

## Appendix A: City Of Mukilteo Traffic Accident Summary Data

### Accident Locations

|                  | 2006       | 2007       | 2008       |
|------------------|------------|------------|------------|
| City Street      | 148        | 122        | 101        |
| Private Property | 11         | 2          | 46         |
| State Highway    | 170        | 137        | 87         |
| <b>Total</b>     | <b>329</b> | <b>261</b> | <b>234</b> |

### State Highway Intersections

|                             | 2006      | 2007      | 2008      |
|-----------------------------|-----------|-----------|-----------|
| Front Street                | 5         | 1         | 3         |
| 5th Street                  | 5         | 4         | 4         |
| Goat Trail                  | 4         | 1         | 1         |
| 76th Street                 | 2         | 1         | 1         |
| 84th Street                 | 10        | 10        | 3         |
| 92nd Street                 | 1         | 2         | 3         |
| Paine Field Blvd.           | 0         | 6         | 8         |
| Harbour Pointe Blvd. N.     | 4         | 23*       | 11        |
| Chennault Beach Road        | 4         | 4         | 3         |
| Russell Road                | 2         | 0         | 2         |
| QFC Shopping Center         | 10        | 13        | 6         |
| Harbour Pointe Blvd. S.     | 10        | -         | 3         |
| Evergreen Drive             | 2         | 10        | 3         |
| Beverly Park Road           | 4         | 11        | 2         |
| 84th St. & Paine Field Blvd | 0         | 1         | 0         |
| 44th & 84 <sup>th</sup>     | 0         | 4         | 0         |
| <b>Total</b>                | <b>63</b> | <b>49</b> | <b>63</b> |

### Accident Type (State Highways)

|                         | 2006       | 2007       | 2008      |
|-------------------------|------------|------------|-----------|
| <b>Rear End</b>         | 79         | 76         | 43        |
| <b>Sideswipe</b>        | 19         | 37         | 10        |
| <b>Head-on</b>          | 5          | 9          | 4         |
| <b>Right Angle</b>      | 38         | 0          | 27        |
| <b>Pedestrian</b>       | 4          | 2          | 0         |
| <b>Hit Fixed Object</b> | 15         | 9          | 1         |
| <b>Other</b>            | 10         | 4          | 2         |
| <b>Total</b>            | <b>170</b> | <b>137</b> | <b>87</b> |

### Accident Impacts (State Highways)

|                        |     |     |    |
|------------------------|-----|-----|----|
| <b>Property Damage</b> | 122 | 120 | 89 |
| <b>Injuries</b>        | 48  | 31  | 22 |
| <b>Fatalities</b>      | 0   | 1   | 0  |

### Accident Type (City Streets)

|                         |     |     |     |
|-------------------------|-----|-----|-----|
| <b>Rear End</b>         | 42  | 20  | 26  |
| <b>Sideswipe</b>        | 13  | 14  | 11  |
| <b>Head-on</b>          | 5   | 6   | 4   |
| <b>Right Angle</b>      | 31  | 27  | 37  |
| <b>Pedestrian</b>       | 4   | 3   | 2   |
| <b>Hit Fixed Object</b> | 39  | 39  | 15  |
| <b>Other</b>            | 14  | 16  | 6   |
| <b>Total</b>            | 148 | 122 | 101 |

### Accident Impact (City Streets)

|                        |    |     |     |
|------------------------|----|-----|-----|
| <b>Property Damage</b> | 99 | 108 | 104 |
| <b>Injuries</b>        | 28 | 19  | 20  |
| <b>Fatalities</b>      | 0  | 0   | 1   |

## Appendix B: Traffic Impact Fee Calculation

### Trip Generation From Vacant Lands

ASSUME:

- 1) Do not include areas within Harbour Pointe Master Plan with previous agreement with Snohomish County of Traffic Mitigation, Improvements and Requirements.
- 2) Per Glen's memo of July 23, 2003, vacant land:
  - Commercial: 17.4 acres
  - Industrial: 53.1 acres
  - Single-Family Residential 249 parcels (exist)

|       |                                            |              |          |
|-------|--------------------------------------------|--------------|----------|
| FROM: | ITE Trip Generation – 6 <sup>th</sup> Add. |              |          |
|       | Land Use                                   | ADT (AC/Lot) | PM Trip  |
|       | Single-Family Residential                  | 10/Lot       | 1.02/Lot |
|       | Commercial/Mixed Use                       | 120/Ac.      | 28.3/Ac. |
|       | Industrial                                 | 51.8/Ac.     | 7.26/Ac. |

If exempt parcels that generate less than 3.0 PM peak hour trips

All existing Single-Family Residential lots are exempt from payment of a mitigation fee.

|                                                           |        |        |        |
|-----------------------------------------------------------|--------|--------|--------|
|                                                           | 2030   | 2002   | _____  |
| 2030 ADT                                                  |        |        |        |
| SR 525 76 <sup>th</sup> St. SW to 84 <sup>th</sup> St. SW | 28,000 | 17,200 | 10,800 |
| Bev Park Rd to Harbour Pointe Blvd-South                  | 41,000 | 29,600 | 11,400 |
| of new traffic ½ North, ½ South                           |        |        |        |

$$5509 / 2 = 2755 \text{ ADT}$$

$$2455 / 10,800 = 0.26 = 26\%$$

$$2755 / 11,400 = 0.24 = 24\%$$

Use 25% of traffic growth is internal generated traffic; 75% is generated by sources outside the City and development inside should not be expected to pay for mitigation for outside development.

## 2003 TRANSPORTATION PLAN

### CAPACITY PROJECTS

#### TRAFFIC MITIGATION FEE COST ANALYSIS

| PROJECT                                | ESTIMATED CAPITAL COST  | AMOUNT DUE TO DEVELOPMENT | COST TO DEVELOPMENT   |
|----------------------------------------|-------------------------|---------------------------|-----------------------|
| 121 <sup>ST</sup>                      | \$ 3,000,000.00         | 25%                       | \$750,000.00          |
| PAINE FIELD BLVD. EXTENSION            | \$116,000,000.00        | 0%                        | \$ 0.00               |
| HARBOUR REACH EXTENSION NEW ALIGNMENT  | \$ 9,000,000.00         | 25%                       | \$2,250,000.00        |
| PICNIC POINT ROAD TO HPB NEW ALIGNMENT | \$ 2,500,000.00         | 0%                        | \$ 0.00               |
| <b>TOTALS</b>                          | <b>\$130,500,000.00</b> |                           | <b>\$3,000,000.00</b> |

| LAND USE                 | ACRES AVAILABLE | ADT GENERATED PER ACRE (LOR LOT) | TOTAL ADT |
|--------------------------|-----------------|----------------------------------|-----------|
| SFR – LOTS               | 67              | 10                               | 670       |
| COMM/MIXED USE           | 17.4            | 120                              | 2088      |
| INDUSTRIAL               | 53.1            | 51.8                             | 2751      |
| MULTI-FAMILY RESIDENTIAL | 0               | 50                               | 0         |

|                     |          |
|---------------------|----------|
| IMPACT COST PER ADT | \$544.60 |
| 50% OF IMPACT FEE   | \$272.30 |

## Appendix C: References

1. “A Policy on Geometric Design of Highways and Streets” 2001, Fourth Edition.  
American Association of State Highway and Transportation Officials (AASHTO), 444 North Capitol Street NW, Suite 249, Washington, DC 20001
2. “Highway Capacity Manual, HCM2000”  
Transportation Research Board, National Research Council, Washington, DC
3. “Roadside Design Guide”, January 1996  
American Association of State Highway and Transportation Officials (AASHTO)
4. Final Report “Development of a City-Wide Pavement Management System: for the City of Mukilteo by Harris & Associates, Inc., June 1999
5. Feasibility Study for “Paine Field Boulevard Extension” for the City of Mukilteo by OTAK, Inc., 2000
6. “Trip Generation”, 6<sup>th</sup> Edition, Institute of Transportation Engineers, Washington, DC, 1997
7. Mukilteo Multi-modal Terminal and Access Study Draft and Final Programmatic EIS, City of Mukilteo, June 1995
8. Mukilteo Multi-modal Terminal and Access Study Engineering Concepts Report, City of Mukilteo, June 1995
9. Everett-Seattle Commuter Rail Project – Draft and Final EIS, Sound Transit, 1999
10. Puget Sound Park & Ride System Update – WSDOT, February 2001
11. Washington State Highway System Plan 2003-2022, Washington State Department of Transportation, February 2002
12. Washington State Ferries System Plan 1999-2018, Washington State Department of Transportation, 1998
13. Washington State Ferries Division “Final Long-Range Plan (2009-2030)”
14. Community Transit’s “Transit Development Plan (2008-2013)

## Appendix D: Intergovernmental Coordination

The draft of the Transportation Plan was sent to local, regional and state agencies asking for review and comments. Included in this group are agencies that directly interface with or adjoin Mukilteo and provide transportation infrastructure to the residents of Mukilteo and other citizens within Mukilteo City limits:

- Washington State Department of Transportation (WSDOT)
- City of Everett
- City of Edmonds
- City of Lynnwood
- Community Transit
- Puget Sound Regional Council
- Sound Transit
- Snohomish County

In addition, current adopted plans from these agencies were consulted and utilized for the preparation of this Transportation Plan as noted in Appendix C.

The City received formal (letter/e-mail) and informal (telephone conversation) comments as noted below:

| AGENCY                                         | FORMAL | INFORMAL |
|------------------------------------------------|--------|----------|
| Washington State Department of Transportation: |        |          |
| ⇒ Ferries Division                             | ✓      |          |
| ⇒ Aviation Division                            | ✓      |          |
| • Puget Sound Regional Council                 |        | ✓        |
| • Snohomish County Airport – Paine Field       | ✓      |          |
| • City of Everett                              | ✓      | ✓        |

As stated earlier, Mukilteo is and will be a transportation hub or node. Many different transportation means come together and meet in the City, especially in the north end where the new Inter-Modal Terminal is slated to be constructed. While auto, pedestrian and other traffic is generated by City residents, analysis has shown that the majority of traffic and its impacts experienced by the City is generated by and originates in the surrounding region. With two highways of statewide significance, a ferry terminal and a Sound Transit Commuter Rail Station within the City boundaries, this situation will continue in the future.

# Appendix E: 2008 and 2030 Intersection Level of Service Impacts

# LOS Summary

**PM Peak Hour LOS Results**

| Int # | Intersection                                     | Control          | Movement | Existing Network |       |       | 2030 Future Networks |       |       |                    |       |       |                    |       |       |
|-------|--------------------------------------------------|------------------|----------|------------------|-------|-------|----------------------|-------|-------|--------------------|-------|-------|--------------------|-------|-------|
|       |                                                  |                  |          | 2008 Existing    |       |       | 2030 Alternative 1   |       |       | 2030 Alternative 2 |       |       | 2030 Alternative 3 |       |       |
|       |                                                  |                  |          | LOS              | Delay | V/C   | LOS                  | Delay | V/C   | LOS                | Delay | V/C   | LOS                | Delay | V/C   |
| 1     | SR 525 / 5th St                                  | Signalized       | -        | D                | 36    | 0.73  | E                    | 79    | 0.81  | E                  | 79    | 0.81  | C                  | 26    | 0.21  |
| 2     | SR 525 / SR 526 / 84th St SW                     | Signalized       | -        | D                | 35    | 0.76  | E                    | 61    | 0.96  | E                  | 61    | 0.96  | C                  | 29    | 0.76  |
| 3     | SR 526 / 84th St SW / Paine Field Blvd           | Signalized       | -        | C                | 21    | 0.48  | B                    | 20    | 0.48  | B                  | 20    | 0.48  | B                  | 18    | 0.59  |
| 4     | SR 525 / 88th St SW                              | Unsignalized ALL | EB or WB | E                | 39    | 0.11  | F                    | >100  | >1.00 | F                  | >100  | >1.00 | F                  | 39    | 0.42  |
|       |                                                  |                  |          | A                | 3     |       | F                    | >100  |       | F                  | >100  |       | A                  | 4     |       |
| 5     | SR 525 / 92nd St SW                              | Signalized       | -        | B                | 11    | 0.66  | B                    | 13    | 0.78  | B                  | 13    | 0.78  | B                  | 12    | 0.73  |
| 6     | SR 525 / Paine Field Blvd                        | Signalized       | -        | C                | 21    | 0.65  | B                    | 16    | 0.71  | B                  | 16    | 0.71  | C                  | 24    | 0.89  |
| 7     | SR 525 / Harbour Pointe Blvd (N)                 | Signalized       | -        | C                | 24    | 0.77  | C                    | 31    | 0.85  | C                  | 31    | 0.85  | C                  | 31    | 0.85  |
| 8     | SR 525 / Chennault Beach Rd                      | Signalized       | -        | C                | 32    | 0.85  | E                    | 61    | 1.04  | D                  | 55    | 1.03  | E                  | 61    | 1.04  |
| 9     | SR 525 / Russell Rd                              | Unsignalized ALL | EB       | E                | 39    | 0.43  | E                    | 38    | 0.48  | E                  | 38    | 0.48  | E                  | 38    | 0.48  |
|       |                                                  |                  |          | A                | 1     |       | A                    | 1     |       | A                  | 1     |       | A                  | 1     |       |
| 10    | SR 525 / Harbour Pointe Blvd SW (S)              | Signalized       | -        | D                | 47    | 0.93  | D                    | 48    | 0.99  | C                  | 21    | 0.78  | D                  | 48    | 0.99  |
| 11    | SR 525 / 121st St SW                             | Unsignalized ALL | WB       | F                | >100  | 0.97  | F                    | >100  | 1.00  | F                  | >100  | 1.00  | F                  | >100  | 1.00  |
|       |                                                  |                  |          | A                | 6     |       | A                    | 6     |       | A                  | 6     |       | A                  | 6     |       |
| 12    | SR 525 / Beverly Park Rd                         | Signalized       | -        | D                | 52    | 0.90  | F                    | 81    | 1.03  | E                  | 65    | 0.98  | F                  | 81    | 1.03  |
| 13    | SR 525 / Lincoln Wy                              | Signalized       | -        | C                | 23    | 0.76  | C                    | 32    | 0.85  | C                  | 32    | 0.85  | C                  | 32    | 0.85  |
| 14    | SR 99 / Lincoln Wy                               | Signalized       | -        | D                | 49    | 0.90  | D                    | 43    | 0.94  | D                  | 43    | 0.94  | D                  | 43    | 0.94  |
| 15    | Beverly Park Rd / 112th St SW                    | Signalized       | -        | B                | 14    | 0.50  | F                    | 83    | >1.00 | F                  | 83    | >1.00 | F                  | 83    | >1.00 |
| 16    | Airport Rd / 112th St SW                         | Signalized       | -        | C                | 22    | 0.59  | D                    | 39    | 0.87  | D                  | 39    | 0.87  | D                  | 39    | 0.87  |
| 17    | Beverly Park Rd / York Rd                        | Unsignalized ALL | EB/WB    | C                | 24    | 0.14  | F                    | >100  | >1.00 | F                  | >100  | >1.00 | F                  | >100  | >1.00 |
|       |                                                  |                  |          | A                | 1     |       | E                    | 44    |       | E                  | 44    |       | E                  | 44    |       |
| 18    | Beverly Park Rd / Lincoln Wy                     | Unsignalized ALL | WB       | F                | 87    | 0.94  | F                    | >100  | >1.00 | F                  | >100  | >1.00 | F                  | >100  | >1.00 |
|       |                                                  |                  |          | B                | 10    |       | F                    | 53    |       | F                  | 53    |       | F                  | 53    |       |
| 19    | Beverly Park Rd / Picnic Pt Rd / Shelby Rd       | Signalized       | -        | C                | 21    | 0.69  | D                    | 42    | 0.87  | D                  | 42    | 0.87  | D                  | 42    | 0.87  |
| 20    | 52nd Ave W / 140th St SW / Picnic Pt Rd          | Unsignalized ALL | NB       | C                | 17    | 0.36  | C                    | 21    | 0.42  | C                  | 21    | 0.42  | C                  | 21    | 0.42  |
|       |                                                  |                  |          | A                | 4     |       | A                    | 4     |       | A                  | 4     |       | A                  | 4     |       |
| 21    | 52nd Ave W / 148th St SW                         | Signalized       | -        | B                | 19    | 0.61  | C                    | 34    | 0.85  | C                  | 34    | 0.85  | C                  | 34    | 0.85  |
| 22    | SR 99 / 148th St SW                              | Signalized       | -        | E                | 64    | 1.00  | F                    | >100  | >1.00 | F                  | >100  | >1.00 | F                  | >100  | >1.00 |
| 23    | 35th Ave W / 148th St SW                         | Signalized       | -        | B                | 10    | 0.53  | C                    | 27    | 0.95  | C                  | 27    | 0.95  | C                  | 27    | 0.95  |
| 24    | Admiralty Wy / 148th St SW                       | Unsignalized ALL | NB or SB | C                | 25    | 0.66  | F                    | 92    | 0.49  | F                  | 92    | 0.49  | F                  | 92    | 0.49  |
|       |                                                  |                  |          | A                | 6     |       | B                    | 12    |       | B                  | 12    |       | B                  | 12    |       |
| 25    | Admiralty Wy / Gibson Rd                         | Unsignalized     | AWSC     | A                | 10    |       | C                    | 23    |       | C                  | 23    |       | C                  | 23    |       |
| 26    | Harbour Pointe Blvd / Cyrus Wy                   | Signalized       | -        | B                | 15    | 0.51  | B                    | 21    | 0.75  | B                  | 11    | 0.38  | B                  | 21    | 0.75  |
| 27    | Harbour Pointe Blvd / Harbour Reach Dr           | Signalized       | -        | B                | 13    | 0.52  | B                    | 14    | 0.60  | C                  | 20    | 0.65  | B                  | 14    | 0.60  |
| 28    | SR 526 / 84th St SW / 44th Ave W                 | Signalized       | -        | A                | 8     | 0.44  | A                    | 9     | 0.52  | A                  | 9     | 0.52  | A                  | 9     | 0.52  |
| 29    | SR 526 / 40th Ave W                              | Unsignalized ALL | SB       | F                | >100  | >1.00 | F                    | >100  | >1.00 | F                  | >100  | >1.00 | -                  | -     | -     |
|       |                                                  | Signalized       | -        | B                | 14    |       | F                    | >100  |       | F                  | >100  |       | -                  | -     | -     |
|       |                                                  |                  |          | -                | -     |       | -                    | -     |       | -                  | -     |       | C                  | 21    | 0.87  |
| 30    | SR 525 / QFC Shopping Center Driveways           | Signalized       | -        | A                | 8     | 0.57  | A                    | 8     | 0.61  | A                  | 8     | 0.61  | A                  | 8     | 0.61  |
| 31    | Beverly Park Rd / Harbour Reach Dr / 132nd St SW | Signalized       | -        | -                | -     | -     | -                    | -     | -     | E                  | 56    | 0.96  | -                  | -     | -     |
| 32    | 6th Street / Paine Field Blvd                    | Signalized       | -        | -                | -     | -     | -                    | -     | -     | -                  | -     | -     | A                  | 7     | 0.47  |

LOS at unsignalized intersections shown for worst stop-controlled movement and all-way stop controlled intersections (AWSC).  
 All signalized intersections under future conditions were optimized for coordinated and uncoordinated cycle lengths, splits, and offsets.  
 Delay shown for F > 100 and V/C > 1.00.