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The Rural Perspective Technical Report Washington County Transportation Futures Study

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The Rural Perspective Technical Report Washington County Transportation Futures Study

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The Rural Perspective

Technical Report

Washington County Transportation Futures Study

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Jacob Rose, Sophia Solano, and Pablo Valenzuela

Center for Global
Business Studies

Tom McCall Center
for Policy Innovation



September 2016

A report for the Washington County Department of Land Use and Transportation

Executive Summary

1. Workers and residents see no difference between transportation systems within and without the urban growth boundary. They see a web of connections that ought to be seamless.
2. Latino groups and a significant proportion of other respondents see a need to expand public transportation options in rural areas.
3. Farm, forestry, and nursery leaders along with a significant proportion of other respondents call for growing the road system to better accommodate trucks, farm equipment, commuters, bicyclists, and pedestrians.
4. There is an almost universal call to improve safety for pedestrians and bicyclists. Not only for those engaged in those activities, but for those driving autos, trucks, and farm equipment on rural roads.
5. Calls for a public awareness campaign to emphasize safety.
6. Differing perceptions of what the transportation system ought to be among lifestyle residents, farmers, and workers, highlighting the need for engagement with these diverse groups.
7. Truck access for businesses is becoming a bigger and bigger issue.

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Introduction

Washington County has a total area of 727 square miles, and most of this—605 square miles—consists of area outside the urban growth boundary (UGB). At the same time, according to July 1, 2006 estimates revised by the Population Research Center at Portland State University, roughly 500,585 people lived in Washington County, and approximately 6% of these people lived outside the UGB in rural areas (2007–2008 Adopted Budget: County Profile, Washington County Profile). Getting the perspective of rural residents is crucial to making decisions about land use and transportation. For some residents, urban and rural, the rural economy and lifestyle has value beyond just the financial considerations. Others see the land as area for potential development. Weighing competing interests can be a tough balancing act, as evidenced by the oft-contentious UGB.

In this study we examine people’s perspectives about the transportation system in rural Washington County. We are interested in acquiring the opinions of people who live or work in rural areas. Our research team defines “rural areas” as lands outside the UGB. Moreover, an important goal of the project is to acquire the opinions of groups that have traditionally participated less in public policymaking such as agricultural laborers and Latinos. Another noteworthy aspect of this study is that it is a student project with faculty supervision. A group of undergraduate researchers at Pacific University took a lead role in designing this project, conducting the research, and writing the report.

Before embarking on the data collection process, the research team conducted a review of the literature to help better understand the extent to which the rural voice is being heard, if and how rural opinions differ from urban ones, and to see how minority voices have been heard and represented.

Literature Review

Background

Washington County has long been one of the most significant for agriculture in Oregon. However, there have been some important changes in the sector over the past few decades. According to data from Oregon State University, the nursery and greenhouse industry recently saw significant increases in sales. Sales went from about \$6 million to \$125 million. In constant dollars, sales were nearly 7 ½ times larger in 2002 than 1972. In fact, nursery and greenhouse sales came to amount to more than half of agricultural sales in Washington County (Miles & Miles and Associates, 2003).

At the same time, some traditionally strong crops have decreased in acreage. Washington County included about 3,000 acres of strawberries in the early 1970s, but this had decreased to under 1,000 acres in the early 2000s. The same types of trends took place with other berries. Significantly, local farmers could not compete with low labor cost areas such as Mexico and Chile. At the same time, wine grapes on the other hand were an exciting crop that increased in acreage (Miles & Miles and Associates, 2003).

A 2015 report found that while farm acreage in the county is increasing, the number of farms is actually decreasing. While big farms are becoming increasingly prevalent, the report noted that more than 60% of farms had sales of less than \$10,000 in 2012. Moreover, the report also found that smaller farms have relatively low farm-related income and profitability (Marstewart Group & Cogan Owens Greene, 2015, pp. 2–3). Owners of farms of different sizes may have different perspectives, opinions, and priorities on the public transportation system.

Rural Lifestyle

The rural lifestyle seems to be something many urban and rural citizens value. This value is in part evidenced by participation in farmers markets, and the focus on “buying local.” Cousins (2010) noted that there are two main types of farmers who participate in the local food network (e.g., at farmers

markets): long-time family farmers, and lifestyle farmers who started more recently as a hobby or a lifestyle choice. The two types of farmers generally differ in primary motivations for farming—family farmers tend not to idealize rural life and focus on production, and lifestyle farmers appreciate the rural lifestyle and as an escape from the city. However, both groups do not think the rural voice always receives fair input in planning processes (pp. 41–42). When looking at rural citizens’ opinions on land use and transportation, there is a large variety of people there; their opinions are bound to converge and diverge.

Rural Issues

One issue that can affect the rural community is conflicts between rural land use and the urban population at the edge of the UGB. In 2003 the Portland-area Metro Council held a symposium that gave the agricultural community a chance to talk about land use issues, especially those related to the UGB, and the future of agriculture in the Portland Metropolitan area (Sloop, 2003). Among other findings, the symposium revealed that although conflicts between urban populations and rural land uses have always existed, the impacts have worsened as the population in the region increases (Sloop, 2003, p. 4). The Hillsboro Chamber of Commerce, City of Hillsboro and Metro similarly sponsored two focus groups that included individuals from the agricultural community in Washington County. Among other comments, participants called for buffers between rural land uses and urban residential uses as a way to address conflicts between these two land uses. They explained that buffers would lessen the impacts of dust, spray, nighttime operations, and farming equipment on roads with urban traffic. The buffers might be natural, roadways, or commercial or industrial land uses that are more appropriate neighbors than private residences (Palm, 2003, pp. 5–6).

Another common complaint from rural citizens is congestion. A 2005 report, *The Cost of Congestion to the Economy of the Portland Region*, concluded the following:

The region’s economy is transportation dependent. Despite Portland’s excellent rail, marine, highway and air connections to national and international destinations, projected growth in freight

and general traffic cannot be accommodated on the current system. Increasing congestion even with currently planned improvements will significantly impact the region's ability to maintain and grow business, as well as our quality of life (Economic Development Research Group, 2005, p. ES-1).

For agricultural producers, for example, congestion makes truck sharing—the practice of farmers sharing trucks to reduce transportation costs—across the region impractical. The congestion effectively splits the agriculture sector into three geographic areas—east of I-5, west of I-5, and the south I-5 corridor heading to the Willamette Valley. This trifurcation increases agricultural production costs (Sloop, 2003, p. 3). Another report likewise found that there are serious problems with trucking goods through Washington County because of road congestion (Palm, 2003, p. 4).

A related issue that often emerges at the rural-urban fringe is environmental conflicts. For example, during the planning process of the Damascus/Boring Concept Plan, many stakeholders supported the idea of an interconnected multiuse transportation system, but “there was conflict about how an extensive on- and off-road bicycle and pedestrian network would impact the area's buttes, watersheds, and wildlife populations” (Adler et al., 2008, p. 543).

Additional Policy Suggestions in the Literature

In the report, *The Cost of Congestion to the Economy of the Portland Region*, there is a call for the Portland region to make investments in its transportation infrastructure to deal with congestion and remain competitive with other regions that are planning large such investments. “Failure to invest adequately in transportation improvements will result in a potential loss valued at of \$844 million annually by 2025 – that's \$782 per household and 6,500 jobs” (Economic Development Research Group, 2005, p. ES-1).

The 2003 symposium “Agriculture at the Edge,” which brought together members of the agricultural community in the Portland metro area for a discussion, provided some additional suggestions on how to improve the local transportation system. For example, the Land Conservation

and Development Commission (LCDC) suggested the following: mapping high value agricultural land; including water as a factor in land use decisions; joining the conservation groups to preserve irrigated land; and reviewing and possibly restricting commercial uses on agricultural land (Sloop, 2003, p.7).

While the issue of food insecurity among migrant farmworkers (and other rural residents) cannot be completely solved by transportation changes, making transportation decisions with food deserts in mind may help to alleviate them. Grauel and Chambers (2014) evaluated food desert experiences of migrant and seasonal farmworker communities in Oregon's Willamette Valley. They found that all migrant and seasonal farmworker camps had access to a food retailer within 5 miles. However, their research also indicated that using only distance to determine food deserts could be misleading. For example, distance numbers do not show the challenges that migrant and seasonal farmworkers in rural labor camps face when shopping for foods, as they often lack access to personal vehicles and public transit. Adding public transportation routes between where migrant and seasonal workers live and work and nearby markets could help solve some issues, but some rural residents may not support the infrastructure development and potential urbanization that might bring.

Summary

Rural citizens' opinions on land use and transportation can often differ from their urban counterparts. There are also sometimes differences within the rural community on transportation issues. The sources did not appear to include a proportional amount of agricultural farmworkers and low-income rural residents. If those populations were surveyed, systematic differences may be found in priorities, especially in regard to public transit and urbanization. Residents who struggle to afford private transportation may favor expanding public transit options. That will likely conflict with residents who care about the rural lifestyle, like lifestyle farmers.

In the literature, a common complaint from rural residents was that the rural opinion is not valued or listened to enough; some key demographics seem to be underrepresented in the literature. This is a gap this study seeks to fill.

Methods

To address these gaps in the literature, we conducted intensive individual interviews and focus groups with individuals who live or work in rural areas of Washington County. This data collection took place between May and August 2016. This included farmers, leaders in the nursery, winery and forestry industries, rural residents, and Latinos. We obtained the names and contact information of farmers, winery, nursery and forestry leaders, and rural residents from the Washington County Department of Land Use and Transportation. To reach Latino residents and workers in rural Washington County, we made arrangements with Centro Cultural in Cornelius and at Adelante Mujeres in Forest Grove to participate in focus groups at these organizations.

We carried out the individual interviews with nine people who are farmers, leaders in the nursery, winery and forestry industries, or live in rural Washington County. Eight of these interviewees self-identified as “Caucasian,” while one identified as “American.” All nine were in leadership positions in their professions and fields, such as president, owner, farmer, executive director, manager, and board member. First, we asked each individual interviewee basic demographic questions including their ethnicity, occupation, and primary mode of transportation between home and work. Second, we asked them several open-ended questions about the transportation system, namely: “What is your opinion of the transportation system near where you live/work?”; “What are your top values related to the transportation system near where you live/work?”; and “What do you think should be done to improve the transportation system near where you live/work?” All the individual interviewees explained that they live or work in rural Washington County, and that their primary mode of transport between their home and work is car or truck and sometimes bicycle in the case of one interviewee.

At the same time, we participated in twelve focus groups. To reach Latinos, we participated in ten focus groups at Centro Cultural and Adelante Mujeres. We carried out four focus groups at Centro Cultural in Cornelius with participants in classes at the organization (e.g., GED, ESL). Each group included approximately ten participants, for a total of forty-one people. Because we conducted the

focus groups in preexisting classes at Centro Cultural, we could not control whether the participants lived or worked in rural areas of the county. However, during the discussions it became apparent that many participants fit this description or were willing and able to speak about people they knew who did. We also assume that all the participants would self-identify as Latino or Hispanic. This is the case because Centro Cultural is a Hispanic organization that serves Latino residents. A mix of males and females were present during each focus group. We asked the participants if they live or work in rural Washington County, about their primary mode of transportation between home and work, and the same open-ended questions noted above for the individual interviews.

Likewise, we utilized six focus groups at Adelante Mujeres. One group consisted of the thirteen participants in the organization's Adelante Empresas class, a business development course for small business owners that took place in Beaverton. Like at Centro Cultural, we conducted our focus group in a preexisting class, so we could not control whether the participants lived or worked in rural areas of the county. Participants did not give a clear answer to our question of whether they live or work in rural Washington County, however, giving us some sense of where they live, one individual claimed to live in Forest Grove and another in Cornelius. We also assume that all the participants would self-identify as Latino or Hispanic. This is the case because Adelante Mujeres provides education and empowerment opportunities to low income Latino families. A mix of males and females were present during this focus group. We asked the participants the same demographic and open-ended questions we asked the focus group participants at Centro Cultural. The participants in this group at Adelante Mujeres and in the four groups at Centro Cultural indicated that their primary mode of transport is car, and sometimes carpooling. Some also bike to work, and some take the TriMet bus, but problems with the buses, described later, limit their use of this mode of transport.

We also observed and collected data at five focus groups that Adelante Mujeres carried out on its own during its annual Latino Forum in Forest Grove on May 18, 2016. During each group, participants discussed their opinions about the local area, which included perspectives about the transportation system. However, because our research team did not direct these focus groups, we

could not ask the participants whether they live or work in rural Washington County, their primary mode of transportation, or our open-ended questions. The participants also spoke mostly about transportation issues in urban areas.

Besides the ten focus groups at Centro Cultural and Adelante Mujeres, we also conducted two other groups, each with residents of a particular area in rural Washington County. In one group, we met with fourteen people who were attending the Kinton Grange meeting. Kinton Grange is located in Beaverton on SW Scholls Ferry Road, and meeting attendees are local residents. It is also worth noting that many of the attendees were retirees. All the participants self-identified as Caucasian however one person identified as American Indian with no particular tribal affiliation. In another group, we met with seven residents of Helvetia. These individuals had some important characteristics in common with the participants at Kinton Grange. Many again were retirees. Others in the group included one who owns a winery, one who is restoring a winery, and one who is a farmer. All the participants in the Helvetia group self-identified as Caucasian however one person identified as Hispanic. The group also pointed out that Helvetia as a community is majority Caucasian. In the case of both the focus group with Helvetia residents and the one at Kinton Grange, a mix of males and females were present. At Kinton Grange, participants' primary mode of transport is car, although a few bike either occasionally or avidly, and similarly in Helvetia, participants' primary form of transport is car. We asked the participants in both groups various demographic questions as well as the open-ended questions.

Findings

Latinos

The focus group participants at Centro Cultural and Adelante Mujeres had much in common in their experiences and opinions related to the transportation system. Participants described how they and other Latinos they know live in Forest Grove, Cornelius and Hillsboro—all within the UGB—but they commute to work in agricultural areas near Gaston, Banks, North Plains, Gales Creek, Blooming Fern Hill Road, and beyond town past Echo Shaw Elementary.

1. EXPANDING THE PUBLIC BUS SYSTEM TO RURAL AREAS

In multiple groups, participants said there are not enough bus lines. One group explained that due to insufficient lines, people have to ask others for a ride, bicycle, and walk between their home within the UGB and their work in rural areas. Similarly, another group contended that the public transportation system should be improved to better reach less urban areas, and yet another said more bus lines should extend to smaller towns where many people work, such as in Gaston and Banks. One way to address this problem would be to extend existing lines. In this vein, participants in one group explained that line 57 only runs east-to-west, merely following Highway 8. It also extends west only to B Street in Forest Grove, not reaching rural areas. As a result, people have to walk over two miles to their jobs at a local nursery. There was also interest in expanding the MAX system, with a call for extending a line through Forest Grove.

2. IMPROVING THE URBAN PUBLIC BUS SYSTEM

Participants spoke of several other issues with the bus and MAX system as well as problems for pedestrians and bikers such as a lack of crosswalks and streetlights. These concerns are not specific to our focus on rural areas but rather relate more to urban busing and infrastructure. Nevertheless, we still list these concerns below for a couple of reasons. First, these issues were a major concern of Latino respondents. Second, the urban transportation system is inextricably intertwined with the rural system.

Participants identified several additional issues with the bus system. They said that buses do not begin running early enough in the morning for people to arrive at work on time. They also noted that buses do not pass by stops often enough in a day, especially on weekends when some of them work. At the same time, sometimes the buses are full when they arrive at a stop, and then the people there have to wait for the next bus, making them late for work. Similarly, respondents also said that some people use a combination of bus and bicycle to reach work, however, each bus has one rack that only accommodates a few bikes. Sometimes the rack is full and passengers with a bike have to wait for the next bus to come by, possibly making them late for work. Furthermore, buses commonly arrive late to stops, typically by about fifteen minutes. Bus stops are also sometimes far apart, requiring passengers to walk a long distance from one stop to another to reach their final destination. In one group, a majority who took the bus said they often have to walk up to ten blocks to reach their final destination.

Some of the concerns about the bus system as well as the MAX relate to comfort and security. For instance, participants said there are no shelters for rain or lights for security at many stops on route 57, and in fact, the majority of stops in Cornelius lack a rain cover. There is also a large ridership of mothers on the buses, yet it is difficult to get strollers on and off the buses. Furthermore, in one group the participants said that bus stops lack lights and security and as a result they can be dangerous. In another group, a woman described some examples of this danger. She explained two situations at a stop as well as on a bus when intoxicated men gave her looks or made comments that were inappropriate. Yet another group spoke of security issues in the MAX system. It was explained that after a certain hour at night the MAX arrives at stops less frequently, and this causes women who are waiting at these stops to feel insecure.

3. INCREASING SAFETY FOR PEDESTRIANS AND BICYCLISTS

Given the issues with buses, the focus group participants sometimes walk and bicycle to get to where they need to go, and as such, they suggested ways to make walking and biking safer. Groups specifically spoke of the need for more and better crosswalks, sidewalks and streetlights. They also identified particular roads and intersections where these needs exist. For example, multiple groups, including at both Centro Cultural and Adelante Mujeres, identified the roads around the Virginia Garcia Health Center in Cornelius as a safety concern. A group at the Adelante Mujeres Latino Forum said that people cannot cross the street to reach appointments at the Virginia Garcia clinic. Similarly, a group at Centro Cultural said the crosswalks at 13th and Baseline and 14th and Baseline are a safety concern and need improvement. Another group at Centro Cultural likewise called attention to Highway 8 between 12th and 13th Avenue where people cross on foot to reach the health center—this intersection needs crosswalks and flashing indicator lights. The group at the Adelante Mujeres Empresas Workshop gave similar but even more specific advice. It explained that near the clinic and Centro Cultural people are dangerously crossing the street where there is no traffic light, and to deal with this problem there should be a lighted crosswalk in the area like the one near Safeway in Forest Grove.

At the Adelante Mujeres Latino Forum, participants also focused a great deal on safety issues where Pacific Avenue intersects with Mountain View Lane in Forest Grove. For example, one focus group said that at Mountain View Lane near Rose Grove trailer park, people cross Pacific Avenue to reach a bus stop, and this area needs security lights. Other groups at the Forum also expressed concern about this area, with one saying that the area near Rose Grove needs both a light and street crossing because this would make it safer to cross the street as well as help guard against robberies in the area. The Adelante Mujeres Empresas Workshop identified an additional problem spot in Forest Grove. It said that the area near the 7-Eleven, which is located where Pacific Avenue intersects with Yew Street, is dangerous for pedestrians and a crosswalk should be installed there.

Other comments focused on bicycle safety. A man explained that he bought a bike to ride to work, but he found it too dangerous to do this on local roads and stopped. In another group, many expressed frustration that they have to ride a bike to work in rural areas when the roads are often narrow or otherwise dangerous, such as in the case of Ritchey Road in Forest Grove.

Rural Businesses and Residents

In contrast to the focus group participants at Centro Cultural and Adelante Mujeres, the persons who participated in individual interviews, the focus group at Kinton Grange, and the group in Helvetia did not agree as much about the transportation system. Here the differences between the “lifestyle” and “farming” communities were most evident. Most importantly, participants split into two differing visions of the future over whether Washington County should further develop and expand transportation infrastructure in rural areas, with one group more supportive of this development and the other less so. The latter group also showed greater interest in improving access to public transportation in rural areas, putting this group more in line with the Latino focus group participants. However, there was broad support for making rural roads safer for bicyclists, which was also a concern raised during the Latino focus groups. Furthermore, all participants agreed that congestion is increasing on roads in rural areas and this is a problem.

1. GROWING THE RURAL TRANSPORTATION SYSTEM

More than half of the individual interviewees expressed a stronger support for developing and growing the rural transportation system. These individuals are farmers, foresters, and leaders in the nursery business. Their farms, nurseries and workplaces are located in Cornelius, Sherwood, Wilsonville, Gaston, and Banks. They contended that traffic is increasing in rural areas. For example, one interviewee said that traffic is getting worse every year in his area because of commuters as well as increasing service businesses nearby like restaurants and grocery stores. The interviewees said that this growing congestion is an issue because it increases driving times. For instance, one interviewee said that although increasing congestion is good for the business of his farm store, it is negative in

the sense that it slows the transport of crops from his farm. Furthermore, some consumers do not go to his farm store because of the danger of turning across traffic to the store lot. Another interviewee explained that increasingly trucks arrive late to the nursery due to road congestion, and then workers have to stay beyond 5 p.m. to load the truck. In fact, he added, it is taking longer and longer to transport goods between Portland and areas to the west in rural Washington County, and congestion is causing a shortage of transport carriers in these rural areas because drivers are not willing to go there if it means sitting through heavy traffic. Interviewees said that the growing congestion is also reducing road safety. For example, a couple interviewees said that commuters are conflicting with farm equipment and heavy trucks on the roads, leading them to engage in unsafe driving practices. Interviewees also expressed that there is a growing number of bicyclists on rural roads and this is reducing safety. For instance, one said that there is an increasing amount of recreational bikers on rural roads, so there should be separate parallel bike paths along these roads. Another said that insufficient shoulders, blind hills and blind corners on rural roads are all problematic for bikers.

These interviewees expressed support for dealing with congestion and safety issues by developing and enlarging the rural transportation infrastructure. Interviewees advocated adding more lanes to roads, widening lanes, straightening s-curves, and adding larger shoulders. They also named specific locations where these improvements are needed. For example, an interviewee said that Tualatin-Sherwood Road has only two lanes or even only one lane in each direction, and it needs more lanes due to congestion, and Roy Rogers Road now needs more lanes as well. An interviewee pointed out problems with Tongue Lane between Golf Course Road and Johnson School Road, saying that guardrails on this narrow road are forcing farming equipment to veer over the road's center marks. Additionally, a participant suggested making changes to Highways 47 and 26. He called for larger shoulders on both highways to better accommodate trucks, and he advocated wider or more lanes on Highway 26 for this same reason. Similarly, another respondent recommended adding more lanes to Highway 47 in Gaston and to Highway 8 as well to keep up with population growth that is leading to safety issues on this road. A couple of the interviewees also said that the long-considered Westside

Bypass, a freeway through rural areas of the county, would have been helpful in dealing with congestion.

Finally, 40% of these interviewees expressed that it was perhaps not feasible to extend public bus lines into rural Washington County because of limited ridership (the other 60% of this group of participants unfortunately did not clearly address this issue during the interviews). However, the focus group data suggests the opposite conclusion: Latinos expressed interest in using public transport in rural areas, so perhaps they would provide ridership for new or extended lines.

2. FINDING ALTERNATIVES TO GROWING THE RURAL TRANSPORTATION SYSTEM

The other individual interviewees, slightly less than half the total, as well as the participants in the focus groups at Kinton Grange and in Helvetia expressed less support for developing and growing the rural transportation system. These lifestyle communities also expressed more interest in expanding public transportation in the direction of rural areas of Washington County. However, at the same time they still matched up with the previously discussed individual interviewees (i.e., the farming communities) in contending that congestion is a growing problem on rural roads. Furthermore, the lifestyle communities asserted that we should make rural roads safer for bicycles.

The second grouping of individual interviewees includes a leader at a nursery, a long-time rural resident, and two leaders at two different wineries. Their businesses and homes are located in Cornelius, Beaverton, Hillsboro, and Sherwood. The participants at Kinton Grange and in Helvetia had a similar profile. The group at Kinton Grange, located southwest of Beaverton, consisted of local rural residents. Likewise, the participants in the other group consisted of residents of the rural area of Helvetia. In both focus groups, many of the participants are retirees.

A. CONGESTION ISSUES ON RURAL ROADWAYS

The individual interviewees, Kinton Grange group, and Helvetia participants agreed that congestion is increasing nearby. The Grange group contended that there is more traffic on rural roads and people are speeding, including up to 80 mph. It was their sense that this increasing traffic

is coming from people from urban and suburban areas who are increasingly using rural roads to get around. The Grange participants went on to identify specific roads where there is a great deal of car traffic. They named River Road, Scholls Ferry Road, Tile Flat Road, Burkhalter Road, Simpson Road, Clark Hill Road, and 219. They also described complicating factors that make it difficult for these roads to handle increased traffic. Namely, Tile Flat and River Roads also have traffic from bikers, Simpson and Burkhalter Roads also have traffic from construction vehicles such as gravel trucks, and Scholls Ferry Road has dangerous curves.

The Helvetia focus group told a very similar story. They explained that there is more and more traffic in Helvetia, and it is coming primarily from commuters. However, they also noted that there is a lot of tourism in Helvetia, such as to wineries, pumpkin patches and berry picking farms, and this tourism is another important contributor to increasing traffic in the area. The Helvetia group saw that development patterns and existing transportation options have resulted in much more traffic on the rural roads in their area. They said that, together with the increased congestion, there is also a problem with speeding in Helvetia. They blamed this problem in part on limited oversight by the authorities. Focus group participants explained that in western Washington County there are only two sheriff deputies on duty per shift, and these two deputies have various responsibilities of which handling traffic violations is merely one. Within this context, the focus group members said they rarely see the deputies out giving traffic tickets in Helvetia. Like the Grange participants, the Helvetia group also named some specific rural roads where congestion and speeding has increased. For example, they explained that the government is pushing drivers to use West Union Road in order to take traffic off Highway 26. They also said that people are driving 60 to 65 mph on Philips Road and Dick Road, which is over the limit.

The individual interviewees made similar remarks. One said that there is too much traffic on Blooming Fern Hill Road going from a gravel road to a major commuter route. Similarly, another respondent said that there is increasing congestion in her area because people are driving on the scenic route through rural areas. Yet another interviewee said that congestion problems have

increased on county roads because of a growth in housing developments near his work. In fact, because the traffic does not flow, it has become easier for him to commute to Newberg in Yamhill County instead of to Hillsboro. He also added that having the same routes for commuter traffic and farm equipment can contribute to safety issues on the roads.

The focus group participants in Helvetia elaborated much further on why increased congestion and higher driving speeds in rural areas is a negative phenomenon. The major concern of the group was that, when rural areas are subjected to traffic in this manner, there is a negative impact on local agriculture. For example, a lot of the farmers in Helvetia also lease land elsewhere, and this requires them to transport their equipment and combines to these areas. However, the equipment transportation is getting more and more difficult because of rural traffic. To deal with the situation, farmers organize convoys to move their equipment together in a safer manner. However, because the farmers can only move their equipment when convoys are running, they may not be able to harvest or tend to their crops when it is most needed. The Helvetia group expressed concern that eventually local farmers will give up their profession because of these difficulties. They emphasized that farming plays an important role in the economy of Washington County. Specifically, group members pointed out that the farms of Helvetia provide a significant amount of trade dollars in the economy of the county. Besides these economic concerns, the Helvetia group explained that the increased congestion and higher driving speeds in the area is also a safety issue. They said that the conditions of local roads make them inadequate for handling increased and faster traffic. For one, local farming creates dust clouds that move across roads and this makes driving more dangerous. Furthermore, roads in Helvetia have ditches next to them for drainage, and these present a danger for commuters especially when they are sharing the road with large vehicles like farm equipment. Further still, the roads and bridges in Helvetia are deteriorating because they were made to handle agricultural traffic rather than all the commuters that they are currently accommodating.

The Kinton Grange group, Helvetia participants, and individual interviewees also expressed an interest in making roads safer for biking. For their part, the Grange participants noted an increase in

bicycle traffic on rural roads. They also said that there are few bike paths to alleviate this problem. They went on to explain that car drivers get stuck behind cyclists and this causes the drivers to make unsafe driving maneuvers. The Helvetia focus group members described a similar situation in their area. They said that there are more and more bikers going through Helvetia, and this is dangerous because the roads are narrow and lack bike lanes. Individual interviewees provided similar insights and further detail. One said that bike rides take place in her area almost weekly, with larger groups on the weekends, and another explained that there are more and more people biking on Farmington Road. However the Kinton Grange group and the same two individual interviewees proposed to deal with this problem in a different way than the Helvetia participants. As for the Kinton Grange group, most of them wanted more bike lanes on nearby roads to improve safety, and furthermore, the idea of having separate bike paths away from regular roads was popular. Similarly, the two individual interviewees both agree that there is a need to build bike lanes and larger shoulders on rural roads. The Helvetia residents, on the other hand, showed less support for building bike lanes and paths. They said that building bike lanes or shoulders on local roads would interfere with the ditches on each side of the road, which are an important part of the drainage system for agriculture. Moreover, building a separate bike path beside the road would require the government to take people's agricultural land to make space for the path. Rather than building lanes or paths, the Helvetia group said the answer to improving bicycle safety on local roads was to reduce commuter traffic in the area.

B. ALTERNATIVE APPROACHES TO CONGESTION ISSUES

Besides some significant support for adding bike lanes and shoulders, the individual interviewees, Grange participants, and Helvetia residents did not show much support for enlarging rural roads. Instead, they called for other means to deal with increasing automobile traffic in the countryside. Their primary goals appear to be improving road safety, maintaining rural quality of life, and supporting local agriculture. The individual interviewees called for lower speed limits, and one also recommended speed bumps since this would not require police enforcement. One also called for installing more stoplights. For example, accidents are common in the area of Zion Church Road, and

a stoplight is needed at Zion Church Road and Susbauer Road. One of the individual interviewees also said that we should leave blind hills and sharp turns as they are because these features slow drivers down. Moreover, there should be more pavement treatments to warn drivers when they are veering out of their lane. This is needed on Farmington Road, for instance. One of the individual interviewees expressed some guarded support for enlarging roads. Namely, this respondent expressed support for putting more lanes on nearby roads. However, the interviewee would not support doing this on Highway 26 as well because this would encourage more people to move nearby the interviewee's workplace and further develop the area. Another individual interviewee was more adamantly against adding more lanes to local roads, saying this would cause more traffic accidents and make it more difficult for pedestrians and bikers to cross streets. Aside from these recommendations related to the road system, an individual interviewee suggested that we could also minimize congestion by limiting housing development in rural areas.

The Helvetia and Kinton Grange groups made some of these same recommendations. They both called for maintaining narrow roads that tend to reduce traffic speed and for keeping blind hills and curves that discourage people from using the roads and therefore keep down congestion. Furthermore, the Helvetia group called for lowering speed limits. For example, they said that the limit on Helvetia Road is 55 mph, which is too fast. Moreover, the Kinton Grange group called for putting rumble strips on roads.

Moreover, the Kinton Grange and Helvetia participants widely agreed that improving the urban transportation system would help alleviate stress on the rural road system. For instance, the Kinton Grange participants widely agreed that improving the urban system by widening roads and freeways and speeding up the pace of public transit would alleviate stress on rural roads. As with the individual interviewees, there was support for enlarging rural roads as well only in particular situations. Specifically, many of the Kinton Grange participants agreed that there should be more middle lanes for turning in rural areas to allow people to turn across traffic more safely. An example of a road where a middle lane is needed is Pleasant Valley Road. In Helvetia, the focus group participants

similarly expressed support for improving the urban transport system by widening and adding lanes to roads. They argued that the Tualatin Valley Highway should be made into a freeway. Furthermore, explained one of the Helvetia residents, instead of building a Westside Bypass that would destroy farmland in its path, the government should finish the first incarnation of the bypass that would have consisted of 217 to 26 to Cornelius Pass Road. The Helvetia group also argued that there are too many intersections with traffic lights in urban areas that slow down traffic, and the government should build overpasses in these areas that would better facilitate traffic. The Kinton Grange group provided several additional recommendations for how we might address rural congestion and speeding that went beyond those expressed by either the individual interviewees or the group in Helvetia. Namely, they called for placing speed tracking signs in particular areas, putting flashing signs up high warning people about upcoming blind hills and curves, and having an education campaign to teach people “the price you pay” to enjoy the scenic beauty of rural areas is to drive slower.

The individual interviewees, Kinton Grange group, and Helvetia participants also expressed support for expanding public transportation in the direction of rural areas, which was similar to the opinions voiced by the Latino focus group participants. The Grange participants contended that in fact many who live in their area would prefer to use public transport instead of driving a car. The Helvetia group members admittedly showed less support than their counterparts at Kinton Grange for expanding transit into rural areas. For example, they did not seem to have a personal interest in having access to transit in Helvetia. Nevertheless, they did say that perhaps it would be useful to have park-and-ride hubs closer to Helvetia, as long as they were located in industrial rather than agricultural areas. A couple of the individual interviewees called for expanding busing into rural areas. One said that a bus should operate on Zion Church Road because many of her workers would use this route. Another noted that transit is very focused on getting people into and out of Portland and said that they had advocated for bus service in their area. A third individual interviewee suggested extending the MAX further west. Finally, the Kinton Grange group members called for a more

innovative type of transit in rural areas. They called for creating an Uber-type model that would connect people in rural areas to the bus and MAX lines in urban areas. They explained that this system would be particularly useful to people who live in the countryside who are older and are no longer able to drive.

Summary of Findings

Below we summarize and provide some final analysis of the interview and focus group data. First, we describe some clear patterns of opinion that groups held on various themes, including the issue of transit and the question of whether to enlarge the transportation infrastructure in rural areas. Second, we take a closer look at these and other themes and related challenges that emerged during the research.

Patterns of Opinion

The focus groups and individual interviews revealed some interesting patterns of opinion among people who live or work in rural Washington County. One of the most striking patterns is how the participants in the Latino focus groups prioritized expanding public transport into rural areas and making improvements to urban public transport, while many of the individual interviewees did not appear to prioritize these goals as much. In other words, the Latino participants, who appear to include farm and nursery workers, seem to prioritize these goals more than many of the individual interviewees, who include leaders in the farming and nursery sector. However to be sure, other individual interviewees as well as participants in the focus groups at Kinton Grange and Helvetia did take a similar position to their Latino counterparts. A little fewer than half the interviewees, the Kinton Grange focus group, and the Helvetia group expressed support for expanding public transportation in the direction of rural areas. It is also worth noting that the Latino focus group participants primarily called for expanding and improving the bus system rather than another aspect of the public transport system.

Another noteworthy pattern is how the individual interviewees, Kinton Grange participants, and Helvetia respondents clearly split into two groups on their level of support for addressing the congestion in rural areas by growing the road system there. A group of farm, forestry and nursery leaders is more prepared to add and enlarge lanes on rural roads than another group that includes agricultural leaders and rural residents, including a significant number of retirees. However, there was

significant agreement across all the focus groups and all the individual interviewees in this study on the need to improve road safety for pedestrians and bicyclists. This would not only better protect the walkers and bikers but also the automobiles and farm equipment that share the road.

Need for a Public Awareness Campaign

There is general agreement that safety is important. A public awareness campaign as a first step seems to be a policy that all groups would support, with increased signage to promote safe driving and sharing of rural roads. On rural roads in Washington County there are often blind corners, sudden dips, and small shoulders. While some of these areas have signs warning drivers, many do not. Increased signage, flashing lights, and rumble strips in key areas—as identified by the transportation department surveying the roads and a more in-depth survey of rural residents—would help warn drivers ahead of time so they have sufficient time to slow down to a safe speed. Especially on roads with narrow shoulders and blind curves this could help different modes of transportation share the same road safely. Adding signs to explain where and where not to pass might help issues with commuters sharing the road with farm equipment. The public awareness side of this could include signs or online advertisements that remind people to drive slow when sharing the road with farm equipment, and that driving slow is the “price you pay” to preserve the rural areas.

Improving the Urban Transport System Would Help Address Rural Transportation Issues

There was a lot of agreement during our interviews and focus groups that the urban transportation system needs to be improved in order to fix the rural transportation system, something we did not see much of in the literature. Participants agreed that, if it were financially feasible, fixing the urban transportation system would solve rural issues without affecting the rural lifestyle. However, as one interviewee mentioned, widening roads in urban areas would have much larger economic impacts than in rural areas.

Bicycling—A Big Issue, but Solutions are Hard to Come By

Another issue mentioned more frequently by our participants than in the literature we reviewed was bicyclists and bike paths. Because many of the rural roads have small shoulders, traffic going the same direction as the bicyclists is slowed down to the same speed as the cyclist, until the road clears and drivers are able to safely pass. One potential solution is adding dedicated bike paths separate from the road, like in the case of the Banks-Vernonia State Trail. This solves the issue of safety almost completely, but some of our participants cautioned that this solution could destroy valuable farmland. Furthermore, as we saw in the case of the Damascus/Boring Concept Plan, conflict may also emerge over potential environmental impacts of bike paths. Solving the issue of bicyclists on rural roads is complicated because every solution has unintended consequences. If bike lanes are going to be added, the process for deciding what roads to add them on should be intentional and look at a combination of factors including existing traffic level, present level of bicyclists on the roads, and the feasibility and public support for converting some of the land into bike lanes.

Transit

There was not a consensus among our individual interviewees and focus group participants on the question of whether to add transit in rural areas. In fact, it may create more issues than it would solve. Firstly, there are last-mile–first-mile issues to deal with. With farms spread out all around rural Washington County, it will be difficult for bus riders to get close enough to their final destination to actually be useful. Also, increased bus use on smaller rural roads will only increase conflicts between different modes of transportation. In the long term, some solution involving a service like Uber using self-driving cars may be workable. That could help residents without cars and older residents who have difficulty driving (which will become an increasingly large problem as the children of farmers decide to pursue a different career path).

Lifestyle Farmers and Long-Time Farmers

The interviews and focus groups revealed that there are both long-time farmers and lifestyle farmers in rural Washington County. Lifestyle farmers are relatively new to their communities and often are able to purchase large plots of land because they are higher up the income ladder. They do not rely on their land to make a living—instead, they find value in closer-knit communities and having easy access to natural amenities. With a combination of an aging population of farmers, flight from urban Washington County encouraged by increasing population density and facilitated by increasing wealth, and larger farms buying more land and growing bigger, the demographics of rural Washington County may change significantly in the next few decades. This change may affect the balance of opinions of rural residents, and also as farms grow larger and larger lobbying becomes increasingly economically feasible, and thus their political voices and influence may become larger. If this happens, policy makers will need to be cognizant of getting the opinions of less politically powerful groups so they can make balanced decisions.

Westside Bypass

One large-scale suggestion for improving congestion on rural roads is finishing, as one resident of Helvetia put it, “the original Westside Bypass.” Expanding this route to be able to handle increased traffic could make it an obvious path for commuters to follow, it could make sharing the road easier with farm equipment, and it could help alleviate traffic on urban as well as rural roads. However, the costs of this solution are high and participants in our research disagreed on whether to build “the original Westside Bypass” or some different version of it in another area of rural Washington County. One of the first farmers interviewed mentioned that he had hardly seen any development in the rural transportation system in the last forty years, a time during which traffic and population increased significantly. Being proactive about transportation decisions could help to make Washington County a more pleasant place to live and also help facilitate its growth.

Truck Access

In our survey we met with the sales manager for a nursery who articulated his concerns about how it is increasingly difficult for him to find truck drivers who are willing to pick up his products for delivery. He noted that many truck drivers come from the Portland area, and are deterred by increased congestion in our county's transportation system. In our literature review, we included a memorandum published by the Hillsboro Chamber of Commerce in which focus group respondents identified the same problem, pointing out that increased congestion leads to higher transportation costs overall. The nursery manager we spoke with suggested that it might make sense to widen or build more lanes on Highway 26, I-5, and 217. This proposal may warrant future study in light of decisions about a Westside Bypass or expanding roads to include bicycle lanes and the like.

References

- Adler, S., Dobson, N., Fox, K. P., & Weigand, L. (2008). Advocating for active living on the rural-urban fringe: a case study of planning in the Portland, Oregon, metropolitan area *Journal of Health Politics, Policy and Law*, 33(3), 525–558. doi: 10.1215/03616878-2008-007
- Cousins, J. J. (2010, 1 January). *Local Food and Land-Use in Washington County, Oregon*. Master of Science thesis, Portland State University, Portland, OR. Retrieved from PDXScholar
- Economic Development Research Group. (2005, 25 November). *The Cost of Congestion to the Economy of the Portland Region*. Portland Business Alliance, Metro, Port of Portland. Portland, OR. Retrieved from www.portofportland.com
- Grael, K., & Chambers, K. J. (2014). Food Deserts and Migrant Farmworkers: Assessing Food Access in Oregon's Willamette Valley *Journal of Ethnobiology*, 34(2), 228–250. doi: 10.2993/0278-0771-34.2.228
- Marstewart Group, & Cogan Owens Greene. (2015, 14 May). *Washington County Rural Tourism Study: Washington County Agriculture Sector Report. Snapshot of Preliminary Findings*. Washington County, OR (Draft). Hillsboro, OR.
- Miles, S. D., & Miles and Associates. (2003, July). *The Changing Nature of Washington County Agriculture* (Appendices, Report for Hillsboro Chamber of Commerce). Hillsboro, OR.
- Palm, D. (2003, 1 October). *Agricultural Focus Group Summary*. Hillsboro, OR: The Greater Hillsboro Area Chamber of Commerce.
- Sloop, K. I. (2003, December). *Agriculture at the Edge: A Symposium* Metro, Portland-area Regional Government (Summary). Portland, OR: Metro. Retrieved from www.metro-region.org
- 2007–2008 Adopted Budget: County Profile, Washington County Profile. Washington County, Oregon. Hillsboro, OR. Retrieved from www.co.washington.or.us/Support_Services/Finance/CountyBudget/fy07-08-supplemental-information.cfm

Additional Background Sources

- Abbott, C., & Margheim, J. (2008). Imagining Portland's Urban Growth Boundary: Planning Regulation as a Cultural Icon *Journal of the American Planning Association*, 74(2), 196–208. doi: 10.1080/01944360801944997
- Appenbrink, N., Ansary, R., Decker, E., McQuillan, K., Nelson, K., & Picha, E. (2010, 1 January). *Harvesting Opportunity: A Strategic Vision for Farmworker Housing and Microenterprise in Washington County*. Masters of Urban and Regional Planning Workshop Projects, Portland State University. Portland, OR. Retrieved from PDXScholar
- Azuma, D., Thompson, J., & Weyermann, D. (2013, September). *Changes in Development Near Public Forest Lands in Oregon and Washington, 1974–2005: Implications for Management* (Research Paper PNW-RP-596). Portland, OR: USDA Forest Service.
- Butz, A., & Zuberi, D. (2012). Local approaches to counter a wider pattern? Urban poverty in Portland, Oregon *The Social Science Journal*, 49(3), 359–367. doi: 10.1016/j.soscij.2011.12.001
- Davis, J. S., Nelson, A. C., & Duecker, K. J. (1994). The New 'Burbs: The Exurbs and Their Implications for Planning Policy *Journal of the American Planning Association*, 60(1), 45–59.

- DHM Research. (2013, May). *Washington County Transportation Scientific Survey*. DKS and Washington County. Hillsboro, OR. Retrieved from www.co.washington.or.us
- Johnson, S. L. (2008, 6 June). *Oregon's Changing Rural Population: Age, Migration and Policy Response*. Master's Thesis, Oregon State University, Corvallis, OR. Retrieved from ir.library.oregonstate.edu
- Jun, M. J. (2004). The Effects of Portland's urban growth boundary on urban development patterns and commuting *Urban Studies*, *41*(7), 1333–1348. doi: 10.1080/0042098042000214824
- Leo, C. (1998). Regional Growth Managements Regime: The Case of Portland, Oregon *Journal of Urban Affairs*, *20*(4), 363–394. doi: 10.1111/j.1467-9906.1998.tb00428.x
- Metro. (2014, September). *2014 Urban Growth Report: Investing in Our Communities 2015–2035* (Revised Draft). Portland, OR: Metro. Retrieved from oregonmetro.gov/growth
- Morris, M. (1996). Portland's LUTRAQ Program *Planning*, *62*(4), 12.
- Mullinix, K., Garcia, L., Lewis-Lorentz, A., & Qazi, J. (2006, June). Latino Views of Agriculture, Careers and Education: Dispelling the Myths. *NACTA Journal*, 2–11. Retrieved from www.nactateachers.org
- Nelson, A. C. (1992). Preserving Prime Farmland in the Face of Urbanization *Journal of the American Planning Association*, *58*(4), 467–488.
- Oliver, G. (1994). Portland Revs Up for Action *Planning*, *60*(8), 8–12.
- Sloop, K.I., & Parsons Brinckerhoff. (2004, 12 January). *Balancing Agriculture and Urban Land Needs in Washington County: The Agricultural Perspective* (Report for City of Hillsboro and Hillsboro Chamber of Commerce).
- Song, Y., & Knaap, G.-J. (2004). Measuring Urban Form: Is Portland Winning the War on Sprawl? *Journal of the American Planning Association*, *70*(2), 210–225.
- Song, Y., & Knaap, G.-J. (2007). Quantitative Classification of Neighbourhoods: The Neighbourhoods of New Single-family Homes in the Portland Metropolitan Area *Journal of Urban Design*, *12*(1), 1–24. doi: 10.1080/13574800601072640
- Tong, T., Yu, T.-H. E., Cho, S.-H., Jensen, K., & De La Torre Ugarte, D. (2013). Evaluating the spatial spillover effects of transportation infrastructure on agricultural output across the United States *Journal of Transport Geography*, *30*, 47–55. doi: 10.1016/j.jtrangeo.2013.03.001
- 2012–13 Oregon Farm & Forest Report*. (2015, 3 February). Department of Land Conservation and Development, State of Oregon. Salem, OR. Retrieved from www.oregon.gov