ACKNOWLEDGMENTS

"Shared Parking in the Portland Metropolitan Area" is an informational report designed as region specific resource for shared parking. The preparation of this report has been funded by Transportation Growth Management grant, administered by Metro.

We would like to thank the many participants in this study for providing their unique insight and perspectives to this regionally beneficial issue.

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EXECUTIVE SUMMARY

Shared parking is when two or more land uses share the same parking spaces. By taking into account different peak parking demands, shared parking areas reduce the total number of parking spaces required compared with simply adding together the parking requirements of each individual land use. The major benefit of shared parking is a reduction in the land devoted to parking, especially in the amount of paved surface, which preserves more land for green space or development density.

Metro authorized a study to identify the status of shared parking in the Portland metropolitan area. The study is designed to be a region specific resource for businesses, neighborhoods, developers, and jurisdictions to promote greater understanding and use of shared parking. Finally, the study creates model ordinance provisions and a shared use agreement that local governments can use when implementing shared parking as a growth management tool.

The study was comprised of several tasks:

Phase one:

- A review of metro area parking ordinances, as well as those of a few other jurisdictions that have notable shared parking requirements.
- A literature search for relevant reports and articles regarding shared parking.

Phase two:

• Creating a draft of model shared parking ordinance provisions and a model shared use agreement.

Phase three:

- A discussion of shared parking experiences with local stakeholders including city and county planning staff, land developers, business owners, business associations, and neighborhood associations.
- Soliciting comment on the draft model ordinance provisions from the above individuals.

Summaries of all interviews, plus the model ordinance provisions and shared use agreement, are in the appendix of this report.

Summary of Shared Parking Ordinances and Literature

Traditionally, the objective of parking ordinances has been to make sure that ample parking spaces were provided for individual land uses. Some ordinances also contained sections permitting reduced overall parking when shared parking is provided and/or a land use is ancillary to another major businesses.

With the adoption of Metro's Urban Growth Management Functional Plan, the intent of a parking ordinance may change dramatically. The functional plan requires the adoption of both minimum and maximum parking ratios, which should provide ample parking for a given land use, without encouraging excess parking availability. Local jurisdictions already have begun revising their parking ordinances in response to state initiatives calling for reductions in vehicle miles traveled. It is intended that shared parking be implemented with other development strategies to help local jurisdictions manage density in urban areas.

Two jurisdictions in the Portland metropolitan area have notable shared parking ordinances. Gresham provides for reductions in parking requirements when "to the extent that it can be shown by the owners or operators that the need for the (parking) facilities does not materially overlap". In Hillsboro, developers are "required to consider" the feasibility of shared parking to meet their needs if two adjacent land uses have adjacent parking facilities.

The literature search found several major reports that serve as standard references on parking demand rates and methods of computing shared parking needs. These references also identify land uses that have had success with shared parking arrangements.

Pubic Involvement

To gauge experience with, interest in, and concerns about shared parking, the consultant team conducted interviews with a variety of jurisdiction staff, land developers, business owners, neighborhood associations and other individuals involved in parking issues and/or having active shared parking programs.

The key finding from these interviews is that there are many formal and informal shared parking situations throughout the region. Most of these cases are driven by private sector market factors that have led businesses and land developers to pursue shared parking arrangements. Another key finding is that businesses and developers are interested in pursuing shared parking, but are concerned about regulatory red tape that may slow down the development process. A summary of the interview comments is provided below.

- Jurisdiction Staff City and county planners were concerned that developers would not welcome additional regulations, specifically regarding mandating shared parking arrangements. (Metro's goal is to encourage shared parking, not to mandate additional regulations.) Staff also wanted help defining how shared parking would work best, and identifying what land uses would benefit most. The draft model ordinance, model agreement, and this report should help staff address many of their concerns.
- Land Developers Developers were primarily concerned that new developments would be less attractive to potential tenants, because limited parking areas may not be able to provide ample parking for seasonal peaks (such as the holiday season and large sales events). Developers are also concerned that new shared parking requirements will be more onerous than existing site specific parking requirements. Another issue raised was that once an agreement is in place, unforeseen circumstances could change conditions and/or might require additional parking spaces that would not be readily available. Finally, both developers and their financiers tend to be very conservative, and having to rely on undedicated parking areas that they do not control increases the financial risk (i.e., higher development costs, increased time, higher bond rates) of a development.
- Businesses Ample parking is viewed as a key to a successful business. Business
 owners and operators have a mixed reaction to shared parking. Some businesses
 rely heavily on pass-by traffic. Having available parking in the immediate vicinity of
 their store is inviting to their patrons and gives the impression of fast, convenient
 service. People involved with this type of business express concerns about lack of
 obvious parking resulting in potential customers driving away to more convenient
 competitors.

Other types of businesses, such as restaurants or support retail (like newsstands, convenience markets, dry cleaning facilities and others) often locate next to office buildings and other large employers to serve the nearby workers. Thus, a significant portion of their patrons will walk to their business. Such businesses require considerably less parking than the first type of business, and business owners seem much more open to the concept of shared parking.

The interviews revealed that shared parking has also served as a key strategy for redeveloping sites in older, built out urban areas with limited parking opportunities. In these cases, shared parking agreements have been arranged primarily without local government involvement, and often they are informal.

• Neighborhood and Community Associations - Communities are interested in learning how shared parking might impact their neighborhood. Generally they are concerned with livability and quality of life issues as well as promoting community-based enterprise. As a group, they agree that a community awareness program will assist the overall success of district shared parking programs.

Successful Shared Parking Programs

Up until now, market trends have directed much of the need for shared parking. Shared parking arrangements have included programs of all sizes, from large comprehensive programs like Oregon Health Sciences University and the Lloyd District to smaller-scale programs like Hawthorne Street Fair, and many smaller informal business arrangements throughout the region. Notably, private industry efforts have achieved goals that are comparable to municipal philosophies and Metro growth management policies. These include:

- Reducing parking pressures on neighborhood streets.
- Demonstrating that cooperation will occur when the need arises.
- Construction of fewer parking spaces.
- Decreasing paved surfaces thereby reducing storm water runoff.
- Improving a neighborhood business climate and community support for those businesses.

Site Concerns

The interviews revealed a number of concerns about site design and operation, though none appear to be barriers to shared parking development. Often mentioned issues are:

- Liability
- Location
- Maintenance
- Parking Overflow

- Safety (and perception of safety)
- Enforcement
- Shared Driveways
- Signage

Model Shared Parking Ordinance and Model Shared Parking Agreement

Based on existing parking ordinances and standard references regarding shared parking, the consultants prepared a first draft of a model shared parking ordinance. This document went through initial review and comment by Metro staff. Also, based on existing agreements, a draft shared parking agreement was developed. These documents were mailed to stakeholders and their comments were solicited and incorporated into the final product, which are provided in Appendices A and B of this report.

Conclusion

The project revealed several themes that will be of interest to the region in preparing to promote shared parking as a growth management tool.

- Local governments throughout the region need to re-evaluate parking ordinances to actively encourage use of shared parking, including on-street parking, with the goal of reducing land devoted to parking areas. Local government staff stated that they need technical information and support to implement shared parking.
- Businesses throughout the region, ranging from large to small, are using shared parking successfully.
- Interviews revealed a range of concerns about applying shared parking on a regional basis. However, experience and interviews with businesses involved in shared parking indicate that the concerns can be overcome.

SHARED PARKING IN THE PORTLAND METROPOLITAN AREA

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1.0 INTRODUCTION

1.1 Shared Parking Defined

Shared parking can be defined as parking areas or spaces that are used to serve two or more individual land-uses. This is when individual land-uses, either on the same site or from nearby sites form an agreement to share available parking space and/or land developable for parking.

Shared parking may be applied when land uses have different parking demand patterns and are able to use the same parking spaces/areas throughout the day. Shared parking is most effective when these land uses have significantly different peak parking characteristics that vary by time of day, day of week, and/or season of the year. In these situations, shared parking strategies will result in fewer total parking spaces needed when compared to the total number of spaces needed for each land use or business separately.

Land uses often involved in specific shared parking arrangements include offices, restaurants, retail, colleges, churches, cinemas, and special event situations. Shared parking is often inherent in mixed-use developments that house one or more businesses that are complementary, ancillary, or support other activities, such as a small convenience store located in the lobby of an office building. General parking lots and/or on-street parking that is available for patrons of nearby businesses/commercial districts are other forms of shared parking. When applied at the district-wide level, it can produce appreciable results.

The application of shared parking as a growth management strategy produces results. By reducing the number of parking spaces needed by 0.5 spaces per 1000 square feet (SF) of gross leasable area (GLA) built, based on each parking stall being 350 SF (including the stall and associated circulation area), one acre of land can be saved for purposes other than surface parking for every 249,000SF of GLA built.

1.2 The Benefits of Shared Parking

The principal purpose of promoting shared parking is to reduce land devoted to parking, thereby allowing increased densities in urban areas or providing space for open spaces, walkways or other amenities. This will help communities develop better potential for transit and encourage pedestrian and bike commutes, reducing dependence on private vehicles. The overall goal of this and other growth management projects is to create a sense of community in every neighborhood and area of the region, helping individuals feel connected and establishing a "sense of place."

Shared parking can have a variety of benefits. Some can be clearly defined, while others are less tangible. Yet they cover the spectrum of objectives that fall under the umbrella of "creating community" and "enhancing a sense of place."

- Shared parking can benefit businesses participating in shared parking agreements by reducing costs of developing and maintaining parking areas. It can also benefit nearby businesses by attracting new patrons to the area.
- Reductions in the amount of surface parking provided for each land use means less impermeable surface for each new development. This can leave more room for swales, vegetation and other features that prevent stormwater runoff from reaching storm sewers.
- Shared parking increases communication and coordination, between individual businesses, among business districts and neighborhood residents, and within large urban districts. By necessity, shared parking brings people together to consider how they can meet mutual needs.

1.3 List of Major Reference Papers and Books

During the first phase of research, the consultants identified a number of documents that discuss the theory and implementation of shared parking. These may be useful in explaining the principles and benefits of shared parking to elected officials, neighborhood organizations, businesses and developers. They also may provide technical guidelines for use by jurisdictions and developers in determining the feasibility of shared parking arrangements.

BOOKS

- Urban Land Institute with Barton-Aschman Associates, *Shared Parking*, 1983. The major reference on shared parking. Includes procedures for determining parking needs, as well as advantages and disadvantages of shared parking. This reference also provides peak hour parking demand by land use and recommendations for shared parking ratios.
- Harper Righellis, Inc, ECONorthwest, and DKS Associates, Summary Report: Parking Alternatives for the Clackamas Regional Center, 1996.
 This summary of a series of technical memorandums discusses growth in relation to parking in a regional center. It provides a regional review of growth management options specifically related to parking.
- Institute of Transportation Engineers, *Shared Parking Planning Guidelines*, 1995 Through national surveys and cases studies, this reference discusses shared parking application and planning issues. Designed as a supplemental tool to the ULI *Shared Parking* manual includes municipal practices in regulating shared parking as well as the perceived advantages and disadvantages to shared parking.
- JHK & Associates, Inc. and McArthur & Associates, *Peak Parking Space Demand Study*, 1995.

Parking demand study of thirteen land-uses in Portland metropolitan area for the Oregon Department of Environmental Quality. This study specifically addresses these land uses as supplemental data to ITE's *Parking Generation*. Due to the nature of the data gathered, this reference provides a basis for regional peak parking demand rates.

Smith, Thomas, *Flexible Parking Requirements*, American Planning Association, 1983. Discusses benefits and drawbacks of shared parking in conjunction with other parking supply adjustments. This reference specifically looks at flexibility in parking ordinances. ULI and NPA, The Dimensions of Parking, 3rd Edition, 1993. Discusses issues associated with parking, from location and construction to regulatory concepts. This reference specifically discusses the application of shared parking concepts with reprints of peak demand rates.

PAPERS/ARTICLES

Davis, Gordon E., "Regulatory and Parking Evaluation", 1996. Discusses how Metro's Region 2040 Growth Concept is affected by regulatory processes, development standards, and parking standards. From predominantly local sources, this reference draws regional implications and conclusions based on

specific growth management goals and objectives.

Higgins, Thomas J., "Parking Requirements for Transit Oriented Developments", 1992. This reference provides a review of land use policies that directly encourage transit use. More specifically, it draws parking code requirement conclusions based on growth management and demand management strategies associated with transit oriented development.

1.4 Background

This report examines the benefits and concerns about shared parking from both a district-wide perspective and an individual land-use perspective in the Portland metropolitan area.

Until recently, most local government policies have focused on assuring that ample parking was available, rather than attempting to reduce the number of spaces. Current planning practices suggest taking a "big picture" look at an area and minimizing the total amount of land devoted to parking. Shared parking is a major tool available to help achieve this goal.

While most local jurisdictions "allow" shared parking, businesses and developers have shown little interest in taking advantage of shared parking when ordinances and policies do not actively encourage shared parking. By encouraging densification and growth management, Metro is providing an environment where local governments can develop land-use patterns, policies, and regulations that make shared parking a more rewarding option.

In response to the impact of urban growth on air quality, traffic and other livability issues, governments at various levels have established new standards to reduce reliance on private vehicles and increase the amount of trips by non-auto modes (e.g., walking, biking, and transit). Oregon's Transportation Planning Rule calls for a 20% reduction in vehicle miles traveled per capita (per person) and a 10% reduction in the number of parking spaces per capita.

The Metro Functional Plan further refines these concepts for application at the regional level. This plan establishes both minimum and maximum parking ratios for land uses. Furthermore, it prescribes more restrictive maximum parking ratios in areas with good transit service. It also directs jurisdictions to provide blended parking ratios for mixed-use developments. Blended parking ratios are parking ratios that take into account different parking demands to reduce the number of code required parking spaces without simply adding together the code parking requirements of two or more land uses. Additionally, the Functional Plan recommends ways to review applicability of minimum parking ratios.

The Department of Environmental Quality (DEQ) has adopted an Ozone Maintenance Plan for the Portland Air Quality Management Area, which relies partially on trip reductions and parking ratio maximums. This plan is intended to reduce the number of times in which the area exceeds federal standards for ozone levels. The Employee Commute Options (ECO) rule, which is the trip reduction part of the plan, requires a 10% reduction in employee vehicle trips by all employers with fifty or more employees at any worksite. The plan's parking ratio maximum component is the Voluntary Maximum Parking Ratio Program, which is an incentive based component that exchanges ECO exemption and priority processing for adherence to parking ratios comparable to Metro's Regional Parking Minimums.

Shared parking, while not mandated by Metro or the state, is a strategy that applies to these planning policies by significantly reducing the amount of land devoted to parking, while providing a sufficient number of parking spaces and encouraging compact land development. To accomplish these goals, each use of land should be carefully reviewed for more efficient and complementary forms of development.

The metropolitan area can benefit in a variety of ways by reducing the amount of land traditionally used to provide parking relative to a given land use. Parking areas, especially in new developments, can result in inefficient land usage, as well as more environmental and water quality impacts. Excessive parking also has implications for other transportation modes. In areas where transit is provided or where other non-auto modes (i.e. walking and biking) are convenient, providing less parking can increase accessibility and mobility for all modes. For example, a large parking lot between the street and the door of a building can make for an unpleasant walking experience, while providing clearly defined walkways, separated from the cars, can encourage pedestrians. Recent growth management trends lean toward minimizing the total land devoted to parking and considering the access needs of a larger area or district, as well as adopting maximum parking ratios.

1.5 Shared Parking Study Scope

This Transportation Growth Management (TGM) project was designed to study shared parking as a strategy and tool in the regional and statewide effort to reduce parking. There were several tasks of this project, which are discussed below.

Task One: Review of Parking Ordinances

The first task of this project was to review, compare, and summarize the current status of parking regulations in the region. This process involved a review of seventeen city and county ordinances, of which only three were outside the Portland metropolitan area. This phase produced a technical memorandum, which summarized our findings about these ordinances (see Table 1). The information obtained in this task created a basis for developing a draft model shared parking ordinance and a draft model shared use agreement.

Jurisdictions	Criteria		Reduction in	Maximum	Requires written
	No overlap in hours	No overlap in peak hours	space requirements granted for shared parking	distance from land use to parking – ft.	agreement on file between parties sharing parking
Ashland		Х	Χ*	200	Х
Beaverton	х			200	
Cornelius	х			500	Х
Forest Grove	Х*			500	
Gresham		Х		250	х
Hillsboro	х			500	х
Milwaukie	х		Х	300**	х
Olympia, WA	Х	Х	X***	700**	х
Portland		Х		300	х
Tigard		Х		200	х
Tualatin		X****		500	х
West Linn	х			200	Х
Wilsonville		Х		100	
Clackamas County		X****	Х		х
King County, WA	х	Х	Х	150	x
Multnomah County	Х			350	x
Washington County	1	Х		100	х

This is not specifically stated in the ordinance, but staff says the intent is to encourage development of fewer parking spaces. These ordinances include distance requirements in the shared parking sections. Other jurisdictions use general distance requirements for all parking facilities. Different reductions for different circumstances. Also allows shared parking using other criteria. **

Task Two: Public Involvement

The second task of this project was to solicit public and private sector input about shared parking and shared driveways. An additional goal was to elicit comments about the draft model shared parking ordinance and shared use agreement. To accomplish this 54 organizations were contacted, and interviews with 31 of these organizations were conducted, as shown in Table 2.



Table 2: Type and Number of Organizations Involved in Task Two

Each interviewee was sent one of three surveys (see Appendix D) which were directed at various respondent groups: government staff, developer, or business owner/ organization. Later, in-person meetings or telephone conferences were held to go through the survey and to discuss shared parking, shared driveways, the draft model shared parking ordinance, and shared use agreement. The results of these interviews have been compiled and are in Appendix C. They are also summarized and analyzed within this report. The final Model Shared Parking Ordinance (Appendix A) and Model Shared Use Agreement (Appendix B) are also provided and discussed within this report.

Task Three: Shared Parking Handbook

The third phase of this project will be a Shared Parking Handbook. This handbook will be prepared by Metro and will be based, in part, on the finding of phase one and two of this shared parking TGM project. This handbook is intended for distribution to all Metro jurisdictions as part of their growth management toolbox, and to other interested parties such as developers and neighborhood and business associations.

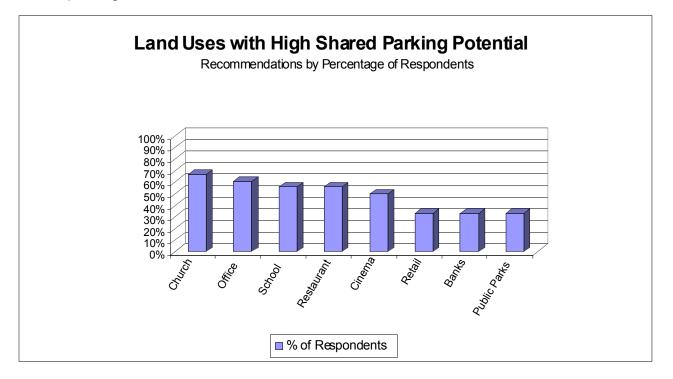
2.0 SHARED PARKING IN THE PORTLAND METROPOLITAN AREA

2.1 Overview

Throughout the region, many organizations already use shared parking in a variety of forms. It can be found in shopping malls and retail strip centers, with colleges and universities, with new developments, and in future planning efforts.

As shown on the chart below, the interviews conducted revealed five predominant land uses having a high potential for shared parking arrangements. Three additional land-uses received recommendations from at least one third of the eighteen respondents.

While some concern was expressed about the combination of some specific land uses, the respondents indicated that parking conflicts are minimized when more land uses share parking resources.



".. On a district scale, as well as an individual basis, most land uses will work together with varying degrees of resolvable (conflict) situations. But, as you increase the number of variables (land uses), the problems resolve themselves.." – from interview with a city planner

Our interviews found many existing informal and formal shared use parking efforts throughout the region. They involve, but are not limited to, a variety of land uses such as:

- > Cinema/Office
- Church/School
- Restaurant/Office
- Health Club/Office
- Retail/Medical Office
- Cinema/Church/Retail
- Retail/Restaurant/Bank
- Medical Office/Health Club
- Retail/Office/Restaurant/ Residential
- Seasonal & Special Events/District-Wide

2.2 Examples: Shared Parking in Action

Some of the larger and more formal efforts, which appear to reduce significantly the actual parking spaces needed while meeting the parking demands of all land-uses involved, combine many of the above land uses. This section details a variety of shared parking situations throughout the Portland metropolitan area.

Ashland, Oregon

To address a shortage of parking in the downtown area caused by a seasonal influx of Shakespeare Festival attendees, this southern Oregon city conducted a detailed inventory and evaluation of parking needs. The survey examined what shared parking opportunities exist as well as how new parking areas might be best located to serve the downtown area.

This study established parking trends and needs for the downtown area and, more importantly, found 3 parcels that could be developed to address the shortage of parking. In total, these parcels were developed to provide 150 new parking spaces. To fund the development of these parcels into parking lots, a local improvement district was formed among downtown property owners. Each business/owner was assessed fees based on the gross square footage, the location, and the benefit that they would derive from the new lots. Part of the fee is collected monthly through the businesses' utility bills. A provision assesses a latecomer's fee to new developments in the downtown area.

Hawthorne Street Fair

The street fair is an annual Southeast Portland community event, which takes place in a district with a mix of residential, restaurant, and small business retail. Normally, most parking for the district is provided onstreet, as the area was primarily built early in the century around a streetcar line, and few of the buildings have off-street parking lots. Parking for the fair, when on-street parking is unavailable, is provided entirely by shared use agreements with four nearby churches. Throughout the duration of the fair, free shuttles connect the shared use lots and the fair. This case is an example of cooperative district utilization of the existing parking supply.

Lloyd District

Located in Northeast Portland, just east of the Central City Business District. This predominantly office district with private parking also contains a large retail center (Lloyd Center mall), which operates a shared use lot for patronage of its establishments. Many drivers use the Lloyd Center lot for short-term parking for other nearby land-uses. The district has less parking then ten years ago, but has added more than 1,000,000 additional gross leasable square feet. This case is an example of marketdriven supply achieving district-wide goals.

National College of Naturopathic Medicine

Located in outer southeast Portland. The parking needs of the college are met by a combination of a small on-site lot, on-street parking and formal agreements for shared parking with 2 local churches. This case demonstrates a shared arrangement between three institutional uses within walking distance of each other.

Oregon Health Sciences University

Located in southwest Portland, just south of the Central Business District. This institution, while having master plan allowances for additional on-site parking, does not view supplemental parking construction as a currently feasible option. Through a combination of formal agreements to use church lots, on-street parking, a shuttle system and other Transportation Demand Management (TDM) measures (such as carpools and subsidized transit passes), OHSU has accounted for student, employee and patient parking needs. This case shows an institution choosing shared parking to meet growth needs.

City of Portland, Parks Bureau

Several city parks have only minimal parking lots, but have shared parking arrangements with adjacent uses including a hospital, a college, and private businesses to use their lots late on weekdays, on weekends, and special events. This case is an example of using public/private partnership to manage parking supply without losing valuable recreation space to parking.

Portland Community College, Cascade Campus

Located in north Portland. The Cascade campus of PCC had master plan requirements that would have added approximately 150 spaces through construction of a parking structure. Due to cost, safety and security concerns, and PCC management decisions, this structure was deemed ill advised. Research and analysis was conducted to find alternatives to this venture. The result was a combination of TDM measures and a partnership with a local market for shared parking during specific times of the day. This example demonstrates the use of shared parking to meet demand and negate future construction requirements and costs.

Tanasbourne Center

Located in suburban Washington County at SW 185th and Highway 26. This site is a small portion of a mixed-use center, which includes restaurants, cinema, and a bank. Several of the commercial uses were developed with reduced parking requirements due to their potential to share parking areas. This is an example of small commercial uses sharing parking in new development and acknowledging the likely cross-patronage of their customers.

Tualatin Commons

Located south of Portland in the city of Tualatin on Tualatin-Sherwood Road at Martinazzi. This development is a new mixed-use project that was specifically designed with reduced parking ratios because of the creation of shared parking areas. The facility contains hotel, retail, restaurant, residential, and community recreation uses. Another unique feature of this location was the city's contribution to development financing.

Each of these efforts is largely unique to the site and the circumstances, as well as having been groundbreaking efforts in each place they were proposed. In addition to these larger efforts, there are many small and informal shared parking arrangements throughout the region that achieve similar objectives. Almost without exception, these agreements have taken place without encouragement by local governments. Only recently, have municipalities begun establishing regulations that actively promote shared parking

2.3 Governmental/Regulatory Concerns Associated with Shared Parking

Traditionally, local jurisdictions have viewed shared parking from a regulatory or management viewpoint. Past policies and philosophies did not encourage the limiting of parking supply. In fact, many policies essentially discourage shared parking. For example, some municipalities enforce basic zoning policies that do not allow or encourage parking dedicated to multiple uses. In these cases, parking spaces can be used for more than one type of land use if an area is not zoned for mixed-uses. This is often the case in areas zoned for single family or multi-family residential. Therefore, this zoning precludes using an apartment building's parking area by employees of a commercial land use during the day.

Similarly, many churches located in residential areas have large parking lots that are empty during the week. However, the residential zoning will not allow these lots to be used for by customers or employees of a commercial building grandfathered into that zoning area or in an adjacent area.

Individuals who have participated in shared parking, there was the frequently mentioned concern that any shared-use parking agreement will potentially trigger a full non-conforming land-use review of all sites involved with shared parking. They also mentioned that most ordinances do not count adjacent undedicated on-street parking towards a land use's parking code requirement.

With the recently embraced objective of reducing the amount of land reserved for parking, municipalities throughout the region are considering ways to incorporate shared parking into their communities.

3.0 KEY COMMENTS FROM INTERVIEWS

This section reviews specific comments from the interviews (described on page 14). Furthermore, it suggests solutions to the concerns presented.

3.1 Jurisdiction Comments

The interviews with planning and transportation staff showed overwhelming jurisdiction staff support for the concept of shared parking. However, staff members said that they lacked the resources to effectively implement shared parking programs. Specifically, the majority of their ordinances either have no shared parking provisions or the provisions are too vague or subject to very loose interpretation.

Additionally, the interviewees suggested that they lack the appropriate incentives to motivate businesses and developers to take advantage of any available reduced parking ratios. These concerns can be addressed with active jurisdiction policies and philosophies that support shared parking as a growth management tool. Agency staff also asked for technical guidance about parking studies, recommended ratios, etc.

Staff mentioned that shared parking would result in minimizing the impact of land development on the environment. Shared parking allows jurisdictions to reduce their amount of impervious surfaces associated with new development, and reduce runoff into storm drains. Many jurisdictions require on-site tertiary treatment and retention of parking lot run-off. More compact development will permit smaller parking areas and more land for bio-swales and planted areas to accommodate this runoff.

Many communities have built parking structures to serve their downtown business districts. Although municipally run shared parking facilities have been successful and have helped support private development in downtown business districts, local government staff were not optimistic about the potential for building shared parking facilities in the near future. Ballot Measures 5 and 47 have reduced the availability of General Fund dollars and also virtually eliminated the potential for tax increment financing in most cities.

Generally, local government staff and planners around the country agree that shared parking is only one of many items in the menu of growth management tools available to cities, counties and other planning agencies. It can, through reduced parking needs, support business district and regional efforts to reduce construction of new parking areas. But, the interviews suggest that to achieve statewide goals of reducing vehicle miles traveled, shared parking must be carried out in concert with other demand management efforts. These include pedestrian plans, carpool programs, or access to public transportation. With less land devoted to parking, developments can utilize more of their land for other amenities (e.g. pedestrian and transit features).

3.2 Business Comments

According to business respondents, parking is thought of as a link to existing and potential customers. Without adequate parking, businesses may fail, because customers, in this vehicle driven culture, may not understand where to leave their car or how to get to the business. If the parking a business has appears to be full or inconveniently located, potential customers may get the message that that a business cannot provide the desired level of service.

"If someone drives by our restaurant and sees a full parking lot, they might not stop and see if seating is available." - from an interview with a business manager

The majority of individual businesses have little involvement with or understanding of shared parking. However, shared parking arranged by mall developers or managers, business associations, or other groups represent an important tool in meeting peak parking demands. Whether for seasonal peaks, special events, or to satisfy customer needs, businesses have sought these arrangements as a matter of survival.

Washington Square mall in Tigard has an arrangement with a nearby office complex to allow parking in the office complex's lot during the mall's seasonal peaks. The Hawthorne Street Fair association has agreements with four local churches to allow parking and special shuttling for their annual event. And, Portland Community College has a year-round agreement for daytime usage of an over built parking lot at a grocery store near the Cascade campus. These examples and others mentioned in section 2.2 were implemented to meet customer and employee parking needs, while not impacting an existing area with construction to increase parking supply.

A few new developments in emerging areas, like Tanasbourne Village and the Tualatin Commons, have been designed to take advantage of shared parking opportunities (e.g. office and restaurants or support retail). In the case of the Tualatin Commons, the City of Tualatin offered the developer a 25% reduction in minimum parking requirements.

The potential for loss of customers is also of concern in situations where a large percentage of sales come from drive-by shoppers or long term parking is needed. But increased customer awareness, short-term parking, and/or enforcement efforts can address these concerns.

The emphatic response from businesses involved in shared parking is "educate people and organizations about the benefits and realities of shared parking, and shared parking will happen". The patrons will understand the environmental and regional support reasons why they need to park someplace other than directly in front of their destination. And other businesses will perceive the benefits of cross-patronage resulting from and inherent to shared use parking and shared driveways.

3.3 Developer Comments

The developer interviewees unanimously recognized that shared parking is an opportunity to maximize buildable land and minimize pavement. This concept is already the practice of the some of the developers interviewed. In the case of PacTrust, an exclusively suburban developer, even its corporate offices are built within a mixed-use development (including offices, an athletic club, restaurants, a hotel, and support retail) with shared parking lots and shared driveways.

"...When developers look at a site, they do not see a future parking lot, rather buildable land. It is not a question of if, but rather when.." – from an interview with a business association director.

When reviewing a site for development or redevelopment with shared parking as a consideration, some developer concerns must be addressed. For example, if shared parking is an option, what zoning barriers must be overcome? And, in the short-term, will potential tenants have concerns about perceived advantages of similar properties with higher parking ratios? While these concerns weigh heavily on a developer's cost-benefit analysis, they can be counter-balanced with incentive-based policies.

The interviews further showed that developers support the ideals of shared parking and densification through growth management, but all developers have concerns about adding criteria (i.e., shared parking requirements) to the development approval process. If an additional process/review is added, how can it be made a relatively positive and painless experience? This brings up the question of "the carrot versus the stick", or incentives versus penalties. For developers, the ideal process would be an entirely voluntary program with incentives benefiting their sites and the region.

As developers gain more experience with shared parking arrangements, results of the interviews indicated that they will feel more comfortable with undedicated parking and realize that providing too much parking may not have any inherent advantages. However, other players may be more resistant to shared parking. National and local financiers currently feel uncomfortable with projects that are different from what the industry considers standard (e.g., less parking). When a developer seeks funding for a project, the lending source first conducts an appraisal of the proposed site and its proposed uses. If the appraiser does not feel adequate parking is available for the proposed tenants and their customers, then funding is reduced in proportion to the risk.

Some national franchises and chains also set minimum parking requirements. One local government had to negotiate with a national corporate headquarters to allow a shared parking arrangement.

Our interviews revealed that many developers are interested in shared parking, but they lack regional usage studies and real world success stories as a basis for decisions and recommendations. To overcome the reluctance to vary from industry standards, shared use awareness programs and real world success stories will assist in convincing developers and financiers that shared parking has many advantages. And, while entirely voluntary programs may not be feasible, an incentive-based regulatory guideline will promote developers using shared parking as a growth management strategy.

3.4 Community and Neighborhood Association Comments

Interviews with neighborhood and business associations revealed a wide disparity in support for and knowledge about shared parking. A few neighborhoods have extensive experience with formal and informal shared parking. Others have little experience with it.

The interviews indicated that some people see real potential for improving vitality and community livability. Others fear that the threat of traffic impacts in residential areas may overshadow any benefits to the neighborhood.

Some representatives of community associations, neighborhoods, and business districts told the consultants that they believe shared parking can contribute to neighborhood livability. In addition to the obvious benefits of providing more flexible parking options and increasing the efficiency of land uses, some of the respondents said that shared parking can greatly enhance neighborhoods and business districts by promoting solutions to quality of life concerns, such as increased pedestrian activities.

Shared parking is also an opportunity for neighborhood businesses and organizations to give back to their community, interviews indicated. For example, during the Hawthorne Street Fair local churches provide free parking and shuttle stops for their community's event, which furthers the cohesiveness and success of a community.

In addition to these substantial benefits, some neighborhood residents and business people feel that shared parking has more practical effects. It encourages pedestrian friendly developments, contributes to vehicle trip reduction goals, and a few cases, it can help minimize spillover parking. Regulations can encourage pedestrian connections between or through parking areas and the creation of amenities that foster a sense of community while promoting use of shared parking areas.

Shared parking brings many benefits to neighborhoods and community associations beyond the principal purpose of growth management. But many respondents said that it would be important to promote acceptance of shared parking. To accomplish this, a community awareness program could be developed in conjunction with business and developer awareness programs.

A number of respondents said that a parking management program would be essential to making shared parking a successful tool. Parking management includes enforcement, signage and cooperation among owners and operators of various land uses.

3.5 Points of Agreement among All Respondent Groups

The interviews revealed that many of the respondents, representing diverse interest groups, shared views about shared parking. These common areas included support for the concept of shared parking as well as ideas for promoting and implementing the idea throughout the region. Many of the common themes are described in the Principles section that follows.

4.0 SHARED PARKING PRINCIPLES

This section discusses some criteria for successful shared parking as interpreted from the interviews. These key principles are:

- Managing District Parking Supply
- On-Street Parking
- Structured Parking
- Parking Demand Studies

- Shared Parking Policies
- Shared Driveway Policies
- Market Driven Trends
- Site Concerns

4.1 Managing District Parking Supply

The message was clearly sent from those who have tried shared parking and from those interested in shared parking: Parking supply must be actively managed on an individual and a district level. This includes management of dedicated and shared parking, both on street and off-street. And, while few jurisdictions or districts have experience with this type of activity, it was identified as a key element to making shared parking work as a growth management tool. Without this management, changes in the parking supply or parking demand could pose threats to the livability and viability of a community. Developing area-wide plans will allow development without unnecessary guesswork and re-evaluation, as well as providing a resource of successful examples from which the business and development community can draw.

4.2 On-Street Parking

It was noted that most jurisdictions do not count adjacent on-street parking towards meeting parking code requirements for a land use. This relatively untapped strategy of utilizing existing parking is tantamount to reducing asphalt. Simply stated, the parking is already used by patrons of multiple establishments, specifically those nearest the land use, so why not count it as such. In Sisters, Oregon, up to fifty percent of code required parking is achievable through dedicated on-street parking. This policy is in conjunction with a successful shared parking experience for the downtown business district.

4.3 Structured Parking

One of the more obvious examples of shared parking is the traditional municipal parking garage that provides parking spaces for a wide range of businesses and land uses located in a central business district. By having structured parking, a limited surface area can provide a large amount of parking spaces. In Oregon, most parking garages are privately funded or developed using revenue bonds. The role of private industry in parking will be even greater with the bonding and funding limitations of Measure 47. Even so, recent discussions with jurisdiction staff indicate that given the costs of structured parking and typical fees in the Portland area, cities will have to carefully consider building and operating parking garages. In reality, the financial analysis for parking structures indicate that it takes at least 5-7 years before an owner begins making a profit. To help the bottom line, parking garage developers are now taking longer financing (50 years rather than 30 years) to spread out much of the initial costs.

In a few cities throughout the U.S., local improvement districts have been formed to provide for parking areas. This has not been the case in Oregon except for small projects such as in Ashland.

Many factors including the cost of the land, site characteristics (i.e. bedrock and soil condition) and type/layout of the structure influence the cost of structured parking. Recent estimates for new surface parking lots in downtown areas were that a parking stall costs about \$3,500 - \$4,000 including all development and construction costs. These costs could be considerably less for redeveloped land, fringe/associated parking areas with marginal benefit or suburban areas and could be about \$2,000 or less per stall. Depending on site factors, the cost of parking stalls in parking structures can range from \$10,000-\$15,000 per parking stall in suburban areas and \$15,000-\$20,000 in downtown areas. Parking spaces that are below the ground level cost at least 10 percent more. However, each structure is a unique project and there are many site factors that will significantly affect the final cost.

In most cases, parking garages are constructed as a single project and not in stages. Often a garage may be downsized during planning due to limited funds, but it has not been common to have the first few floors constructed in one phase with upward additions/phases in mind. With pre-cast construction, it is practical to do phases because footings and columns are already designed for future upward expansion. Estimates show that the cost to construct the upper floors would increase by 10-15 percent per year, with most of this increase being attributed to restaging the construction site. It is more common that a garage will be constructed on one site, with an adjoining site being reserved for horizontal expansion of the parking structure.

4.4 Parking Demand Studies

Developers, businesses, and jurisdictions alike, agree that the availability of accurate parking demand studies for this region will be essential to the success of shared parking.

By demonstrating actual parking needs and uses in the region, developers and local governments can analyze which land uses are likely to succeed as shared parking combinations. With this information, private industry is significantly more likely to embrace shared parking arrangements. This will be of particular importance when it can be documented that typical parking supply ratios are higher than actual regional utilization.

An initial example of regional parking studies is the Peak Parking Space Demand Study prepared by JHK & Associates, Inc. for the Oregon Department of Environmental Quality (DEQ). This study examined thirteen land uses in the Portland metropolitan area, per a specific need for supplemental information to the ITE *Parking Generation* manual. The DEQ study found a consistent oversupply of parking spaces for office and other uses on the sites studied.

Studies like this provide parking generation rates based on peak hour demand for parking in this geographic region. To put information like this to work, the ratio of total gross square feet of leasable space to the actual percentage of occupancy can be applied to peak hour parking demands and then entered into a shared parking calculation, as detailed in the Model Shared Parking Ordinance (appendix A). Additionally these data can be utilized by developers in their quest for funding of developments with parking provided at ratios other than what national standards recommend.

4.5 Shared Parking Policies

To make shared parking a beneficial growth management tool, developers and businesses need a land-use system that works efficiently and consistently; jurisdictions need guidelines as to what is appropriate; and neighborhoods need the reassurance that their interests and community are not to be sacrificed by arbitrary review. A consistent result of this study is that private industry desires less government involvement and regulation, while jurisdictions want clear regulatory guidelines that present a comprehensible development/redevelopment path.

More than 90% of the respondents said that current parking codes provide adequate parking for normal uses. However less than 45% of respondents believed parking codes adequately provide for seasonal peak parking demands.

In some retail environments, more than 50% of annual business is transacted in a 30-60 day period of time (November-January). Parking needs throughout the rest of the year are generally much lower. Building parking based on an average of peak and non-peak demands can discount a business' ability to draw additional customers during these critical peak periods. Shared parking can be a useful tool to account for this significant short-term demand.

At least half of the people interviewed said they favor some variety of regulatory guidance over shared parking. Unfortunately, there was little agreement on how or what type. Both business owners and developers are more amenable to policies and incentives that would assist in encouraging shared parking arrangements. The most suggested incentives are listed in Table 3.

Rank	Incentive
1	Public Private Partnerships To Develop And Mange Parking
2	Better (Safe) Access To Transit
3	Education About The Benefits Of Shared Parking
3	Pedestrian Amenities Within And Between Parking Lots
3	Pilot Demonstration Project
3	Priority Processing* Of Permits And Approvals
3	Public Financed Facilities
3	Reduction In Minimum Parking Requirements
4	Business Tax Breaks/Impact Fee Reductions
4	Transit Subsidy For Employees At Shared Parking Locations

*An example of priority processing can be found in ORS 340-030-1130 as an incentive associated with the Voluntary Maximum Parking Ratio Program in the Ozone Maintenance Plan, by DEQ.

Shared parking codes should be clear to users and jurisdiction staff. They should specifically define both the concept and the approval process. Applying for a shared parking situation should not be any more difficult to do than regular parking codes. At the same time, both private industry and municipalities agree that the regulation(s) must be flexible enough to allow for the inevitable land use changes. Just as important, other municipal policies, such as zoning requirements, should not discourage shared parking arrangements.

4.6 Shared Driveway Policies

Local, regional, statewide and national access management standards have been adopted to reduce the driving risks and increase safety to drivers, bicyclists, and pedestrians. These standards include the major concept of reducing the number of conflict points (where cars are entering or exiting from a land use onto a road or highway) through shared driveways and combined access points.

The concept of shared driveways is consistent with many of Oregon's planning and growth management goals. While there are no strict development policies requiring shared driveways, State and local access management policies attempt to manage the number of access points along a roadway where possible. For example, the Oregon Highway Plan contains an Access Management Plan that defines six access control categories that relate to the highways Level of Importance (LOI). For each category, the Access Management Policy establishes criteria for the spacing of intersections and private driveways. This includes restricting some locations to right turn-in/right turnout maneuvers only.

As a practical matter, new developments often establish shared driveways to meet these access criteria, particularly if the shared driveway will allow for a full movement access rather than only right-in/right-out maneuvers. If all properties are not ready for development at the same time, the driveway is typically constructed on one land parcel and a crossover easement is granted to the other parcels.

On the local level, most jurisdictions in Oregon do not have detailed access management policies for local roadways. Most proposed access driveways must be evaluated based on a traffic impact report and are approved on a case to case basis. Washington County does have general policies requiring that access to developments be placed on the lower classification roadway first, if it is feasible. The county also has specific distance criteria as to the spacing of major access driveways, but variances to these spaces are often granted because they are more than adequate or because past development patterns preclude these access spacing.

Overall, local jurisdictions have not traditionally taken a proactive role to encourage shared driveways. There are many examples throughout the region of developments with parking lots and access points in close proximity without any crossover access. If shared driveways were developed, it was because they were almost always along the boundaries of two land parcels, and because of the layout of land parcels.

4.7 The Success of Market Driven Trends

Market trends traditionally have directed and dictated parking needs and requirements. Without regulation, and in most cases without formal agreements, private industry has sought out shared parking arrangements based on actual needs and circumstances. In most cases, it has been just good business sense to enter into a flexible shared parking arrangement over the option to build and manage individual use lots.

Growth in the Lloyd District provides an excellent example of market-driven shared parking.

"...Since prior to most parking regulations, Lloyd District has added approximately one million gross leasable square feet, and today, there is less parking than in 1984. All of this (reduced parking) was market/developer driven without regulations.." - from interview with commercial property management/developer

When needs arise our economies adjust. This theory is supported by the high level of informal and unregulated shared parking which has taken place. Many organizations, developers, and businesses have entered into these informal arrangements to meet their actual or customer perceived parking demands. In most cases these informal arrangements have been maintained as informal to prevent costly and time-consuming municipal processes.

Of the interviewees who had been or were involved in shared parking situations, only 10% had conducted formal analyses of parking demands, but 70% felt their shared parking project was successful. These projects achieved the meritorious effects of:

- Reducing parking pressures on neighborhood streets.
- Demonstrating that cooperation will occur when the need arises.
- Construction of fewer parking spaces.
- Decreasing paved surfaces thereby reducing storm water runoff.
- Improving a neighborhood business climate and community support for those businesses.

The interviews did indicate some jurisdictions fail to support and may have actually discouraged shared parking. However, regulatory policies that support formal or informal shared parking arrangements succeed in achieving minimal development of excessive parking and related goals.

4.8 Site Concerns

Although respondents noted many site design and operation concerns, most of these issues have not surfaced during our interviews as major barriers to shared parking. Often mentioned issues are:

- Liability

- > Overflow
- Safety (and perception of safety)
- Location
 Maintenance
 Shared Driveways
 Signage Security and Enforcement

 - > Signage

Liability - Upon entering into this study, it was suspected that liability issues would rank high as a concern and potential barrier to shared parking. The interviews demonstrate that while the concept is a concern of most organizations, it can be managed. Participants in shared parking arrangements indicated that it was not a problematic issue, and they resolve it routinely by including their shared parking areas under their standard business liability insurance coverage.

In developing a shared parking agreement, parties may wish to consult an insurance or legal professional for any specific actions necessary. Additionally, the shared parking agreement should mention specifically any applicable times of authorized use of the shared facilities (see Appendix B - Model Shared Parking Agreement).

Location - Respondents provided varying answers to the question of how a parking area should be located from the land-use it serves. The interviews indicated that the location of a shared parking lot should be such that it is convenient to all land uses served by the lot. Currently, Metro area jurisdictions, which address the issue, allow parking to be between 100 and 500 feet.

Without supplemental shuttle service, the average distance from the land uses being served is recommended to be within 300 - 450 feet. With shuttle service and based upon area confidence levels, the range becomes 0.5 to 1.5 miles from a site. The term "area confidence levels" refers to the perceived safety level of a vehicle and a patron awaiting a shuttle pick-up.

Maintenance - For shared projects to be a success, maintenance must be on going and thorough. Aesthetics are important. Not only should the facilities have landscaping in good condition, the facilities should be relatively free from litter. Beyond standard upkeep and appearance, the facilities need to be without serious defect (i.e. pavement in good repair, no potholes, and striping and directional arrows should be clearly visible). Maintenance concerns should be addressed though a shared parking agreement (see Appendix B) between participants.

Overflow Parking - Respondents who are not involved in shared parking arrangements expressed concern that lack of available space will send overflow parking into adjacent neighborhoods and parking areas. People who have experience with shared parking did not typically raise this issue. Good signage and routine enforcement can address any overflow concerns, as well as providing additional assistance for special seasonal or event parking arrangements.

Safety (and Perception of Safety) - Experience has shown that patrons will only use a parking facility if they feel safe. They need to feel that their car is safe from vandalism and theft, and that they can walk freely through an area without encountering danger to themselves. Shared parking will be most successful in areas that are perceived as "safe" by potential patrons. If the area does not promote a high user confidence level, additional security measures ranging from lighting to security patrols, may assist the success of a shared parking project.

Enforcement - Enforcement may be crucial for particular projects. Enforcement can help prevent inappropriate long-term use of spaces in a shared parking area, monitor inappropriate employee parking, and it can protect neighborhoods from overflow parking.

Shared Driveways and Access Management - Another topic, which was discussed with interviewees, was the role of shared driveways in land development. Shared driveways can be used to promote shared parking and circulation among adjacent developments.

Overall, developers and business owners do not have specific objections to shared driveways particularly if the adjoining land uses are compatible or complementary. An example might be a retail center sharing an access driveway with a convenience market or gas station.

However, if only a few land uses are involved and they are not compatible, and the total number of parking spaces are close to the minimum, then vehicles related to one land-use may fill prime parking areas for another land-use. A potential mitigation for this would be establish short-term parking limits (e.g. 15 minute parking zones) in prime parking areas. The model Shared Use Agreement may be adapted to apply to shared driveways.

Signage - Since many parking facilities are designed to minimize street frontages, thereby reducing visibility, participants in shared parking agreements should provide good signage. For a shared parking area or a shared driveway to be successful, signage must be visible and understandable to people using the area. Signs should indicate clearly where parking is available for each land-use. The signs should be placed at the business, at the street access point, and inside the lot. These signs should be aesthetically pleasing, informative and conform to all appropriate municipal codes.

5.0 THE MODEL SHARED PARKING ORDINANCE

The purpose of the model ordinance is to give local governments some examples on which to base their own code and ordinance development. The model attempts to provide clear directions for implementation, while at the same time offering the flexibility necessary to prevent discouraging the development process.

Each jurisdiction must decide which elements of a model ordinance are most appropriate to their communities. The Model Shared Parking Ordinance contains a variety of issues, which each jurisdiction must define for itself. It also outlines a complete concept for a shared parking ordinance.

The Model Shared Parking Ordinance in Appendix A contains:

- A definition and brief understanding of what shared parking is;
- An intent and background section for;
- Options for applying shared parking within a jurisdiction's code;
- A detailed example of how to calculate shared parking needs for businesses;
- Additional jurisdictional code issues, which may be reviewed and addressed as appropriate.

6.0 THE MODEL SHARED USE AGREEMENT

As previously discussed, shared use agreements have not always been concrete documents built on strong foundations of regulatory compliance. In fact, circumstances and forces of the market have formally and informally forged most shared use agreements. Furthermore, they are exited in much the same fashion and with greater elasticity. With a jurisdictional infrastructure of support, these agreements can become an effective component of district parking management.

For an effective shared use arrangement to proceed, all parties should negotiate, agree, and document an arrangement that addresses legal and regulatory considerations. This process should include an up-front discussion of fiscal and liability concerns. This process can become a tool for district parking management.

As part of this study a review was conducted of a variety of shared use agreements, covenants and considerations. This review led to the drafting of a Model Shared Use Agreement, (see Appendix B). The model agreement is a conceptual document, based on existing agreements in the region, that provides options and points of discussion for shared parking agreements. It is designed for a "cut and paste" approach by both the lessor and lessee. All sections within this document are potential issues of negotiation. No portion of the document should be adopted without careful fiscal, liability and legal consideration of all parties.

The document features a standard contractual introduction, including identification of parties and property involved in the transaction, as well as a series of ten covenant categories. Below are just a few of the issues of negotiation:

- 1. Use of Facilities
- 2. Maintenance
- 3. Utilities and Taxes
- 4. Signage
- 5. Enforcement

- 6. Cooperation
- 7. Insurance
- 8. Indemnification
- 9. Termination
- 10. Supplemental Covenants

APPENDICES FOR SHARED PARKING IN THE PORTLAND METROPOLITAN AREA

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