

December 12, 2007

TO: AIRPORT FUTURES PLANNING ADVISORY GROUP

FROM: John L. Campbell, Michael J. Riley, APR, PRC  
RILEY RESEARCH ASSOCIATES

RE: AIRPORT FUTURES STUDY

## TABLE OF CONTENTS

EXECUTIVE OVERVIEW.....	1
INTRODUCTION.....	6
METHODOLOGY.....	6
IMPACT AREA MAP.....	7
QUESTIONNAIRE.....	8

## EXECUTIVE OVERVIEW

### Airport Perceptions

---

- ☒ Metro-area residents appear well satisfied with Portland International Airport (PDX) overall. Nearly one-half (45%) gave a perfect rating of “5” and only 3% gave a score of “2” or lower. The average (mean) rating was “4.3” on the five-point scale. (Q6)
- ☒ Residents were asked to what extent they agree with various statements about PDX. Respondents were *most* likely to agree that the Airport is important to the region’s economy.

Statements (Q9-15, Randomized)	1-5 Scale
The Airport is important to the region's economy	4.7
Portland International Airport is among the best airports in the United States	4.4
Flights out of the Airport allow me to easily travel when and where I want to go	4.3
The Airport should do more to protect the environment	3.8
Protecting the natural environment is more important than accommodating airport growth	3.5
MAX light rail is a convenient way for me to travel to and from the Airport	3.0
Airplane noise reduces the quality of life in my neighborhood	1.9

\* Based on a 5-point scale, where one means, “strongly disagree” and five means, “strongly agree”

- ☒ The largest percentage of participants advocate a balance in terms of the importance of *protecting the neighborhoods’ livability* and *protecting the airport’s ability to support the region’s economic vitality* (37% chose the mid-point of 50 or 51 on a 1-100 rating between the two concepts). (Q24)
- ☒ Similarly, the largest share of participants (36%) would strike a balance between *protecting neighborhood livability* and *protecting air travel options*. (Q25)

### Airport Usage and Behaviors

---

- ☒ Seven out of ten residents (70%) have flown out of Portland International for *leisure* purposes in the past year, including many who travel frequently. (Q3)
- ☒ Almost three out of ten residents (28%) have flown out of PDX in the last year for *business* purposes. (Q4)
- ☒ A broad cross-section of the residents of the region (82%) have picked up or dropped off someone at the airport in the past year, including almost one-third (31%) who have visited six times or more. (Q5)
- ☒ Roughly three-quarters of respondents (74%) have not ridden the MAX light rail to the airport in the last year, while about one-in-six have ridden it once or twice, and one-in-twelve have taken MAX three or more times. (Q5b)

## Airport Usage and Behaviors (Continued)

---

- ☒ The idea of *decreasing next day delivery service* to reduce cargo flights and congestion is a divisive topic, as roughly one in three (34%) would be “very willing” to do so and one in four (23%) would be “not at all willing” to do so. (Q26)
- ☒ While one-third of participants (33%) would “not be willing at all” to *decrease their travel to reduce the overall demand and environmental impact*, one in five (21%) would be “very willing” to do so. (Q27)

## Sustainability

---

- ☒ Residents responded favorably to a number of proposed sustainability options. Participants were *most likely* to favor, setting an air-port wide target of *increasing recycling volumes* (4.4), but were less likely to favor *paying a surcharge* to fly at peak times (2.8).

Support for Sustainability-Oriented Options (Q16-21, Randomized)	1-5 Scale
Set an airport-wide recycling target of increasing recycling volumes, which includes the Port operations, airlines, tenants, and passengers.	4.4
Require Port fleet vehicles, taxis, and rental cars operating out of the Airport to be hybrids, high gas mileage, or use alternative fuel by 2020.	4.0
Enhance public transit to Airport by increasing access to MAX and adding bus service	4.0
Require all future terminal renovations and expansions be certified as energy efficient and environmentally friendly even if it costs travelers more to fly	3.9
Reduce pick-up and drop-off trips by encouraging use of mass transit, and on-site parking	3.7
Pay an airport surcharge to fly at peak times of the day, such as early morning and late afternoon, in order to reduce congestions in - and around - the airport.	2.8

\* Ratings based on a five-point scale, where five means, “favor” and one means, “oppose.”

- ☒ When queried about other key sustainability options or issues for the planning group to consider, residents were most likely to mention public transit improvements and energy-efficiency in the buildings. (Q23)
- ☒ A majority of the residents (70%) said they would be willing to pay a surcharge to help reduce the environmental or carbon impact of their flight. Roughly one in five participants (21%) said they would be willing to pay \$5; 17% would pay \$10; 14% would pay \$15; and 18% said they would pay more than \$15. Just over one in five (22%) would be unwilling to pay any surcharge. (Q22)

## General Quality of Life

---

- ☒ Nearly half of participants (48%) are satisfied with general quality-of-life in their neighborhoods, with *no issues* they would like to see improved. The largest percentage of those who suggested changes (10%) would like to see improvements in public safety. (Q1)
- ☒ Residents were asked about the extent to which they are bothered by a list of selected issues in their neighborhoods. Residents said they were bothered “a great deal” by traffic congestion (38%), the state of school funding (32%), noise from airplanes (7%), and noise from trains (5%). (Q2)

## Geographic Issues

The information below details the statistically significant differences among the four geographic audiences surveyed, including: the Primary and Secondary Noise Impact Areas, the Four Counties (excluding the Impact Areas), and the City of Portland (including applicable Impact Areas).

### Airport Perceptions

☒ The following groups were more likely to “strongly agree” with these statements:

Statements	Total	Primary	Secondary	Four County	Portland
Airplane noise reduces the quality of life in my neighborhood (Q10)	9%	<b>13%</b>	<b>17%</b>	7%	11%
The Airport should do more to protect the environment (Q11)	31	35	<b>39</b>	28	34
Protecting the natural environment is more important than accommodating airport growth (Q14)	27	30	<b>42</b>	24	31

☒ The Four County Area was most likely to “strongly disagree” that the MAX is a convenient way to travel to and from the Airport.

Statements	Total	Primary	Secondary	Four County	Portland
The MAX is a convenient way to travel to and from the Airport (Q15)	38%	31%	27%	<b>42%</b>	27%

☒ The Secondary Noise Area was more likely to favor *protecting the neighborhoods’ livability*. The table below depicts the percentage who gave a “100” rating for each question. (Q24,25)

Issue	Total	Primary	Secondary	Four County	Portland
Protecting the airport’s ability to support the region’s economic vitality (1) vs. Protecting the neighborhoods’ livability (100)	5%	6%	<b>14%</b>	4%	6%
Protecting air travel options (1) vs. Protecting the neighborhoods’ livability (100)	5	7	<b>10</b>	4	6

☒ The Secondary Noise Area and City of Portland residents are more likely to say they would be “very willing” to decrease their travel to reduce the overall demand for travel. (Q27)

Statements	Total	Primary	Secondary	Four County	Portland
Decrease travel to reduce overall demand for travel	21%	23%	<b>34%</b>	19%	<b>25%</b>

## Airport Usage and Behaviors

- Residents from the Primary Noise Area, on average, flew the fewest number of times for business purposes last year. (Q4)

	Total	Primary	Secondary	Four County	Portland
Average number of business trips	1.8	<b>1.4</b>	1.8	2.0	1.8

- The Secondary Impact Area residents visited the Airport the most last year, while residents outside the noise area visited the least. (Q5)

	Total	Primary	Secondary	Four County	Portland
Average number of Airport visits	6.6	7.4	<b>12.0</b>	5.6	8.0

- Residents of the Secondary Area rode the MAX to the Airport the most, while those from outside the Impact Area rarely rode MAX to the airport. (Q5b)

	Total	Primary	Secondary	Four County	Portland
Average number of MAX rides to the Airport	0.9	1.2	<b>2.7</b>	0.6	1.5

## Sustainability

- Secondary Noise Area residents were more likely to be willing to pay a \$5 surcharge to reduce the environmental or carbon impact of their flight. (Q22)

Surcharge	Total	Primary	Secondary	Four County	Portland
\$5 surcharge	21%	20%	<b>26%</b>	21%	19%

- The following areas are more likely to “strongly favor” these sustainability options:

Sustainability Option	Total	Primary	Secondary	Four County	Portland
Require Port fleet vehicles, taxis, and rental cars be hybrids, high gas mileage, or use alternative fuel by 2020 (Q16)	51%	51%	<b>59%</b>	50%	<b>56%</b>
Increase recycling volumes, including Port operations, airlines, tenants, and passengers (Q17)	63	64	<b>68</b>	62	65
Reduce pick-up and drop-off by encouraging use of transit, on-site parking (Q18)	40	43	<b>54</b>	38	42
Require terminal renovations to be energy efficient (Q19)	47	49	<b>54</b>	46	<b>52</b>
Enhance public transit by increasing access to MAX and adding bus service (Q21)	51	55	<b>66</b>	48	55

### **Airport Usage and Behaviors (Continued)**

- ☒ The Primary and Secondary Areas and the City of Portland were more likely than the Four County sample to mention the following sustainability options:

Sustainability Options (Q23)	Total	Primary	Secondary	Four County	Portland
Public transit	14%	<b>21%</b>	<b>29%</b>	10%	<b>18%</b>
Energy efficient building practices	13	<b>21</b>	<b>30</b>	8	<b>18</b>
Recycling	11	<b>16</b>	<b>32</b>	7	<b>15</b>
Alternative fuels	11	<b>18</b>	<b>24</b>	7	<b>15</b>

### **General Quality of Life Issues**

- ☒ The Secondary Noise Area is more likely to want an *increase in police patrols and safety*, as well as *help sprucing up the neighborhood*. (Q1)

Sustainability Option	Total	Primary	Secondary	Four County	Portland
Increase police patrols / safety	10%	13%	<b>17%</b>	9%	14%
Help spruce up the neighborhood	5	4	<b>9</b>	4	6

- ☒ The following groups are more likely to be bothered a “great deal” by the specified quality-of-life issues:

Issue (Q2)	Total	Primary	Secondary	Four County	Portland
State of school funding	32%	30%	<b>42%</b>	32%	<b>40%</b>
Noise from airplanes	7	<b>11</b>	8	5	7
Noise from trains	5	<b>8</b>	2	4	5

## INTRODUCTION

The Port of Portland and the City of Portland asked Riley Research to conduct a regional survey to gain a better understanding of residents' perceptions of the Portland International Airport, as well as how residents view the Airport in the future. The goal of the research was to explore:

- ✓ Current satisfaction with the Airport
- ✓ Airport usage and behaviors
- ✓ Sustainability options
- ✓ Quality of life issues affecting the residents

## METHODOLOGY

Residents were reached using a random-sample scientific telephone survey, conducted among 1208 residents of Multnomah, Washington, and Clackamas Counties in Oregon and Clark County in Washington.

The stratified sample included roughly 302 residents of the Primary Noise Impact area (zip codes defined below), 102 residents of the Secondary Noise Impact Area, and 804 residents outside of the Noise Impacts Areas in the four counties. Residents of the City of Portland were also defined in the sample, of which 556 interviews were conducted. The table below depicts the sample sizes and the margins of error for each:

<b>Audience</b>	<b>Sample Size</b>	<b>Margin of Error</b>
Primary Impact Area	302	+/-5.64%
Secondary Impact Area	102	+/-9.7%
Outside Impact Area	804	+/-3.46%
City of Portland	556	+/-4.16%
<b>Total</b>	<b>1208</b>	<b>+/-2.82%</b>

Calls were by our in-house interviewing crew using an RDD (random digit dial) call list . Pre-testing of the survey was conducted the week of October 22<sup>nd</sup>. Minor edits were made to the questionnaire and full fielding commenced on October 29<sup>th</sup> and ended November 24<sup>th</sup>. The interviews were conducted between September 24<sup>th</sup> and October 4<sup>th</sup>, 2007. Interviewers spoke with respondents between 5:00 p.m. and 9:00 p.m. on weekdays, and 10:00 a.m. and 2:00 p.m. PST on Saturdays.

The following is a question-by-question analysis of the results. A copy of the questionnaire can be found in the appendix. Cross tabulations and Verbatim responses are included as separate documents.

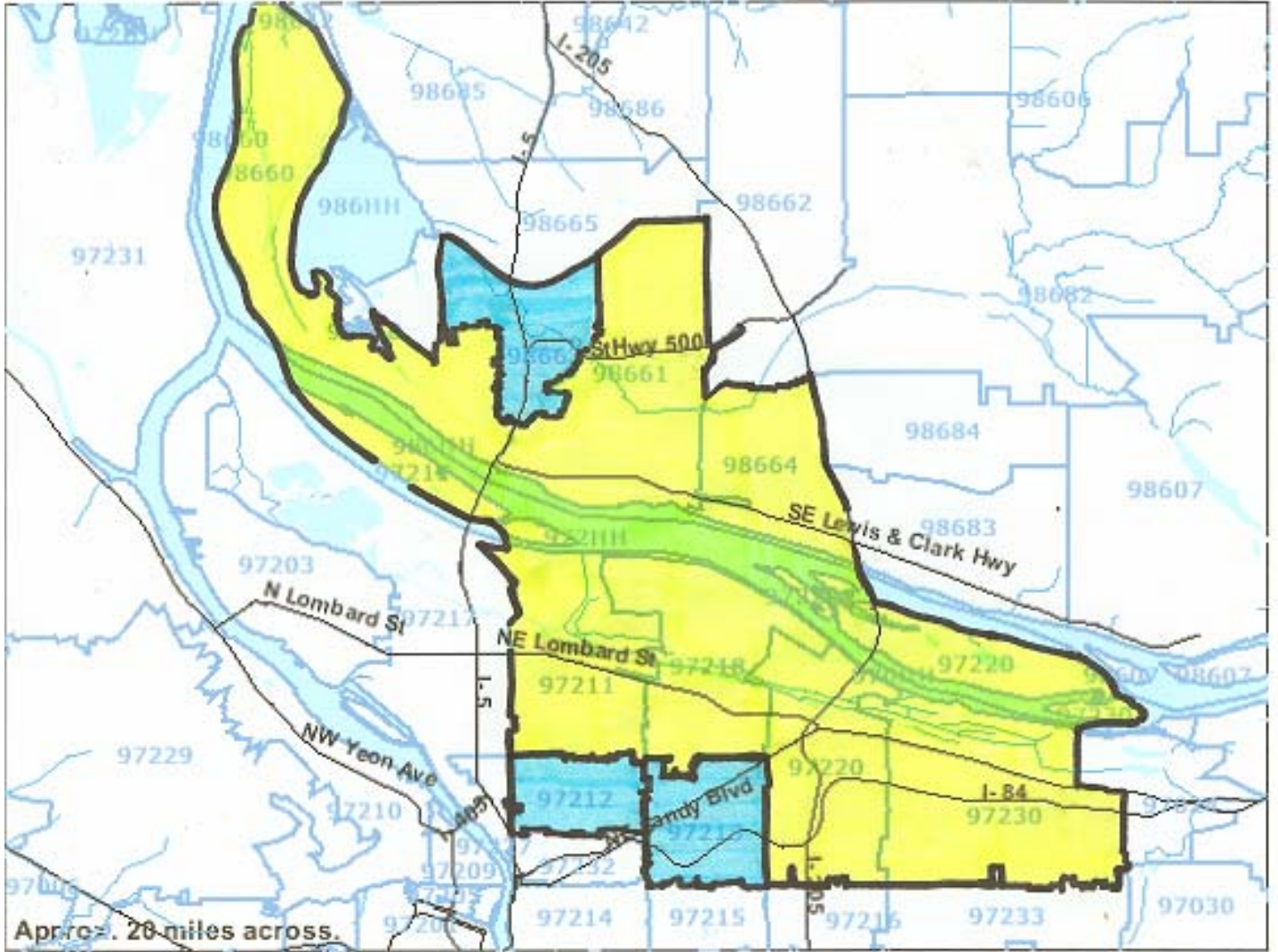
Primary Noise Impact Area Zip Codes – 98660, 98661, 98664, 97217, 97211, 97218, 97220, 97230

Secondary noise Impact Area Zip Codes – 97213, 97212, 98663

City of Portland Zip Codes – 97217, 97211, 97218, 97220, 97230, 97213, 97212, 97201, 97202, 97203, 97205, 97206, 97209, 97211, 97214, 97215, 97216, 97219, 97221, 97222, 97223, 97225, 97227, 97229, 97230, 97231, 97232, 97233, 97236, 97239, 97266

# IMPACT AREA MAP

Primary Impact Area – Yellow  
Secondary Impact Area – Blue



# QUESTIONNAIRE

## Introduction

---

Hello, my name is \_\_\_\_\_ with Riley Research of Portland. We are calling to hear your opinions regarding the future of the Portland International Airport. An Airport Futures planning advisory group has been assembled to provide guidance to the City and Port of Portland Staff. Your feedback will directly inform this group as they weigh options for the future of the Airport. Just so you know, your responses will be combined and reported anonymously with hundreds of others.

## Neighborhood Issues

---

Q1. Before we get to specific airport issues, what general quality-of-life issues would you like to see improved in your local area (“neighborhood” for Impact Areas and Cities of Portland and Vancouver) (OPEN ENDED – DO NOT READ)

Install sidewalks or other pedestrian enhancements	1	Improve environmental health	8
Develop neighborhood focused commercial districts	2	Improve transit service	9
Increase police patrols/safety	3	Improve streets and lighting	10
Improve and maintain local parks	4	Increase employment opportunities	11
Help spruce up neighborhood	5	Increase parks and natural areas	12
Reduce street traffic speeds	6	Improve schools	13
Reduce airport noise	7	Improve access to Healthcare	14

Q2. Now, I am going to read a list of items regarding your local area (“neighborhood” for Impact Areas, Cities of Portland and Vancouver). Please tell me if each item bothers you a great deal, some, not too much or not at all. The first item is... (ROTATE)

State of road repairs and improvements	Great Deal	Some	Not too much	Not at all	DK
Traffic congestion	Great Deal	Some	Not too much	Not at all	DK
Poor economy or lack of jobs	Great Deal	Some	Not too much	Not at all	DK
Lack of parks and greenspaces or access	Great Deal	Some	Not too much	Not at all	DK
Crime	Great Deal	Some	Not too much	Not at all	DK
The state of sidewalks and street lighting	Great Deal	Some	Not too much	Not at all	DK
The health of the natural environment	Great Deal	Some	Not too much	Not at all	DK
Noise from airplanes	Great Deal	Some	Not too much	Not at all	DK
Noise from trains	Great Deal	Some	Not too much	Not at all	DK
Noise from trucks, street or highway traffic	Great Deal	Some	Not too much	Not at all	DK
State of school funding	Great Deal	Some	Not too much	Not at all	DK
Lack of transit service or access	Great Deal	Some	Not too much	Not at all	DK

## Portland International Airport Usage

---

Now, let’s discuss some topics specific to the future of Portland International Airport.

Q3. In the last year, about how many roundtrips would you estimate you’ve flown out of Portland International Airport, for leisure or non-business purposes?

\_\_\_\_\_ times

Q4. And about how many roundtrips have you flown out of the Airport for business purposes?

\_\_\_\_\_ times

Q5. About how many times in the past year would you estimate you have picked up or dropped someone off at the Airport, or visited the Airport for any other reason?

\_\_\_\_\_ times

Q5b. About how many times in the past year have you ridden the MAX light rail to the Airport, for any reason?

\_\_\_\_\_ times

**Attitudes and Perceptions of the Airport**

---

Q6. Using a scale of 1 to 5, where 1 means, “extremely dissatisfied” and 5 means “extremely satisfied,” how satisfied or dissatisfied are you with Portland International Airport overall?

1- Extremely Dissatisfied      2      3      4      5- Extremely Satisfied      9-Don't know

Q7. Why did you give that rating? \_\_\_\_\_

Q8. Now, thinking about growth and the Airport's future, what do you say are the most important things for the planning advisory group to keep in mind?

\_\_\_\_\_

Q9-15. Now, where 1 means “strongly disagree” and 5 means “strongly agree,” please indicate your level of agreement with the following statements: (ROTATE)

Q9. Portland International Airport is among the best airports in the United States	1-Strongly Disagree 2 3 4 5-Strongly Agree 8-NA 9-DK
Q10. Airplane noise reduces the quality of life in my neighborhood	1-Strongly Disagree 2 3 4 5-Strongly Agree 8-NA 9-DK
Q11. The Airport should do more to protect the environment	1-Strongly Disagree 2 3 4 5-Strongly Agree 8-NA 9-DK
Q12. Flights out of the Airport allow me to easily travel when and where I want to go	1-Strongly Disagree 2 3 4 5-Strongly Agree 8-NA 9-DK
Q13. The Airport is important to the region's economy	1-Strongly Disagree 2 3 4 5-Strongly Agree 8-NA 9-DK
Q14. Protecting the natural environment is more important than accommodating airport growth	1-Strongly Disagree 2 3 4 5-Strongly Agree 8-NA 9-DK
Q15. The MAX light rail service is a convenient way for me to travel to and from the Airport	1-Strongly Disagree 2 3 4 5-Strongly Agree 8-NA 9-DK

## Understanding Key Impacts

Q16-21. Sustainability will be an important part of the Airport Futures project. We define sustainability as: meeting the Region’s air transportation needs, without compromising the quality-of-life for future generations. Using a scale of 1 to 5, where 5 means “favor” and 1 means “oppose,” please indicate how much you favor or oppose the following options: (ROTATE)

Q16. Requiring Port fleet vehicles, taxis, and rental cars operating out of the Airport to be hybrids, high gas mileage, or use alternative fuel by 2020.	1-Oppose 2 3 4 5-Favor 8-NA 9-DK
Q17. Set an airport-wide recycling target of increasing recycling volumes, which includes the Port operations, airlines, tenants, and passengers.	1-Oppose 2 3 4 5-Favor 8-NA 9-DK
Q18. Reduce number of pick-up and drop-off trips by encouraging greater use of mass transit, and on-site parking.	1-Oppose 2 3 4 5-Favor 8-NA 9-DK
Q19. Require all future terminal renovations and expansions to be certified as energy efficient and environmentally friendly even if it costs travelers more to fly.	1-Oppose 2 3 4 5-Favor 8-NA 9-DK
Q20. Pay an airport surcharge to fly at peak times of the day, such as early morning and late afternoon, in order to reduce congestion in - and around - the airport.	1-Oppose 2 3 4 5-Favor 8-NA 9-DK
Q21. Enhance public transit to the Airport by increasing access to light rail (MAX) service and adding bus service.	1-Oppose 2 3 4 5-Favor 8-NA 9-DK

Q22. We’d like to get a sense of the amount, if any, you would be willing to pay, per-round-trip-ticket, to help reduce the environmental or carbon impact of your flight. Would you pay nothing, \$5, \$10, \$15, or more than \$15?

Nothing	1
\$5	2
\$10	3
\$15	4
More than \$15	5
Don’t know / Depends / Refused	6

Q23. What other sustainability options or issues would you like to see the planning advisory group consider? (IF NECESSARY) Again, sustainability means meeting the Region’s air transportation needs, without compromising the quality-of-life for future generations. (UNAIDED, ANSWER OPTIONS NOT READ)

Public transit	1
Recycling	2
Energy efficient (Green) building practices	3
Alternative fuels	4
Other (LIST)	5
Don’t know / Refused	6

As the region grows, the impact of the Airport on adjacent neighborhoods increases. We'd like to ask you to consider the following trade-offs between accommodating growth and protecting neighborhood livability.

(ROTATE AND REVERSE SCALE, 50% 1-economic vitality / air travel options, 100-neighborhood livability – 50% 1-neighborhood livability, 100-economic vitality / air travel options)

Q24. On a 1 to 100 scale, where 100 means protecting the neighborhoods' livability and 1 means protecting the airport's ability to support the region's economic vitality, what number between 1 and 100 would reflect your view? (REPEAT AS NECESSARY)

\_\_\_\_\_

Q25. On a 1 to 100 scale, where 100 means protecting the neighborhoods' livability and 1 means protecting your air travel options, what number between 1 and 100 would reflect your view? (Repeat scale as necessary)

\_\_\_\_\_

Q26-27. How willing or unwilling would you be to accept the following trade-offs in order to reduce community and neighborhood impacts, using a scale of 1 to 5, where 1 means "not at all willing" and 5 means "very willing?"

Q26. Decrease my use of <u>next day delivery service</u> in order to reduce cargo flights over the neighborhoods and delivery trucks around the airport.	1-Not at all Willing 2 3 4 5-Very Willing 9-DK
Q27. Decrease my travel to reduce the overall demand for travel and environmental impact.	1-Not at all Willing 2 3 4 5-Very Willing 9-DK

Q28. And finally, when thinking about the future of Portland International Airport, what issues would you like to see the Airport Futures planning advisory group pay attention to?

\_\_\_\_\_

## Demographics

---

I'd like to finish up with a few demographic questions, for classification purposes:

Q29. Which of the following categories describes your age? (READ LIST)

Under 21	1
22 - 35	2
36 - 45	3
46 - 55	4
56 - 65	5
over 75	6

Refused	7
---------	---

Q30. What is the last grade in school you had the opportunity to complete? (READ LIST IF NEC)

Student	1
High School Diploma	2
Some College	3
4 Year Degree	4
Graduate/Post Grad	5
Refused	9

Q31. Which of the following categories describes your total annual household income (READ LIST)

Under \$20,000	1
\$20,000 - \$39,999	2
\$40,000 - \$59,999	3
\$60,000 - \$79,000	4
\$80,000 - \$99,000	5
\$100,000 - \$119,000	6
\$120,000 - \$149,000	7
\$150,000 or more	8
Refused	9

Q32. About how many years have you lived at your current residence?

Under 5 years	1
5-9 years	2
10-14 years	3
Over 15 years	4

Q33. And finally, do you rent or own your current residence?

Rent	1	Own	2
------	---	-----	---

Those are all the questions I have. Thank you for your time and opinions. Have a great evening.

Record Gender:

Male	1	Female	2
------	---	--------	---

Q34. Record County

Multnomah	1
Clackamas	2
Clark	3
Washington	4

Q36. Record Zip code \_\_\_\_\_