



Portland Metro Rideshare

Market Research and Implementation Plan

*Task A: Baseline Research Technical
Memorandum*

April 2005

UrbanTrans Consultants
Parsons Brinckerhoff / PB Consult





Baseline Development

The regional ridesharing baseline is useful not only for the purpose of tracking progress over time, but also to establish how success with achieving regional modal goals contributes to overall regional mobility.

This baseline will primarily be used in Task C of this project, pertaining to the development and conduct of a strategic plan for marketing alternative mode options to commuters. As a result, it is not the intent of this technical memorandum to replicate existing analyses of available data, or, to conduct new primary research. Instead, this technical memorandum should be used only to rapidly educate the strategic planning process on modal developments in target areas and target markets. In particular, this memorandum summarizes information in graphical form already provided by the 2003 Regional Travel Options Program Evaluation Report, with supplemental analysis conducted by the project team for strategic marketing purposes.

For the purpose of this technical memorandum, the regional baseline is established for each of 16 employment focus areas, as identified by the 2040 Regional Transportation Plan. As these areas account for the majority of employment in the Portland metropolitan area, they also reflect the higher priority for the promotion of modal services – as opposed to areas of significantly lower employment intensity.

Existing data sources were gathered for the production of the regional baseline, with the assistance from the RTO Rideshare Working Group. Principal data sources for the baseline included:

- Census for Transportation Planning Package (CTPP), Parts 2 (employment) and 3 (origin / destination), 2000.
- Regional Travel Options Program Evaluation Report, Metro, December 2004.
- Regional Transportation Demand Management Program Evaluation Report, Metro, April 2003.
- “Eco Rule Data”, Oregon Department of Environmental Quality, 2005.

Additional data sources examined for baseline and target market (Task B) development included:

- Carpool Parking Survey, City of Portland, 2003.
- Home Survey, Metro, 1995.
- Regional Travel Model, Metro, 2000.



Interpreting the Data: For the purpose of this study 16 employment focus areas were defined based on the existing and funded TMA boundaries, as shown in Fig 3.5 (Existing and proposed TMA map) of the 2004 Regional Transportation Plan. The Data for each of these centers was gathered from CTPP tabulations and the Employee Commute Options (ECO) program data. The source of information for the CTPP tabulations is the U.S. decennial census which contains tabulations by place of residence, place of work, and for trips between home and work. ECO Rule Data reflects information regarding employee commute options as gathered by employers within the Portland Air Quality Maintenance Area (AQMA) affected by the ECO ruling. As the CTPP and ECO Rule Data is limited to all journey-to-work trips this study does not account for nonwork based trips.

Both 2004 and 2015 mode-split goals are included for each Employment Focus Area Which was acquired from the Regional Travel Options Program Evaluation Report. Mode-split goals were not available for the following areas: Columbia Corridor, Kruse Way, Oregon City, Rivergate, SMART/Wilsonville, Troutdale and Tualatin.

Eco Rule Data was not available for the following areas: Columbia Corridor, Kruse Way, Oregon City, Rivergate, and Troutdale employment areas.

TASK A: BASELINE MODAL PERFORMANCE

The purpose of the Baseline Development (Task A) was to provide the regional rideshare strategic plan development with a base of current modal performance, and, indications of potential directions for strategic rideshare activities. Keeping with the process established by the 2040 Regional Transportation Plan, the modal performance baseline utilizes the concept of major regional employment centers in benchmarking rideshare performance. Full report is available in Appendix B.

The Task A analysis yielded the following observations:

- **Suburban employment centers struggle to achieve SOV-reduction goals – yet may hold untapped potential.** Although suburban employment centers have goals appropriate to their location and size (as compared to Downtown Portland or Lloyd District, for example), they still struggle to meet these goals for SOV reduction. As such, untapped potential likely remains high for these areas, including Gresham, Hillsboro, Oregon City, and Tualatin. Furthermore, as past marketing emphasis on light rail has potentially plateaued commuter interest in transit for the first two centers, carpooling and vanpooling may have greater untapped potential in these areas. Additionally, Oregon City has an extremely low rate of carpool / vanpool mode share by regional standards.



- **Industrial areas already showing high rates of ridesharing could provide additional market share.** Columbia Corridor, Rivergate, Swan Island, and Tualatin Industrial Area already have the highest shares of carpool / vanpool trips in the region, and exceed the regional average mode share. However, these areas also are located in relatively uncongested areas, providing a travel time penalty for the use of multi-occupant vehicles. Offsetting the travel time penalty are lower-than-average household incomes for workers in these areas. Strategic activities that emphasize commuter cost savings could build upon the solid base of potential carpool matches and future vanpool formations.
- **Certain areas have had success in achieving modal goals.** Generally speaking, areas, some of which have active TMAs, have succeeded in reducing drive-alone trips. It is possible the presence of a local agency or partner focused on educating and promoting alternative modes to a group of constituents contributes to overall area modal goals. Partnerships between Metro, TriMet, and others to support and encourage such educational and promotion activities in areas that currently lack them (but could also support one) may contribute to modal shifts.

FINDINGS BY EMPLOYMENT FOCUS AREA

The following highlights key findings of the baseline analysis:

Downtown / River District

- **Goal:** Exceeding Modal Reduction Goal
- **Occupations:** Approximately 50% of occupations confined to generally "fixed schedule" occupations
- **Income:** Average household income (38% greater than \$75,000)
- **Travel time:** Carpool travel time on par with drive alone; vanpool travel time less than transit

Beaverton

- **Goal:** Achieving Modal Reduction Goal
- **Occupations:** Approximately 40% of occupations confined to generally "fixed schedule" occupations
- **Income:** Average household income (38% greater than \$75,000)
- **Travel time:** Alternative modes have travel time penalty compared to drive alone; transit significantly disadvantaged for travel time purposes

Clackamas

- **Goal:** Exceeding Modal Reduction Goal
- **Occupations:** Approximately 30% of occupations confined to generally "fixed schedule" occupations
- **Income:** Average household income (34% greater than \$75,000)
- **Travel time:** Relative travel time parity between modes



Columbia Corridor

- **Goal:** No Modal Reduction Goal
- **Occupations:** Approximately 25% of occupations confined to generally “fixed schedule” occupations
- **Income:** Lower than average household income (30% greater than \$75,000)
- **Travel time:** Significant travel time penalty associated with alternative modes; transit and multi-occupant vehicles’ travel time almost twice that of driving alone.

Gateway

- **Goal:** Achieving Modal Reduction Goal
- **Occupations:** High proportion of health-care workers (approximately 20%); approximately 30% of occupations confined to generally “fixed schedule” occupations
- **Income:** Average household income (33% greater than \$75,000)
- **Travel time:** Moderate travel time penalty associated with transit use; carpool travel times on par with drive-alone

Gresham

- **Goal:** Trailing Modal Reduction Goal
- **Occupations:** Approximately 25% of occupations confined to generally “fixed schedule” occupations
- **Income:** Average household income (33% greater than \$75,000)
- **Travel time:** Significant travel time penalty associated with alternative modes; transit and multi-occupant vehicles’ travel time greater than twice that of driving alone.

Hillsboro

- **Goal:** Trailing Modal Reduction Goal
- **Occupations:** Approximately 50% of occupations confined to generally “fixed schedule” occupations
- **Income:** High average household income (43% greater than \$75,000)
- **Travel time:** Significant travel time penalty associated with alternative modes; transit and multi-occupant vehicles’ travel time almost twice that of driving alone.



Kruse Way

- **Goal:** No Modal Reduction Goal
- **Occupations:** Approximately 65% of occupations confined to generally “fixed schedule” occupations
- **Income:** High average household income (49% greater than \$75,000)
- **Travel time:** Relative travel time parity between modes, with significant time savings for transit users

Lloyd District

- **Goal:** Exceeding Modal Reduction Goal
- **Occupations:** Approximately 40% of occupations confined to generally “fixed schedule” occupations
- **Income:** Average household income (36% greater than \$75,000)
- **Travel time:** Relative travel time parity between drive alone, carpool, and multi-occupant vehicles; significant time penalty for transit users

Oregon City

- **Goal:** No Modal Reduction Goal
- **Occupations:** Approximately 40% of occupations confined to generally “fixed schedule” occupations
- **Income:** Average household income (36% greater than \$75,000)
- **Travel time:** No travel time parity between driving alone and Carpool; multi-occupant vehicles’ travel time more than twice that of driving alone

Rivergate

- **Goal:** No Modal Reduction Goal
- **Occupations:** Approximately 25% of occupations confined to generally “fixed schedule” occupations
- **Income:** Lower than average household income (30% greater than \$75,000)
- **Travel time:** Relative travel time parity between drive alone, carpool, and transit; significant time penalty for multi-occupant vehicle users

SMART / Wilsonville

- **Goal:** Achieving Modal Reduction Goal
- **Occupations:** Approximately 45% of occupations confined to generally “fixed schedule” occupations
- **Income:** Average household income (38% greater than \$75,000)
- **Travel time:** Relative travel time parity between drive alone, carpool, and transit; significant time penalty for multi-occupant vehicle users



Swan Island

- **Goal:** Achieving Modal Reduction Goal
- **Occupations:** Approximately 30% of occupations confined to generally "fixed schedule" occupations
- **Income:** Average household income (36% greater than \$75,000)
- **Travel time:** Relative travel time parity between drive alone, carpool, and transit; some time penalty for multi-occupant vehicle users; travel times, on average, are higher than other employment centers

Troutdale

- **Goal:** No Modal Reduction Goal
- **Occupations:** Approximately 40% of occupations confined to generally "fixed schedule" occupations
- **Income:** Average household income (34% greater than \$75,000)
- **Travel time:** Significant travel time penalty associated with alternative modes; transit and multi-occupant vehicles' travel time almost twice that of driving alone; very short travel times by drive alone

Tualatin

- **Goal:** Trailing Modal Reduction Goal
- **Occupations:** Approximately 40% of occupations confined to generally "fixed schedule" occupations
- **Income:** Average household income (36% greater than \$75,000)
- **Travel time:** Travel time penalties associated with multi-occupant vehicle and transit.

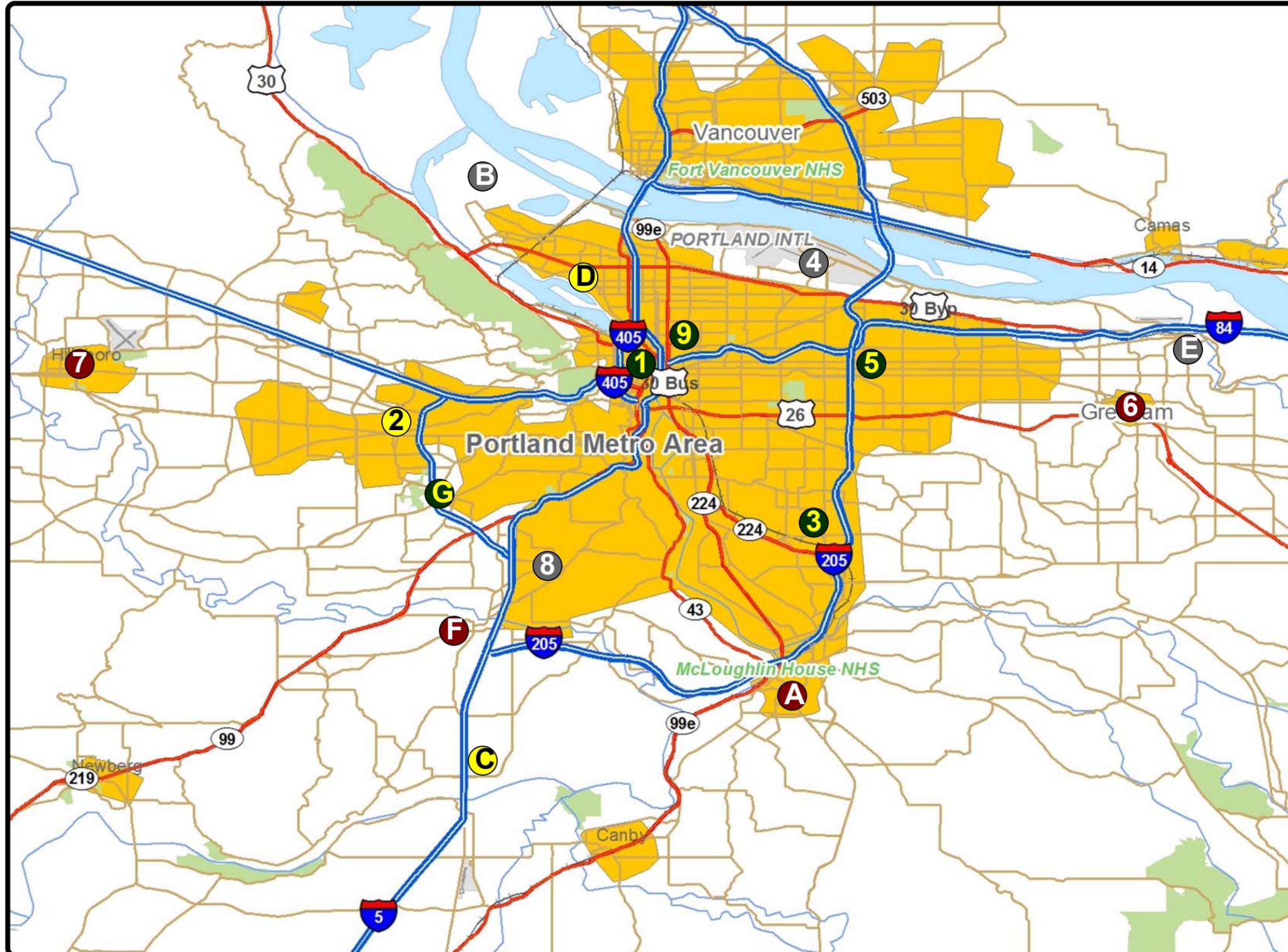
Washington Square

- **Goal:** Exceeding Modal Reduction Goal
- **Occupations:** Approximately 45% of occupations confined to generally "fixed schedule" occupations
- **Income:** Average household income (38% greater than \$75,000)
- **Travel time:** Significant travel time penalty associated with alternative modes; transit travel time more than twice that of driving alone

2040 RTP Employment Focus Areas

Modal Performance to Regional Goal (benchmark 2002)

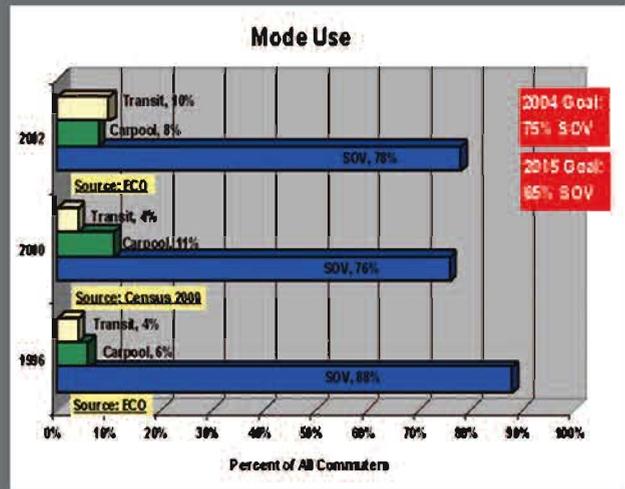
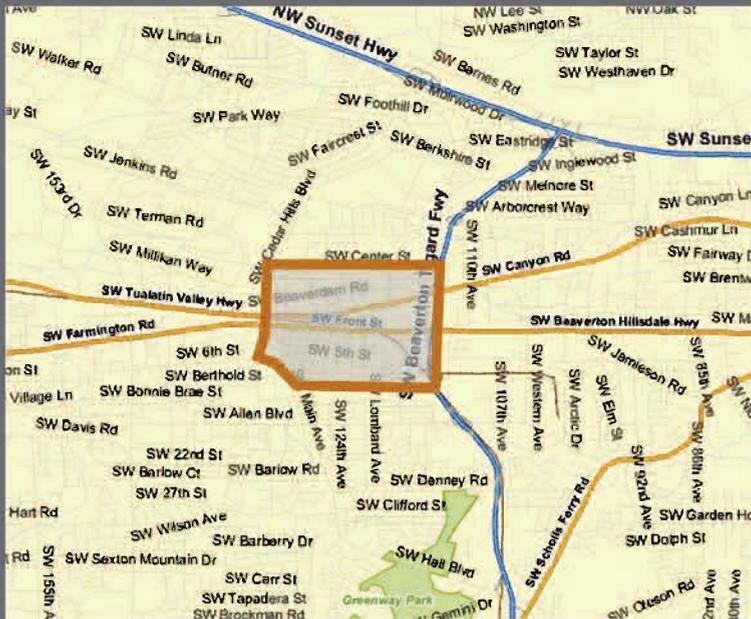
Baselines: 2000 Census for Transportation Planning Package; 2002 ECO Rule Data / TDM Tri-Met Regional Report



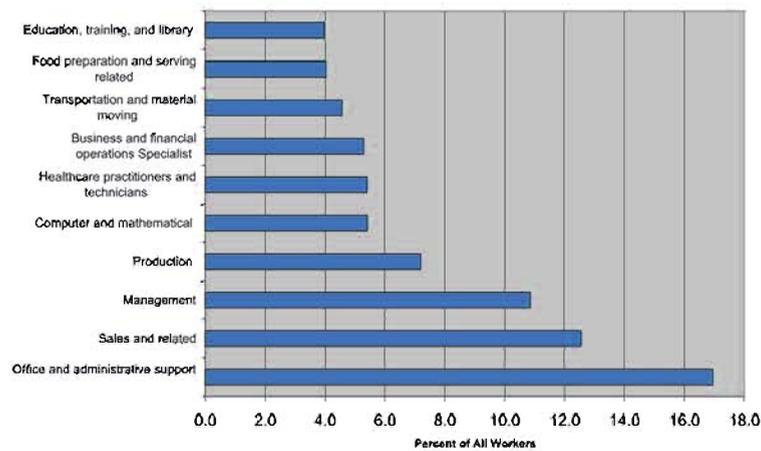
- EXCEEDS goal
- ACHIEVING goal
- TRAILING goal
- NO GOAL on record

- 1 **Downtown / River District (2002)**
- 43% SOV, 13% CPVP, 37% TR
- 2 **Beaverton (2002)**
- 78% SOV, 8% CPVP, 10% TR
- 3 **Clackamas (2002)**
- 74% SOV, 7% CPVP, 13% TR
- 4 **Columbia Corridor (2000)**
- 83% SOV, 13% CPVP, 2% TR
- 5 **Gateway (2002)**
- 74% SOV, 8% CPVP, 13% TR
- 6 **Gresham (2002)**
- 86% SOV, 7% CPVP, 4% TR
- 7 **Hillsboro (2002)**
- 81% SOV, 5% CPVP, 11% TR
- 8 **Kruse Way (2000)**
- 69% SOV, 10% CPVP, 6% TR
- 9 **Lloyd District (2002)**
- 46% SOV, 11% CPVP, 35% TR
- A **Oregon City (2002)**
- 95% SOV, 3% CPVP, 1% TR
- B **Rivergate (2000)**
- 80% SOV, 13% CPVP, 3% TR
- C **SMART / Wilsonville (2002)**
- 84% SOV, 8% CPVP, 4% TR
- D **Swan Island (2002)**
- 80% SOV, 14% CPVP, 4% TR
- E **Troutdale (2000)**
- 77% SOV, 7% CPVP, 1% TR
- F **Tualatin / Industrial Area (2002)**
- 85% SOV, 10% CPVP, 3% TR
- G **Washington Square (2002)**
- 77% SOV, 7% CPVP, 13% TR

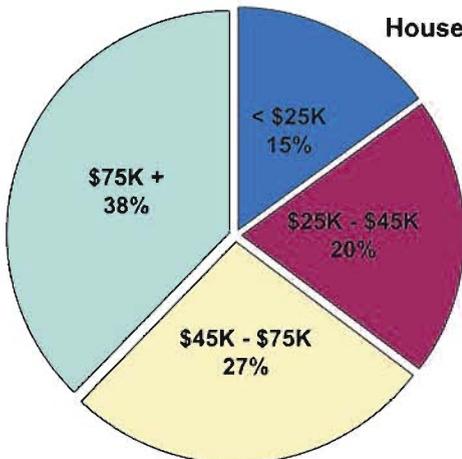
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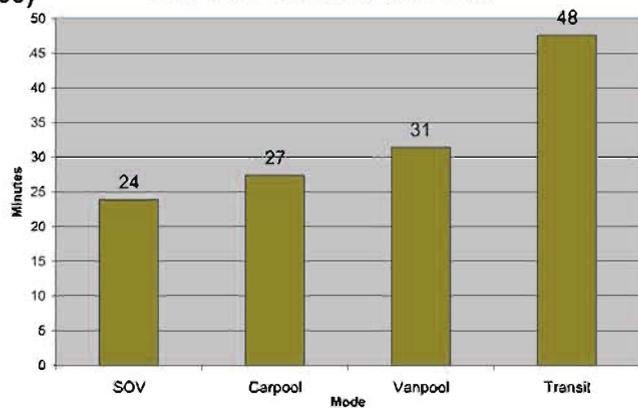
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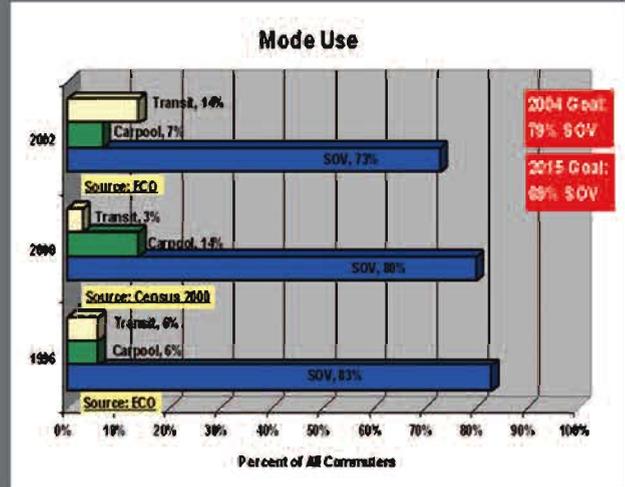
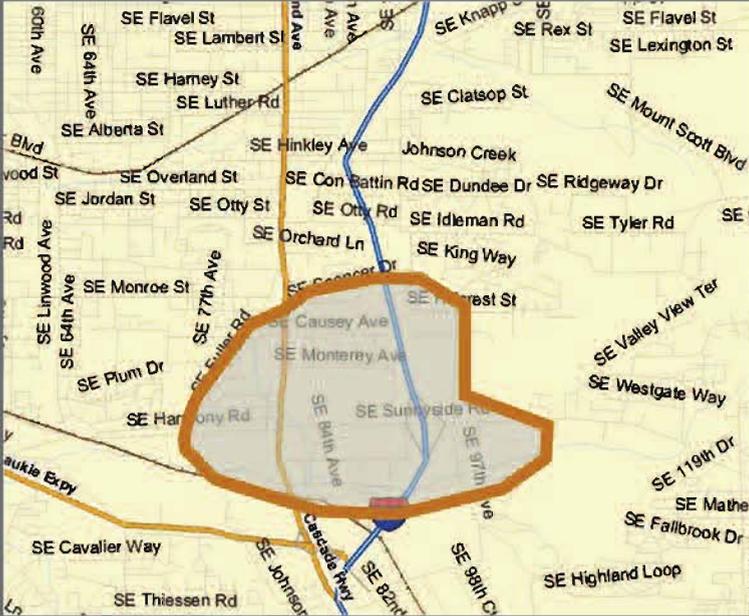
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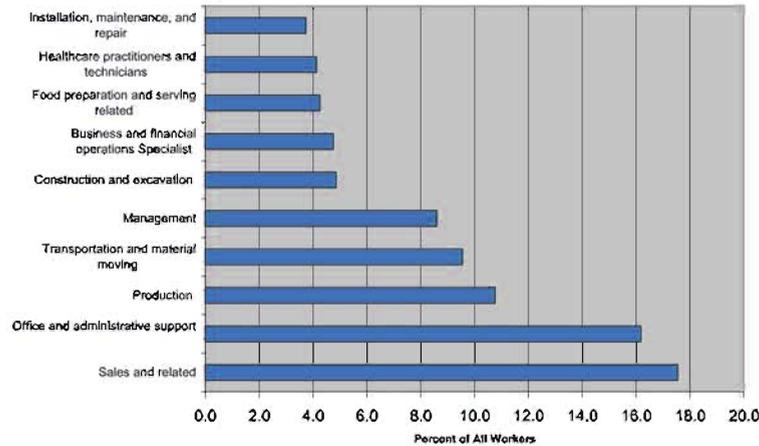
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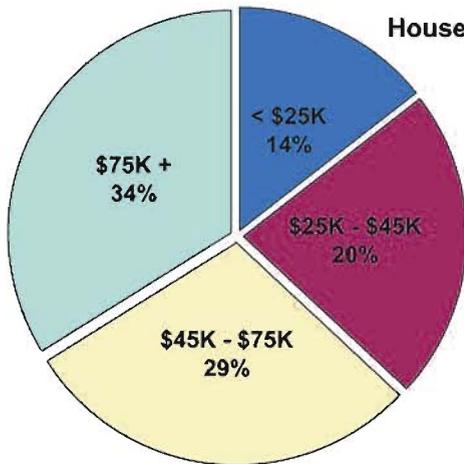
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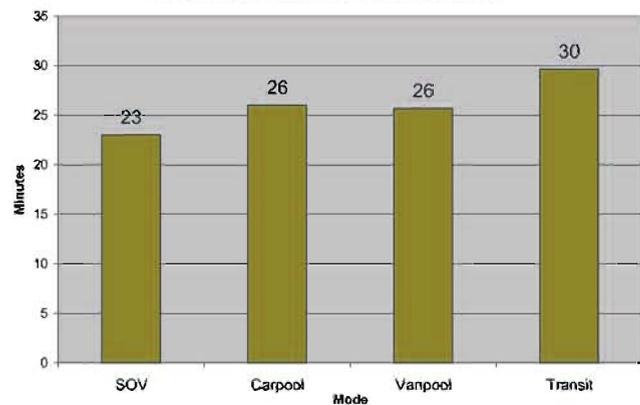
Top 10 Occupations



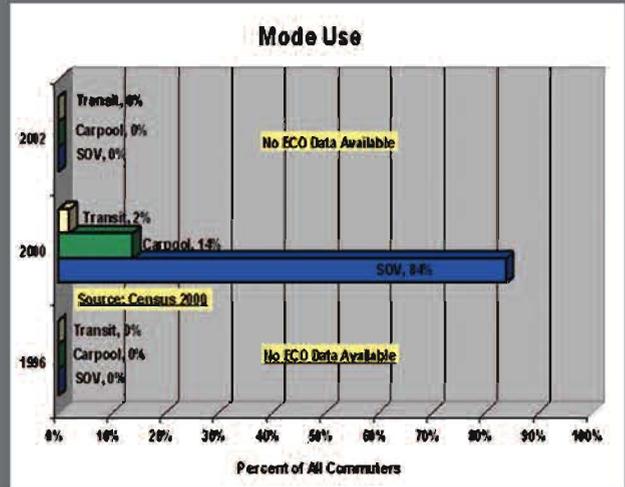
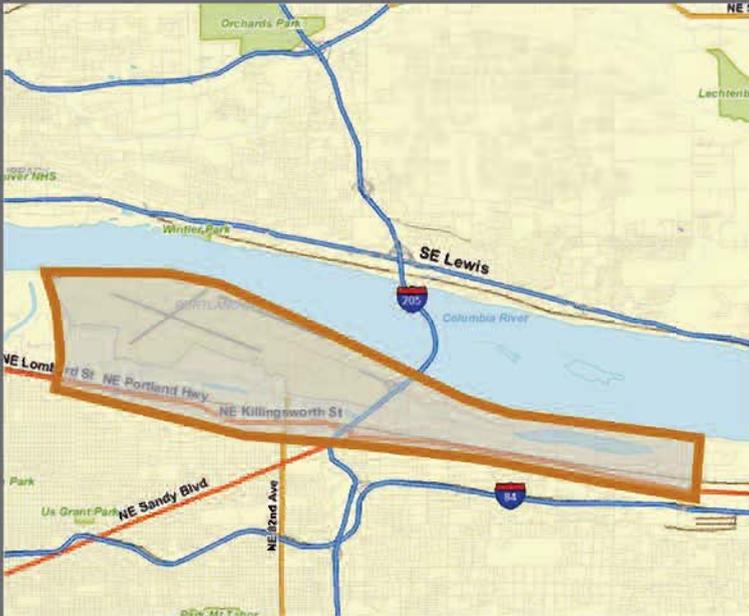
Household Income (1999)



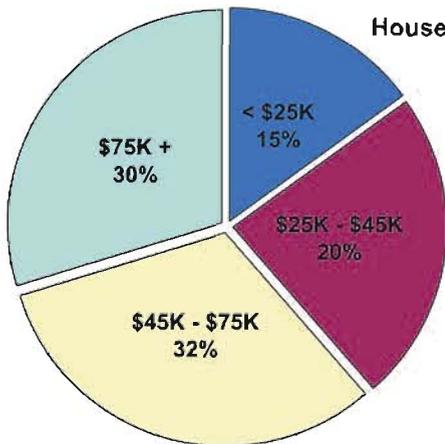
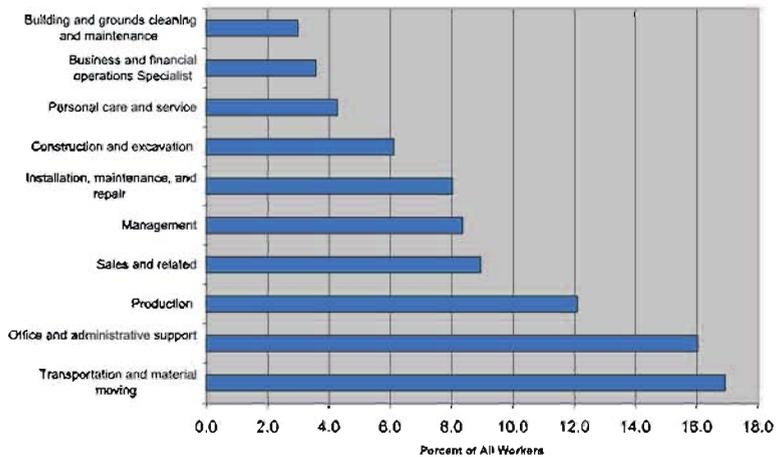
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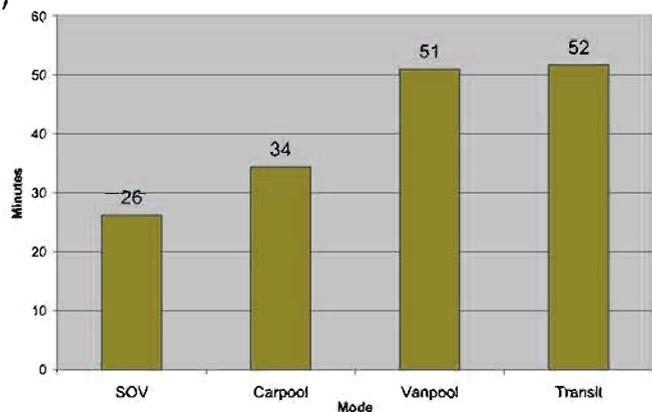
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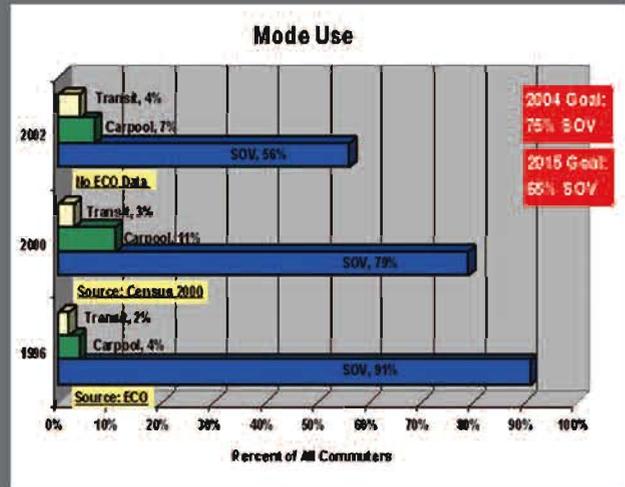
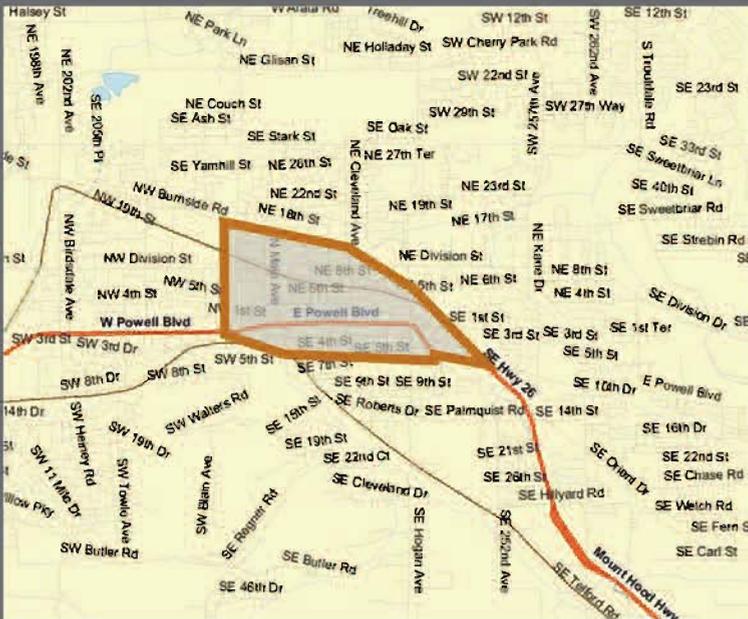
Top 10 Occupations



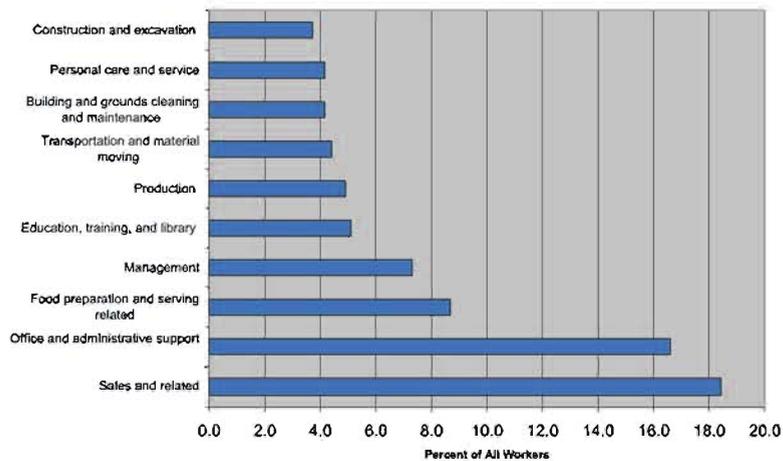
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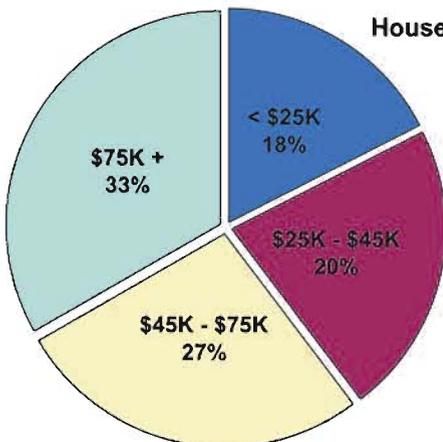
6. Gresham



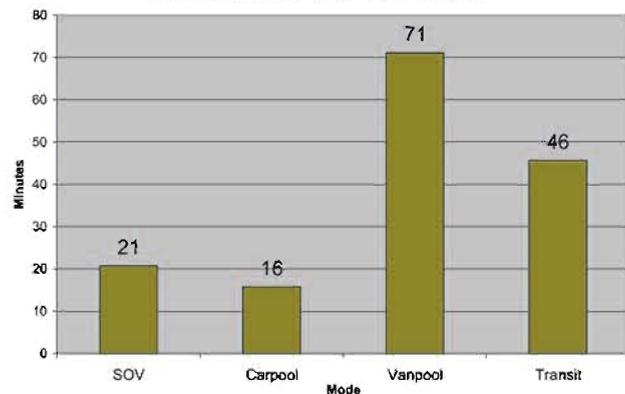
Top 10 Occupations



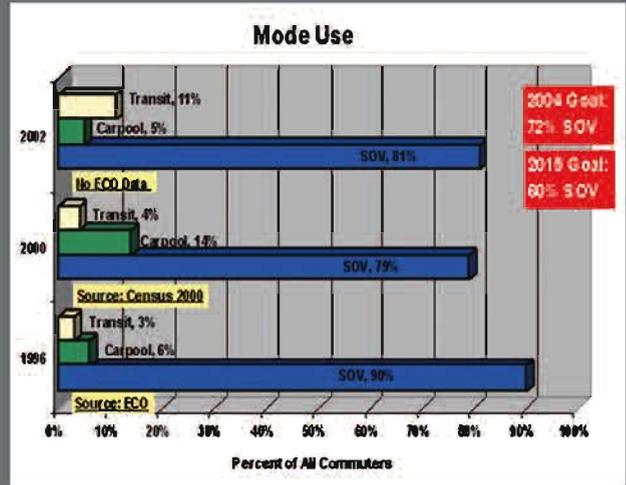
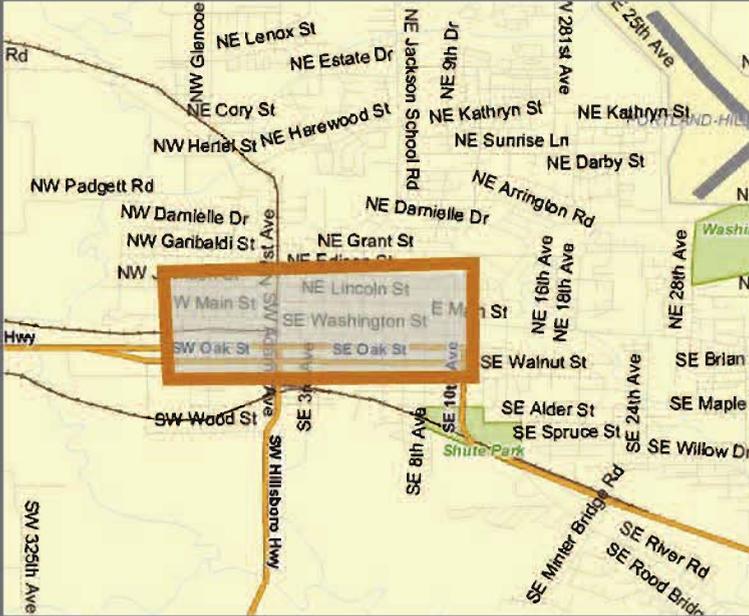
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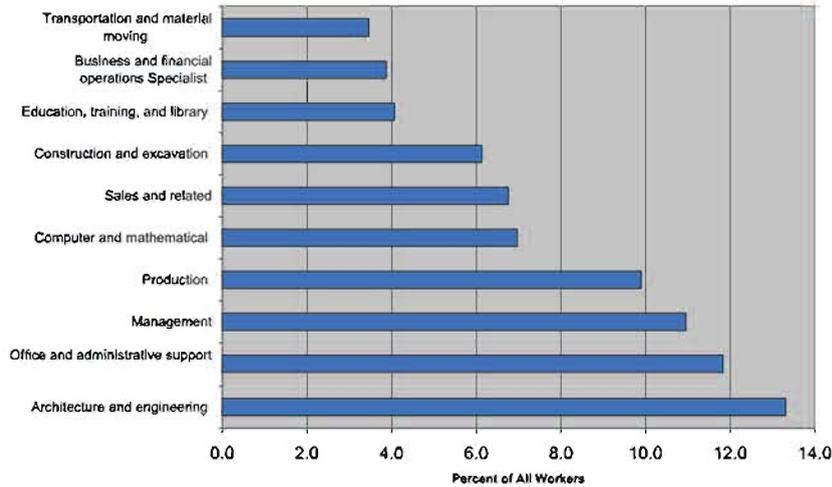
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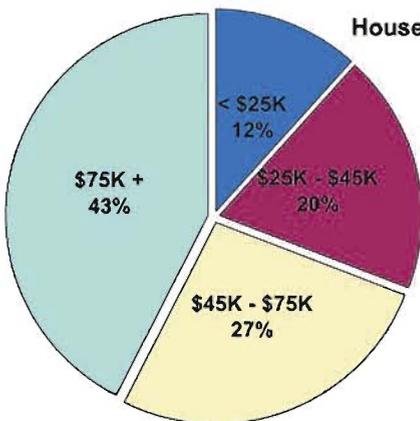
7. Hillsboro



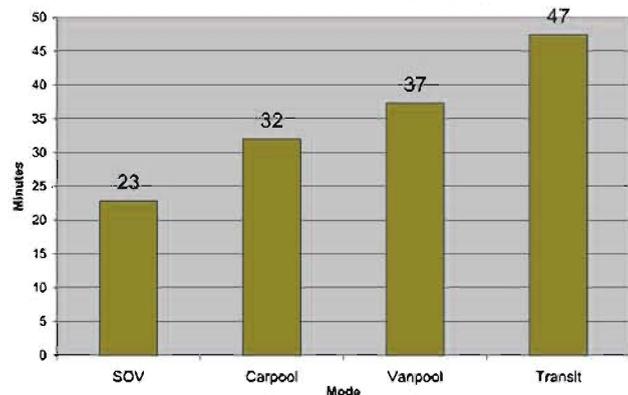
Top 10 Occupations



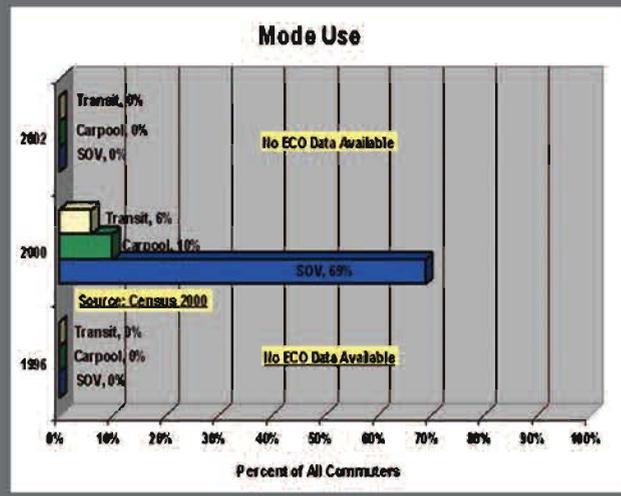
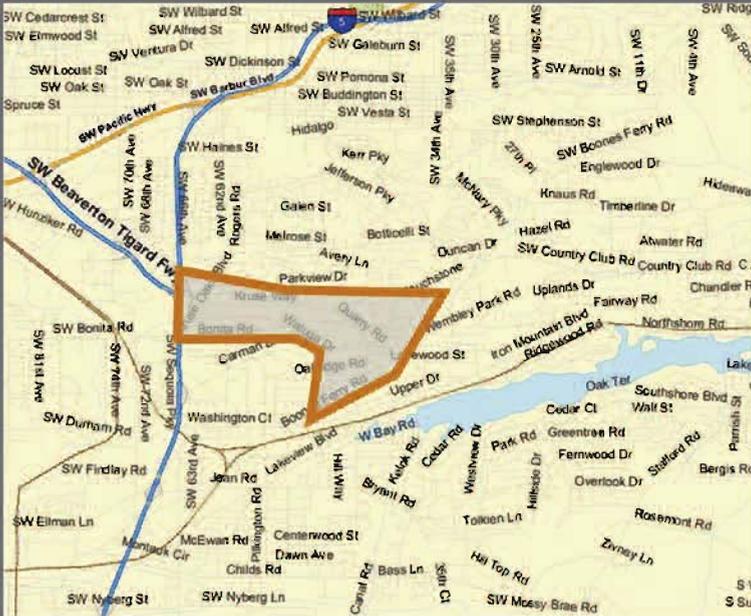
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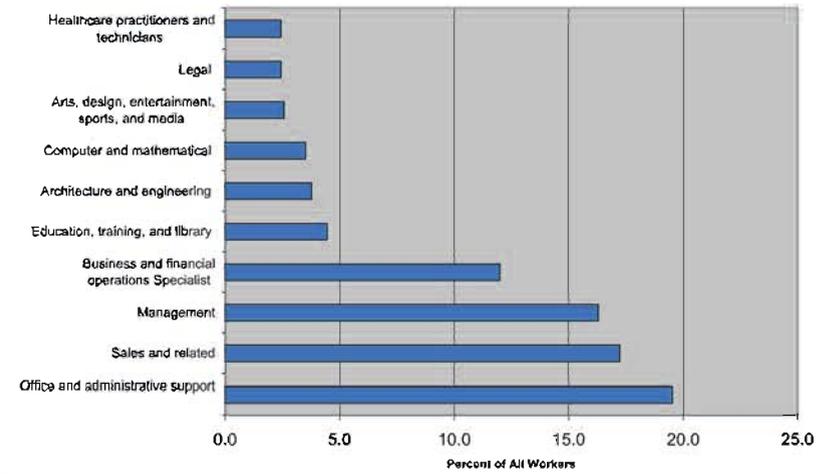
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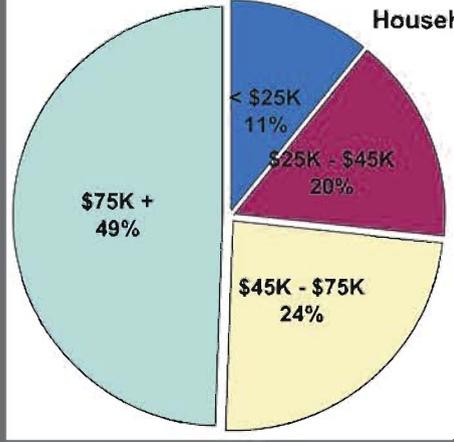
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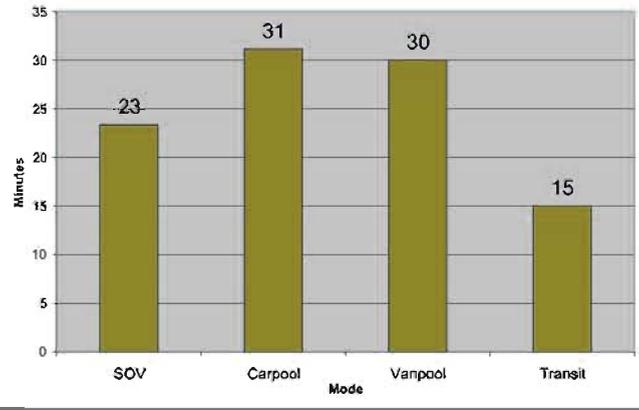
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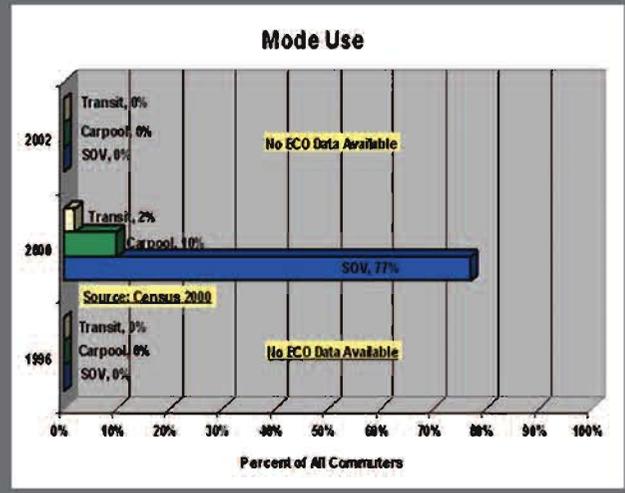
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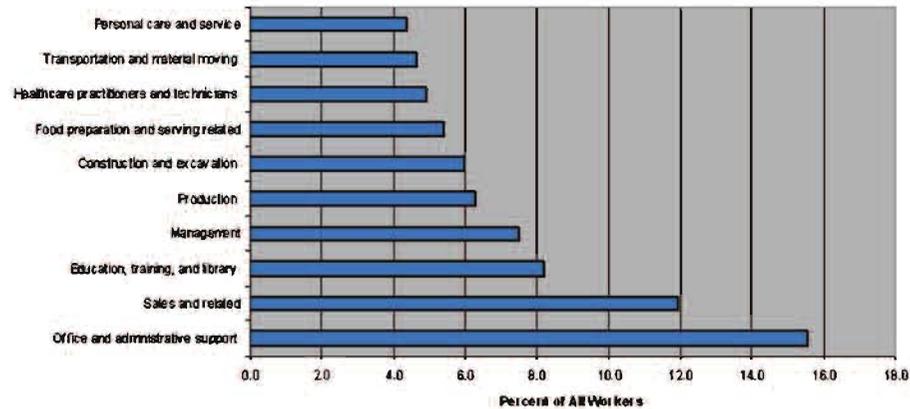
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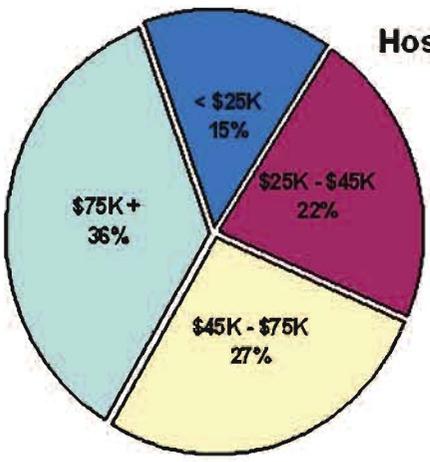
A. Oregon City



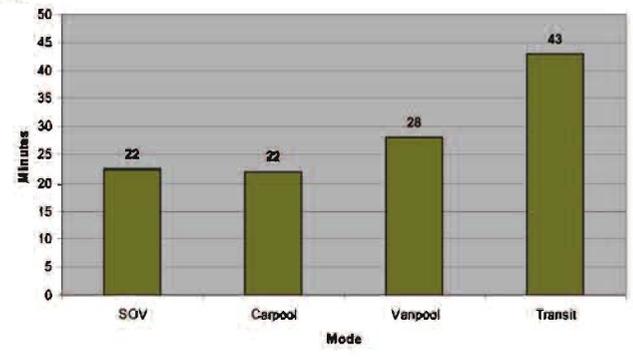
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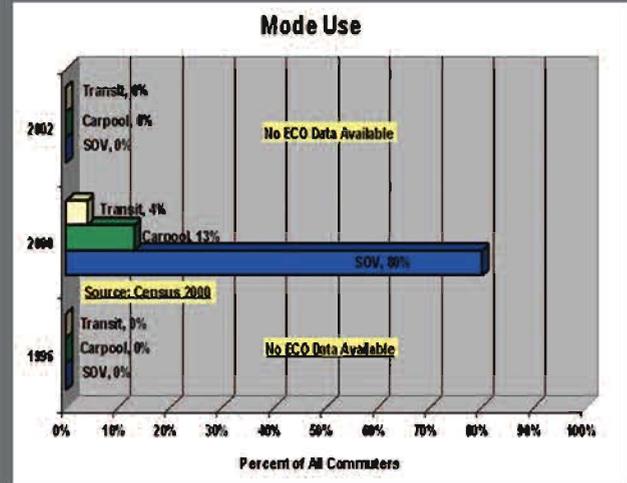
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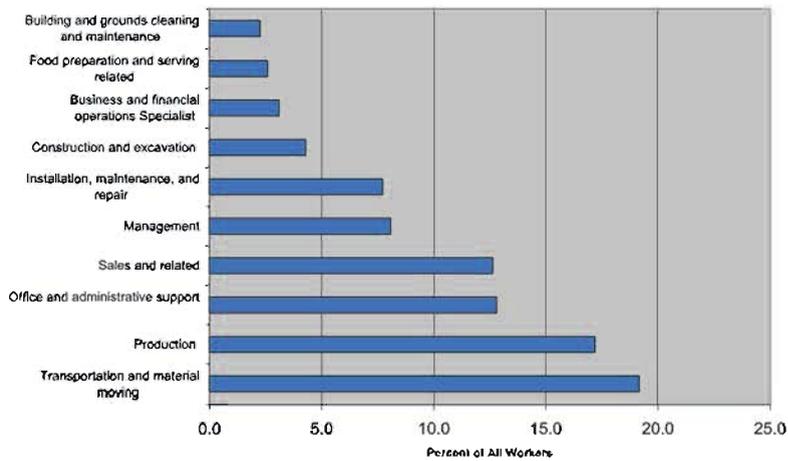
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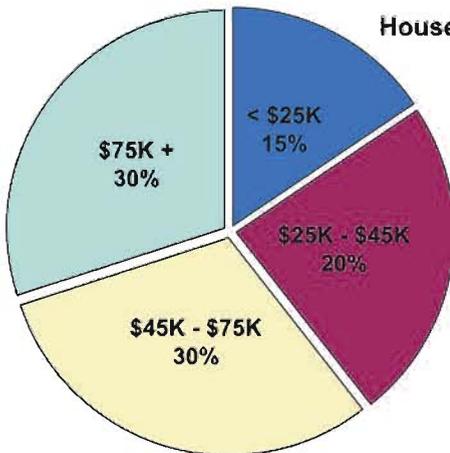
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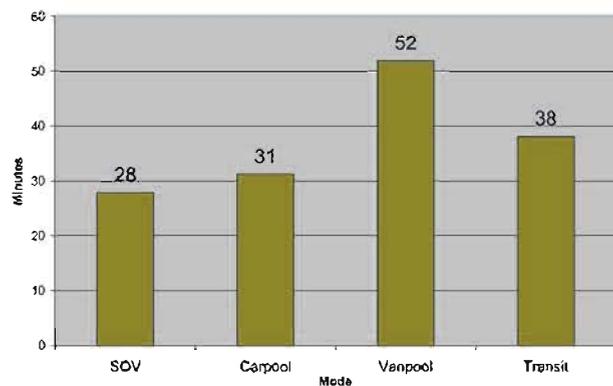
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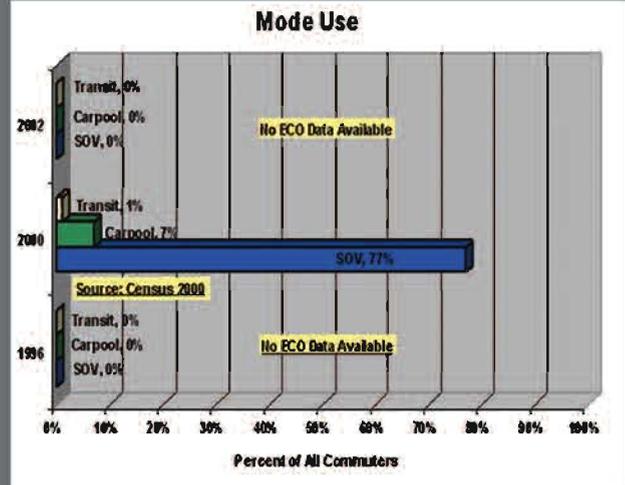
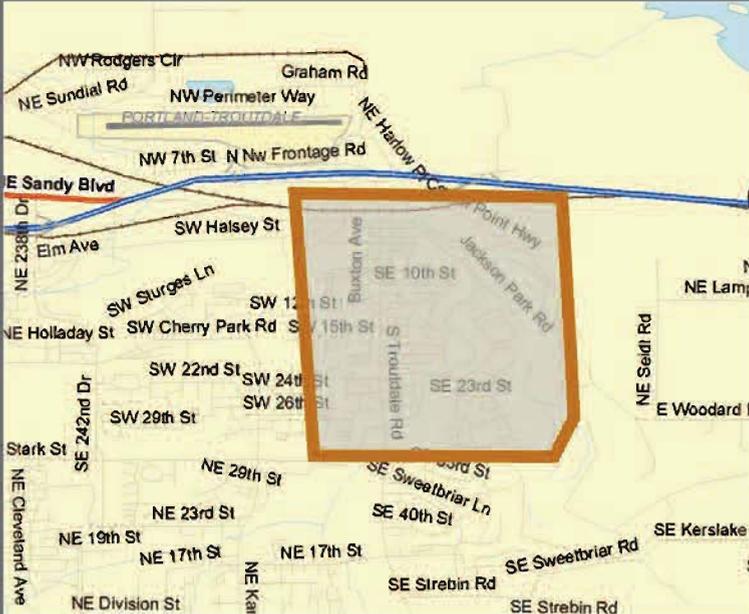
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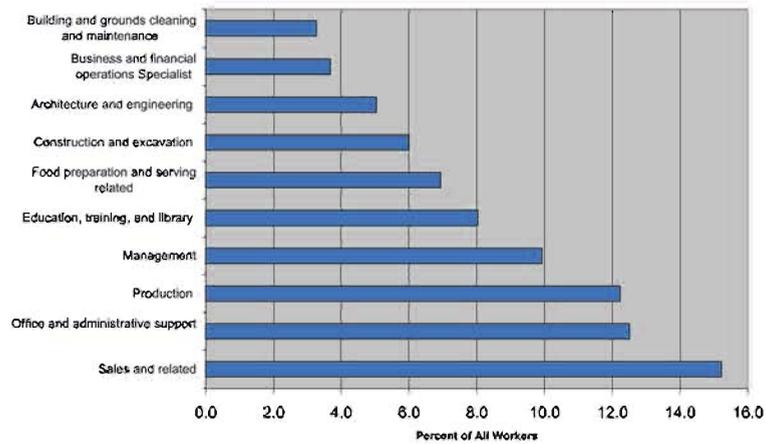
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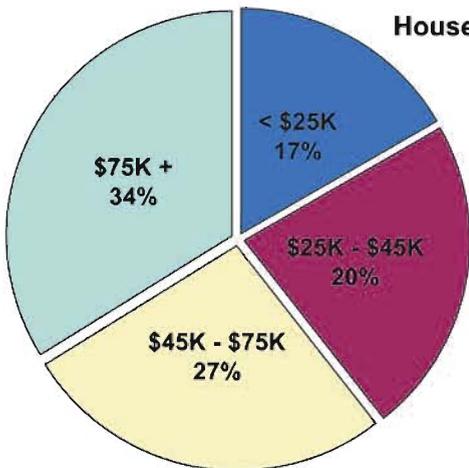
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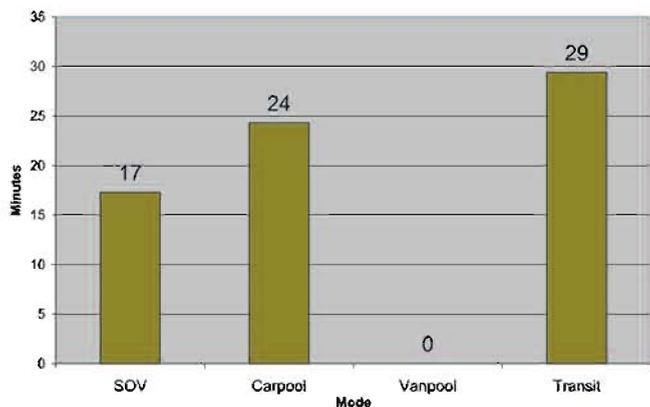
Top 10 Occupations



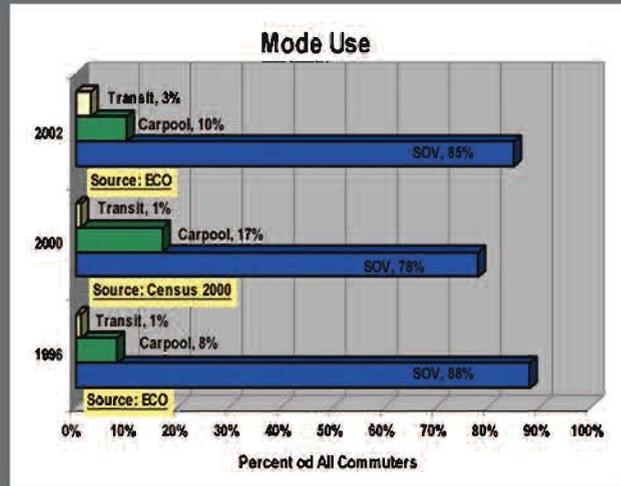
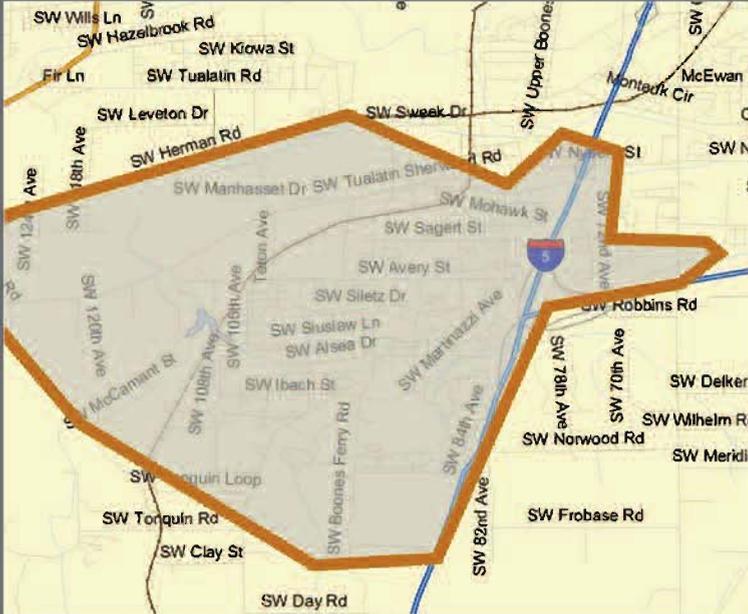
Household Income (1999)



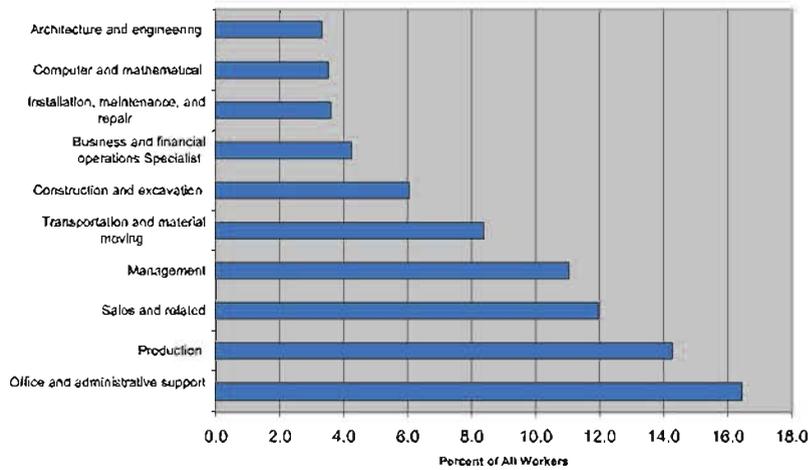
Mean Travel Time to Work from Home



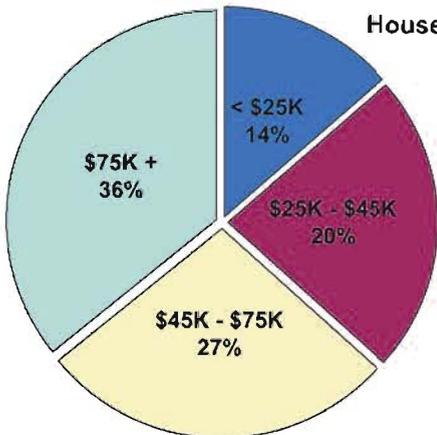
F. Tualatin



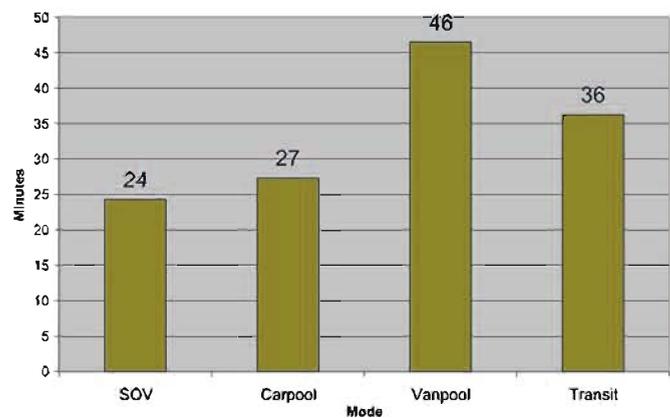
Top 10 Occupations



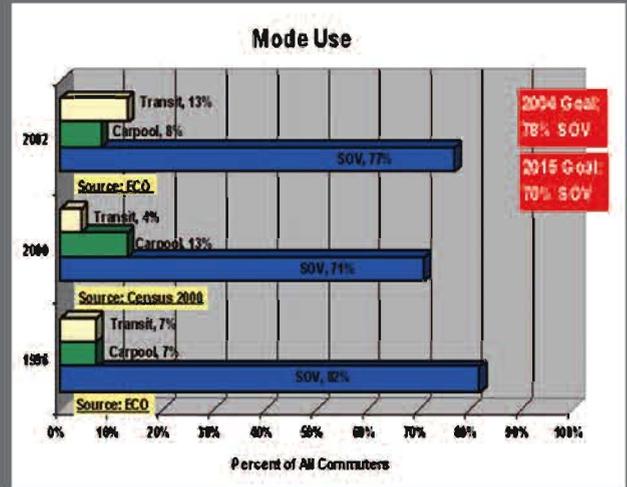
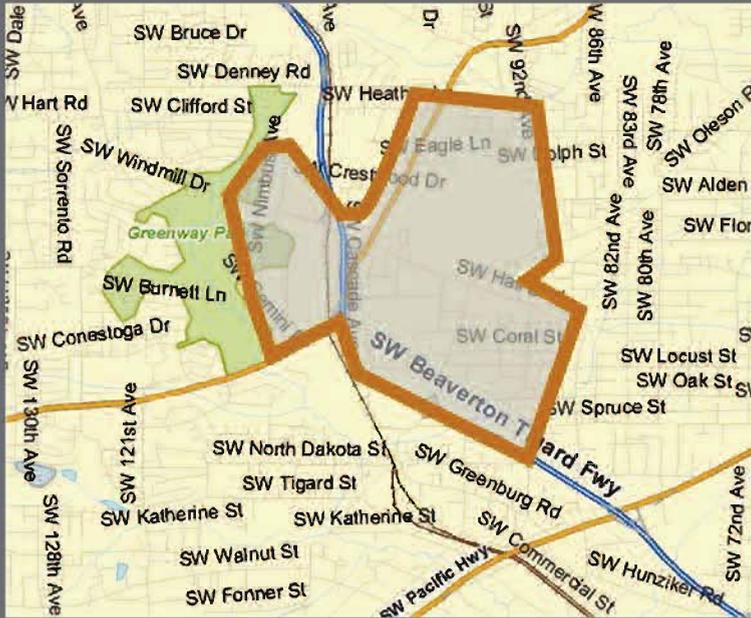
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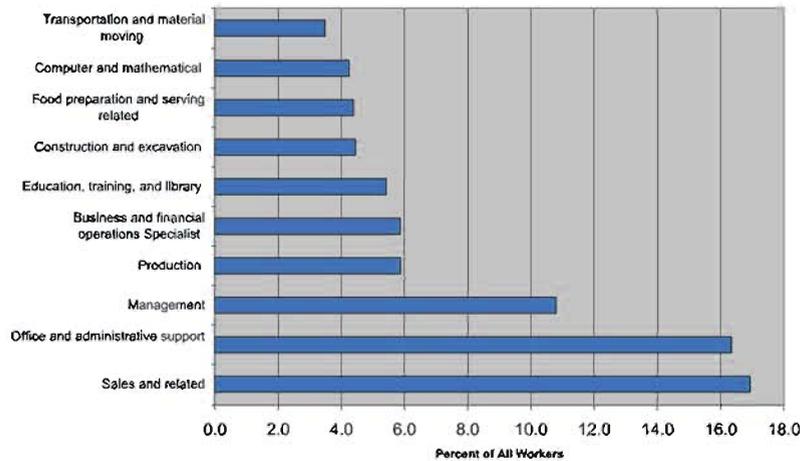
Mean Travel Time to Work from Home



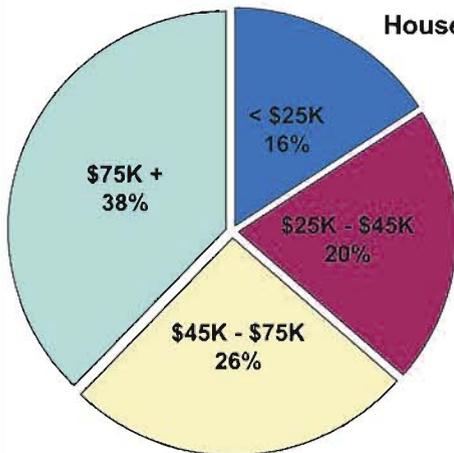
G. Washington Square



Top 10 Occupations



Household Income (1999)



Mean Travel Time to Work from Home

