Washes near Residential Land

As noted earlier, neighborhood group members adjacent to the subject car wash have asked the Board to consider prohibiting car washes on OC sites adjacent to or across the street from residential districts. Their key concerns include traffic congestion, pedestrian and bicycle safety, noise (mainly from blowers and vacuums), and overall impacts on neighborhood livability.

The primary intent of the OC district is to encourage office complex development, but commercial uses are allowed in order to “...*serve the employees of the office complex*” (CDC Section 312-1). Car washes are specifically named as allowed uses in all urban commercial districts except NC (Neighborhood Commercial) and NCMU NB (Neighborhood Commercial Mixed use – North Bethany), but are not *clearly* prohibited even within those. For example, in the NC District, which allows retail and drive-up uses, Casefiles 89-293-D/WE and 90-577-D permitted a car wash as part of the Oak Hills Village Shopping Center on NW Cornell Road.

Staff does not support prohibition of car washes on OC land near residential districts because they are not clearly prohibited on other commercial lands in such cases. Additionally, removal of an allowed use from the CDC may result in Measure 49 issues, requiring notice to all OC property owners at minimum, related hearings, and prospectively processing of claims. Disallowing car washes only in OC would not remedy queuing / “waiting space” issues arising from Parking and Loading standards of CDC Section 413-7.3.B that apply to all districts.

Staff does, however, recommend supplementing existing CDC standards that protect livability of residential areas near car washes. Current standards include:

- Permitted restriction of car wash lighting, sign illumination, height, and hours of operation (CDC Sections 430-123.2 and 430-123.5);
- Requirements for screening and buffering between different land use districts (plantings, fences, and potential additional setbacks per CDC Section 411); and
- General requirements to “*arrange structures and uses for compatibility with adjacent developments and surrounding land uses*” by orienting loading and delivery areas away from existing dwellings (CDC Section 406-2.5).

Borrowing from other sections of the CDC and from the regulations of nearby jurisdictions, protections could be strengthened for residential districts abutting car washes in any urban commercial district by adding standards to CDC Section 430-123 (“Service Station and/or Car Wash”). Specific to car wash sites abutting residential districts, these could include:

- Sound walls between the site and residential land (similar to requirements of CDC Section 379-14.2 for dwellings near quarry sites);
- Specific setbacks for car wash buildings (as currently required by the CDC for such uses as schools, cell towers, wineries, temporary batch plants, agricultural structures that house animals, and more; and by the City of Everett for car wash buildings);
- Plantings exceeding minimum requirements of CDC Section 411 (“Screening and Buffering”);
- A car wash building size limit (as required by Lake Oswego in its “Lake Grove Village Center Overlay District”);

- Location of drive aisles at a minimum distance from residential districts (Tualatin requires 50 feet); and
- Location/orientation of noisy instruments such as blowers and vacuums away from residential areas (similar to CDC requirements of Section 406-2.5 regarding service area orientation, and requirements of Tualatin for “drive-up” uses).

Language Consistency

Throughout the CDC terminology used in connection with car washes is inconsistent or outdated. Changes are recommended to remedy this.

Conclusion

Existing car wash standards contained in the CDC date back to 1974. Staff believes that updates are overdue. Current standards of CDC Section 413-7.3.B call for prohibitive queuing distances when applied to modern mechanized car washes. An alternative to the existing queuing standard is recommended. It would allow applicants to either meet the current standard or submit an engineer’s queuing analysis and provide queuing space accordingly. The analysis allows for targeted assessment of queuing needs regardless of car wash type, without arbitrarily relaxing standards.

Complete prohibition of car washes abutting or across a street from residential land is not recommended. This could result in Measure 49 issues and would fail to address problematic queuing standards that currently affect car washes in all districts. Staff does, however, support strengthening of standards that protect neighborhood livability as listed in the previous section. Minor changes are also recommended to make existing CDC language consistent and clear.