Redmond, Washington Multimodal Plan-Based Transportation Concurrency

American Planning Association

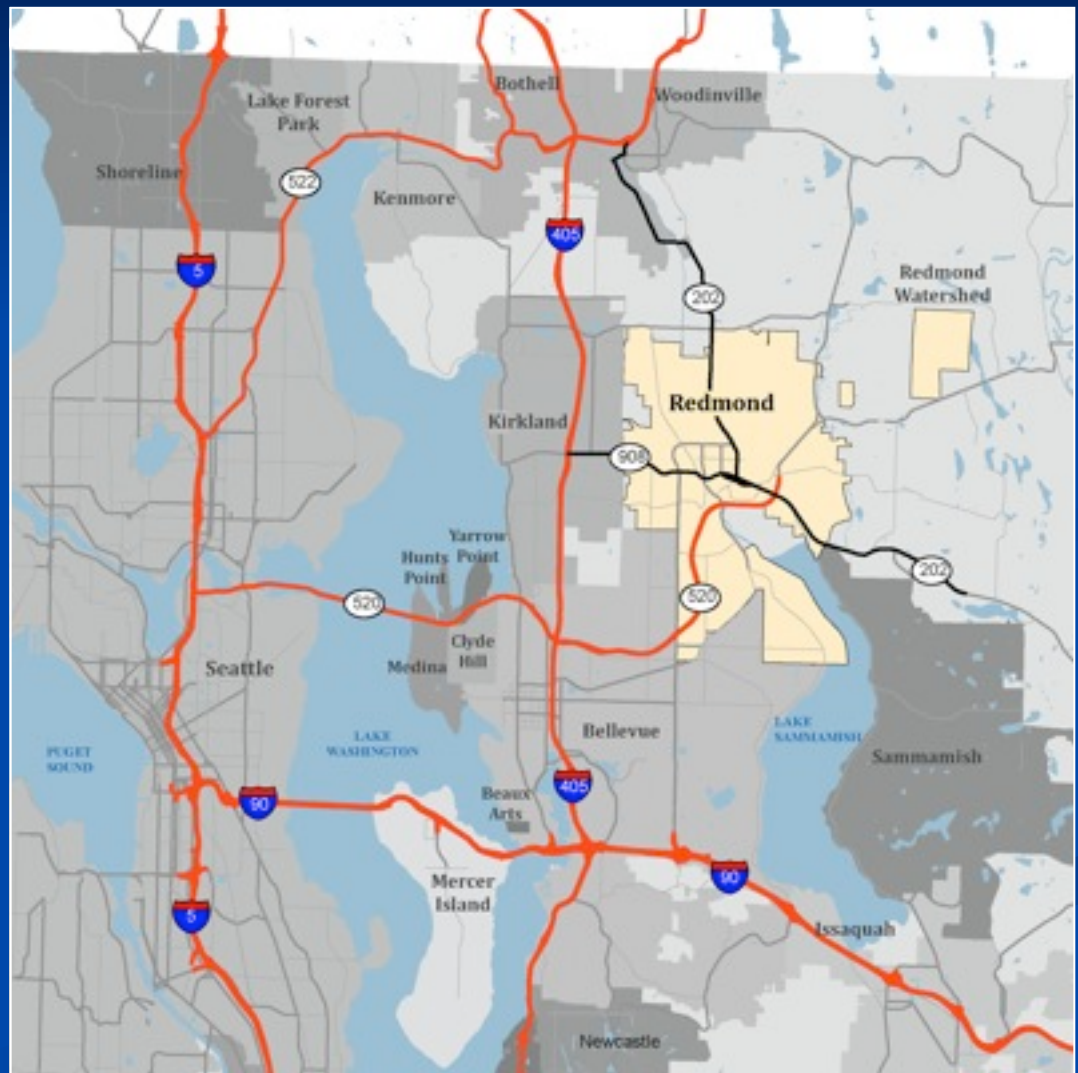
Washington Conference

Vancouver, Washington

November 12, 2009

Redmond, Washington

- Area: 16.85 sq miles
- Population: 51,500
- Employment: 80,000
  - Microsoft
  - Nintendo of America
  - Genie Industries
  - Honeywell
  - AT&T Wireless
- Urban Centers
  - Downtown



Comprehensive Plan

Goals, Vision & Framework Policies– Transportation System Characteristics:

- Convenient, safe
- Offers travel choices
- Well designed, energy efficient
- Environmentally sound
- People spend less time traveling; more time where they want to be

Transportation Master

Balanced transportation system that:

- Supports Urban Centers
- Creates new connections
- Implements Multimodal Corridors
- Prepares for high capacity transit

Comprehensive Plan

Policies—LOS & concurrency must:

- Promote desired land uses
- Expand travel choices
- Maintain community character
- Ensure accountability

NE 36th St Bridge – Overlake

Downtown Redmond Mixed

Comprehensive Plan

Transportation Concurrency—Policy TR-3:

Utilize a "plan-based" approach…ensure that programs, facilities & services occur in proportion to the needs of the City & pace of growth…

Transportation LOS—Policy TR-4:

Redmond's LOS standard is that so long as growth & transportation system development are proportionate, work in parallel and consistent with the Comprehensive Plan, concurrency

Concurrency Update

- Support City vision and goals
- Implement the 2022 Transportation Facility Plan (TFP)
- Track and regulate growth and implementation of the TFP to ensure that they are roughly proportionate
- Simple and predictable
- Be understandable: “I can explain concurrency to my neighbor”

Concurrency Approaches

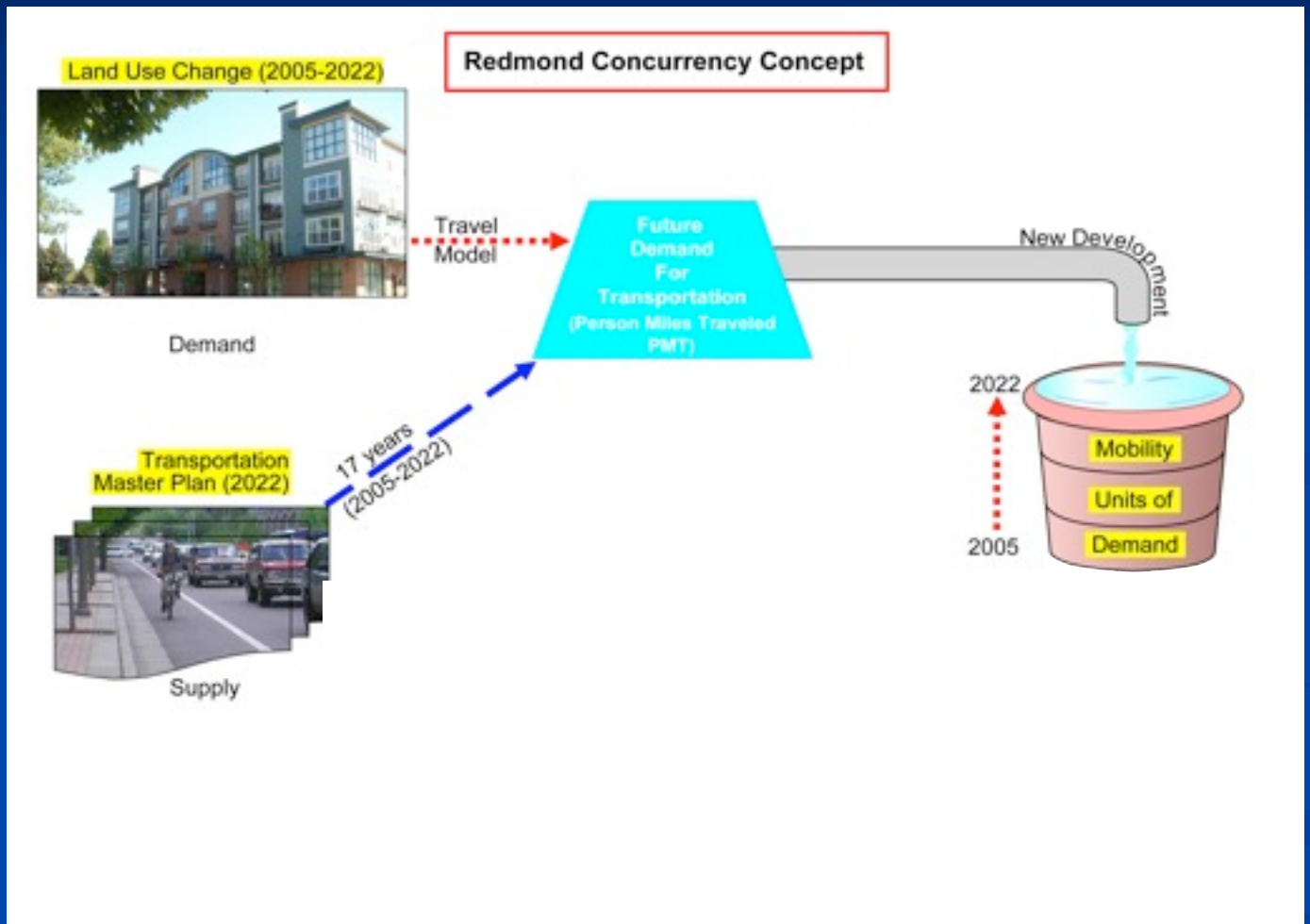
Intersection Based

- Automobile focused – based on PM peak hour intersection LOS
- 7 district system – 4 districts currently exceed LOS standard
- Improve LOS by:
  - Expanding intersections
  - More traffic signals
- Complicated and Cumbersome
- Intersection LOS drives

Plan-Based

- Multi-modal – based on PM peak hour person miles traveled (PMT)
- Citywide
- Improve LOS with 2022 TFP projects, programs, and services that add PMT capacity
- Ensure that growth and transportation improvements are proportional
- Simple and predictable

Total Mobility Unit



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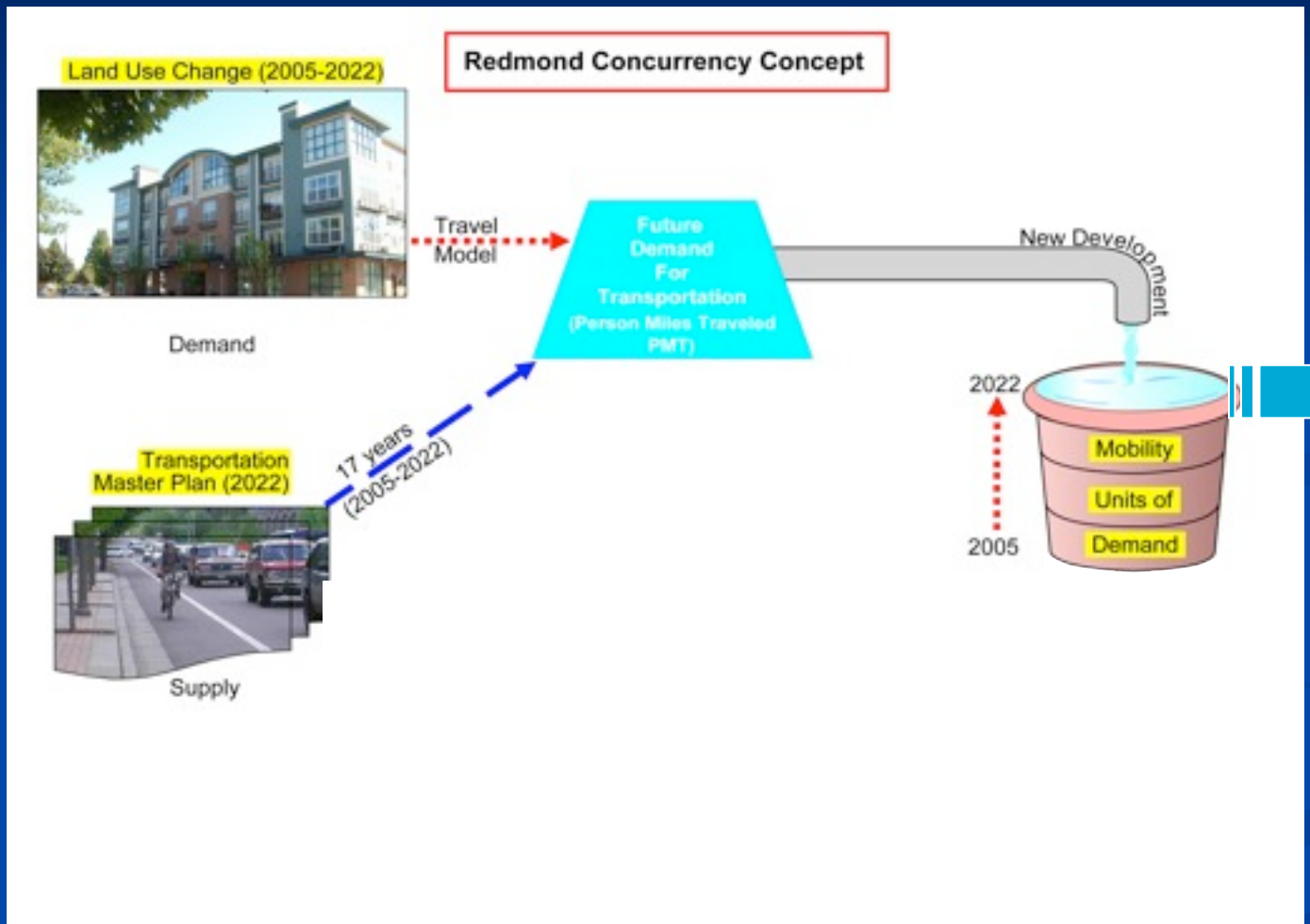
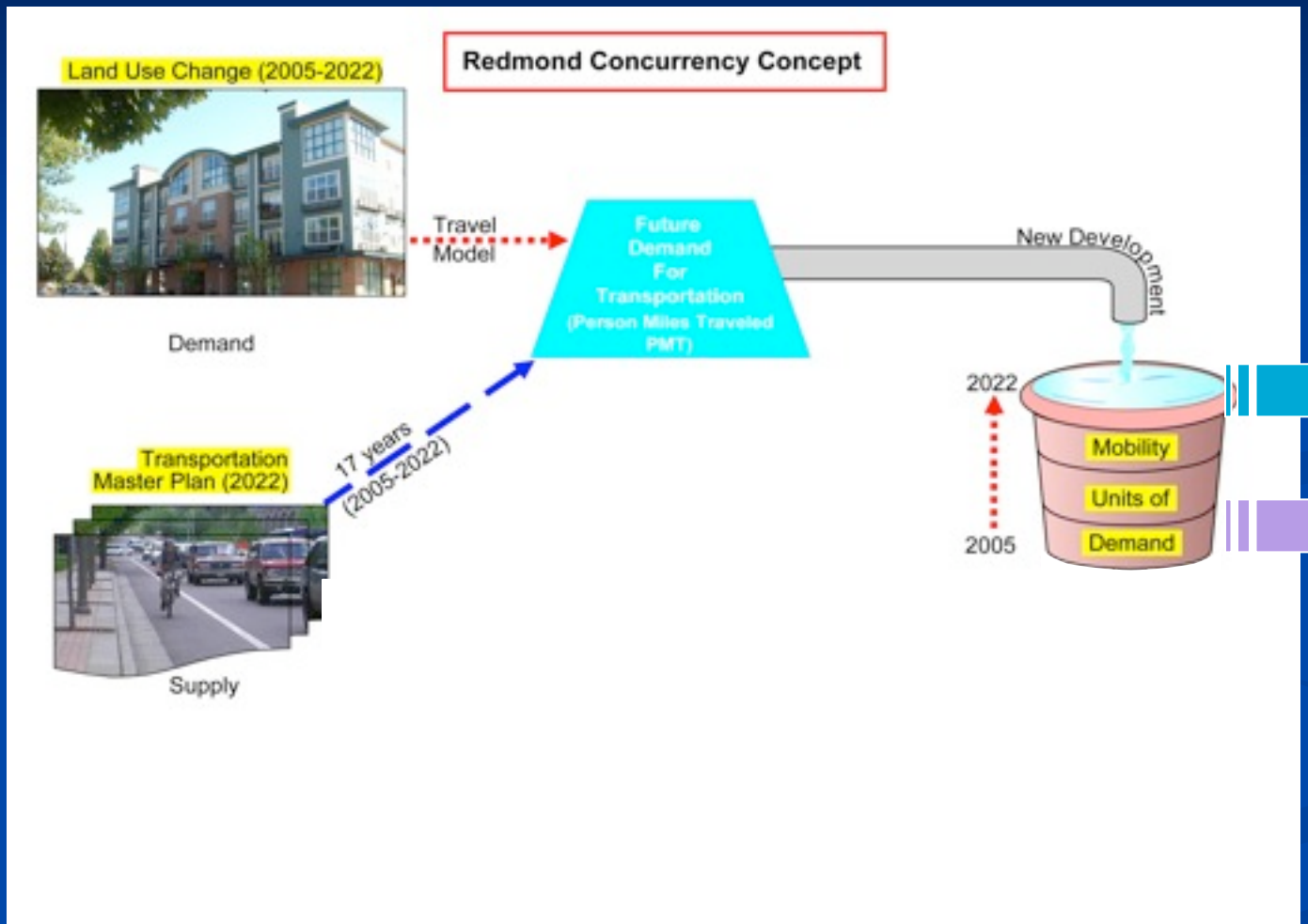


Results in Multimodal Transportation System Performance Measures as reported in Transportation Master Plan and monitored in Mobility Report Card.

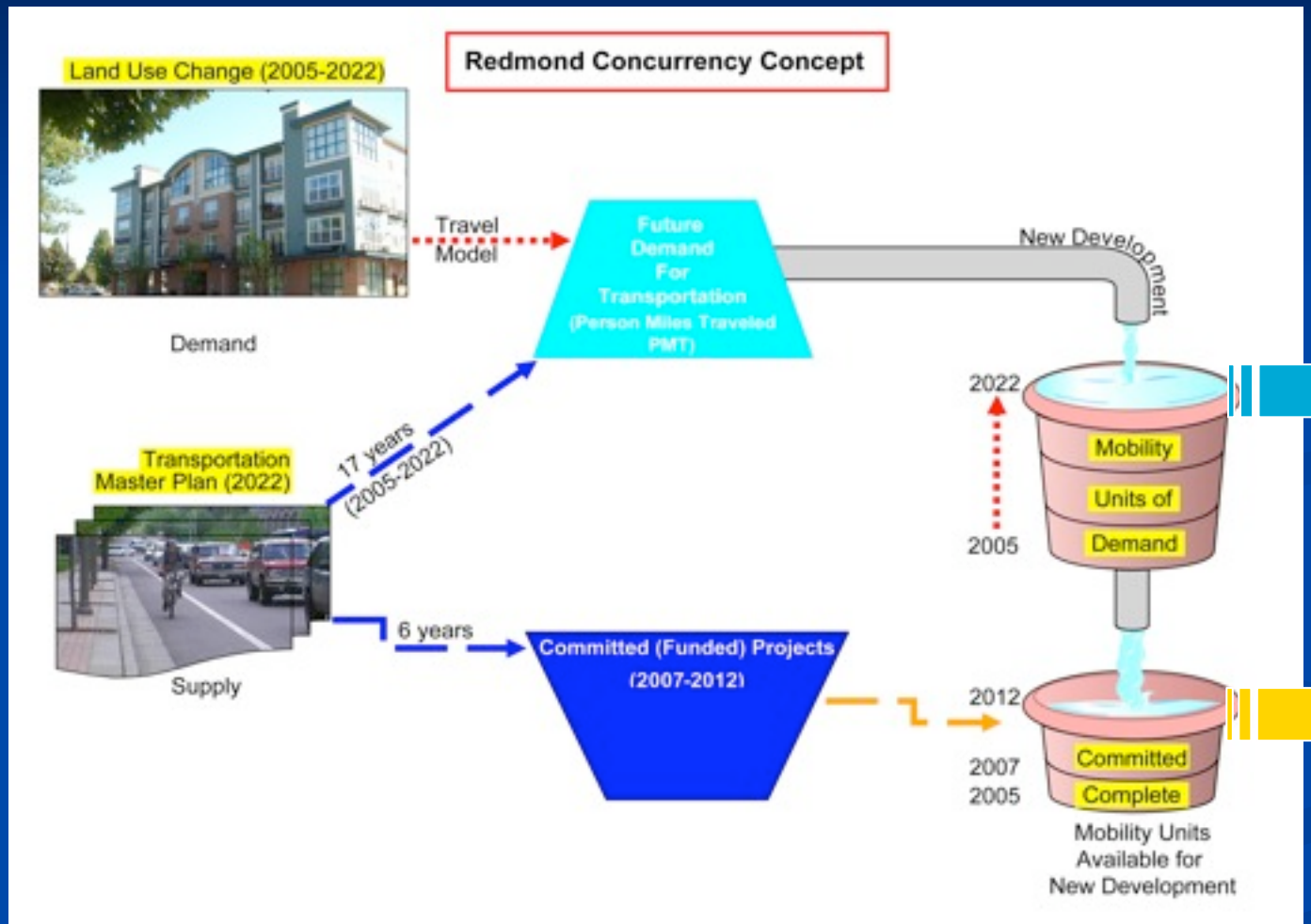
Total Mobility Unit



Results in Multimodal Transportation System Performance Measures as reported in Transportation Master Plan and monitored in Mobility Report Card.

Transportation Facility Plan Supplies 70,022 Mobility Units to get the system performance describe in the TMP.

Total Mobility Unit



Results in Multimodal Transportation System Performance Measures as reported in Transportation Master Plan and monitored in Mobility Report Card.

Percent of Transportation Facility Plan Complete determines Mobility Units supply available.

Mobility Unit Demand Calculation

	Vehicle Trip Generation Rate (PM peak hour)
x	Percent New Trips
x	Person Trip Conversion (Average Vehicle Occupancy & Mode Split)
x	Trip Length (miles)
=	Person Mile Rate per Unit
x	Units of Development
=	Person Miles of Travel (Mobility Unit Demand)

Mobility Unit Demand Calculation

Development	Land Use Type	Units	Proposed Concurrency		
			Mobility Unit	Mobility Units	Notes
Res. Short	SF (unit)	4	2.78	11.12	New
	SF (unit)	(1)	2.78	(2.78)	Existing
	Net Change			8	

Development Mobility Unit Calculator

Land Uses	Standard of Measure	Mobility Units/Land Use Unit		
		Citywide	Urban Centers	
			Downtown	Overlake
Residential				
Single Family	dwelling	2.78	2.78	2.78
Multiple Family	dwelling	1.71	1.28	1.59

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Mobility Unit Demand Calculation

Development	Land Use Type	Units	Proposed Concurrency		
			Mobility Unit	Mobility Units	Notes
Downtown Mixed-Use	Retail (sq	15,00	3.38	51	New
	MF (units)	150	1.28	192	New
	Furniture (sq ft)	(4,45 0)	0.33	(1)	Existing
	Auto (sq ft)	(6,45	4.26	(27)	Existing
	Spc. Retail (sq ft)	(5,60 0)	3.38	(19)	Existing
	Warehouse /Office (sq	(3,78 5)	1.50	(6)	Existing
	Net			190	

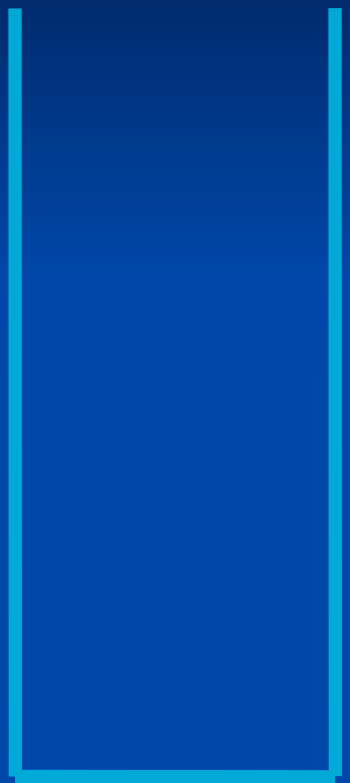
Mobility Unit Demand Calculation

Development	Land Use Type	Units	Proposed Concurrency		
			Mobility Unit	Mobility Units	Notes
Overlake Office	Office (sq ft)	550,000	4.66	2,563	Vacant Site

Mobility Unit Demand Reductions

- Transportation Demand Management
  - Development site required to have a Transportation Management Plan that is enforceable, replicable and in perpetuity.
  - Strategies that result in Mobility Unit reductions applied to Mobility Unit rate per unit
- Urban Centers
  - Mobility Unit rate per unit decreases because of shorter trip length due to more diversity, density and design of land

Testing for Concurrency Green Light Scenario



Mobility Unit Supply 4,000 MU_s

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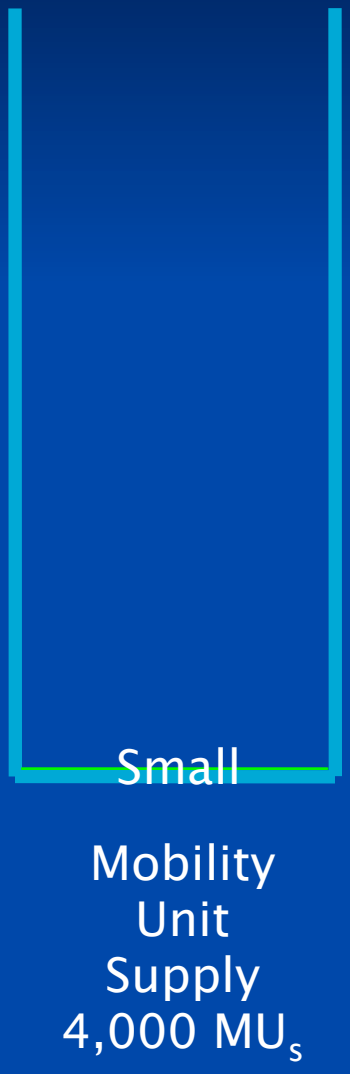
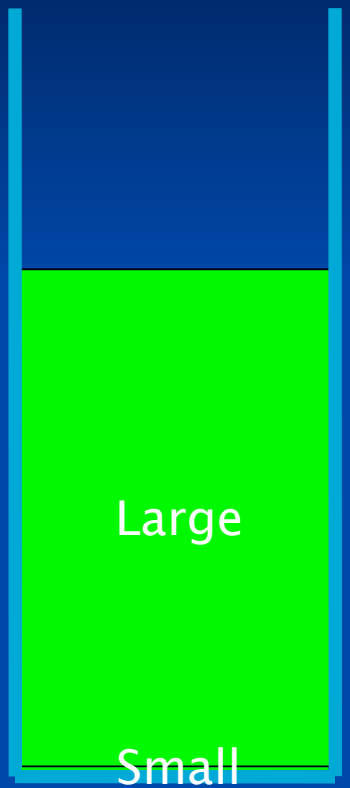


1. Small Development
   - 4,000 MU_s – 8 MU_d = 3,992 MU_s
2. Large Development
   - 3,992MU_s – 2,563 MU_d = 1,429 MU_s
3. Medium Development
   - 1,429 MU_s – 190 MU_d = 1,239 MU_s
4. Remaining Mobility Units

Testing for Concurrency Green Light Scenario



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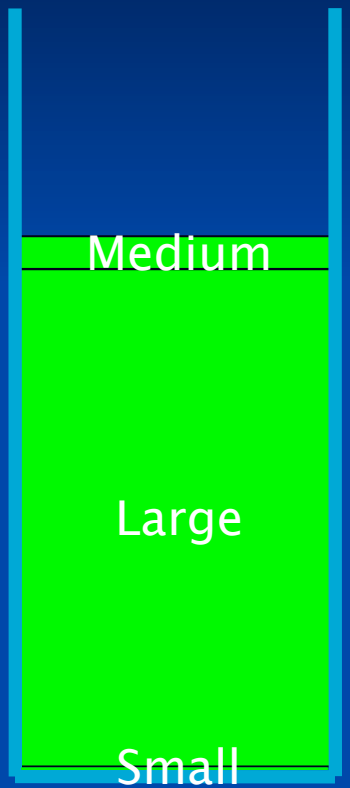

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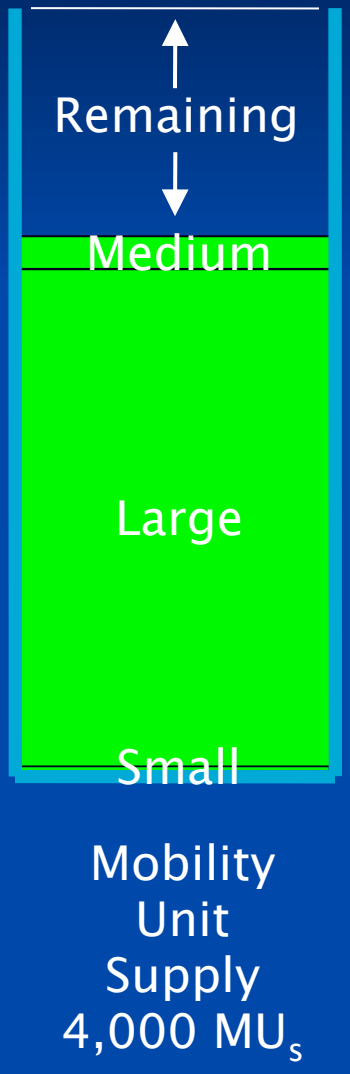

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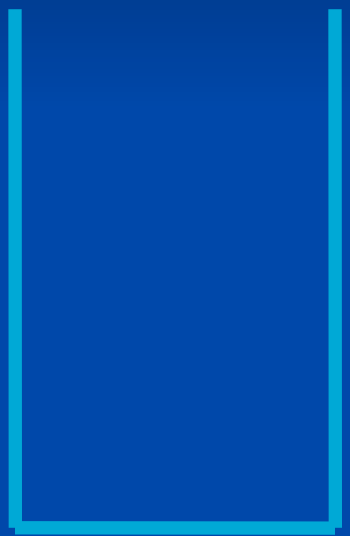

Mobility Unit Supply 2,700 MU_s

Testing for Concurrency Yellow & Red Light Scenario

1. Large Development
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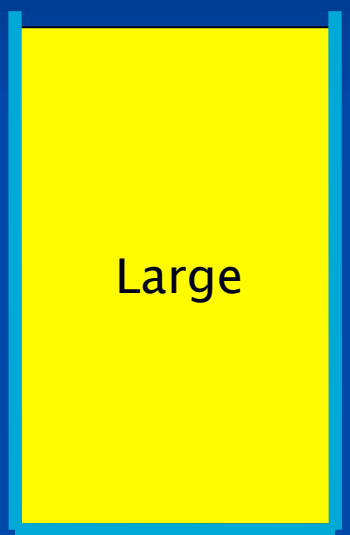
   - Use caution – near threshold



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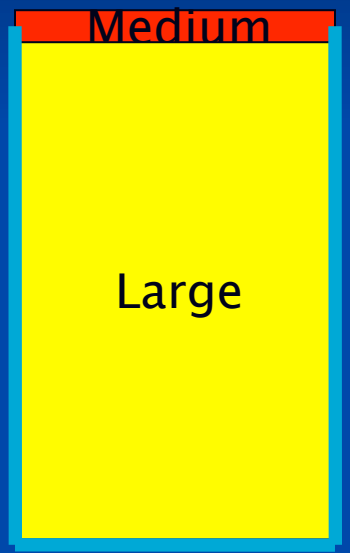

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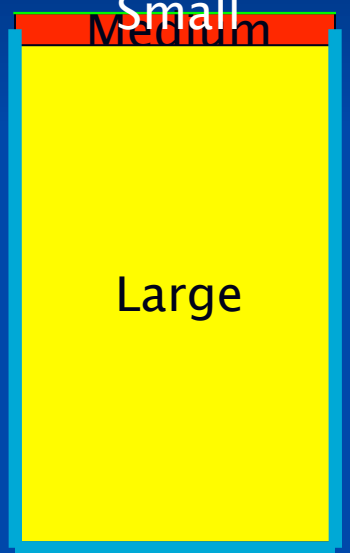
2. Medium Development
   - 137 MU_s – 190 MU_d = (53) MU_s
   - Stop – One of five options…
     1. Supplemental mitigation
        a. Construct project from TFP
        b. Purchase necessary MU_S
     3. Reduce development size
     4. Apply TDM measures
     5. Delay development
     6. City or other source funds additional TFP projects

Testing for Concurrency Yellow & Red Light Scenario



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   - (53) MU_s – 8 MU_d = (61) MU_s
   - Go – Exempt, less than 25 MU_d

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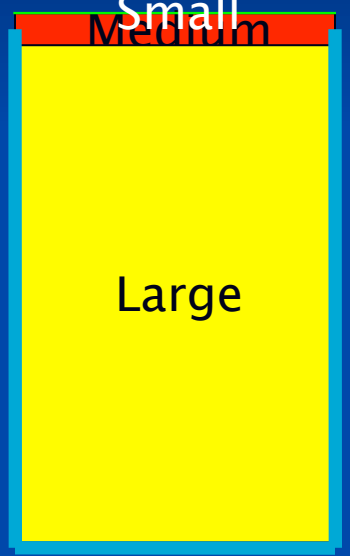

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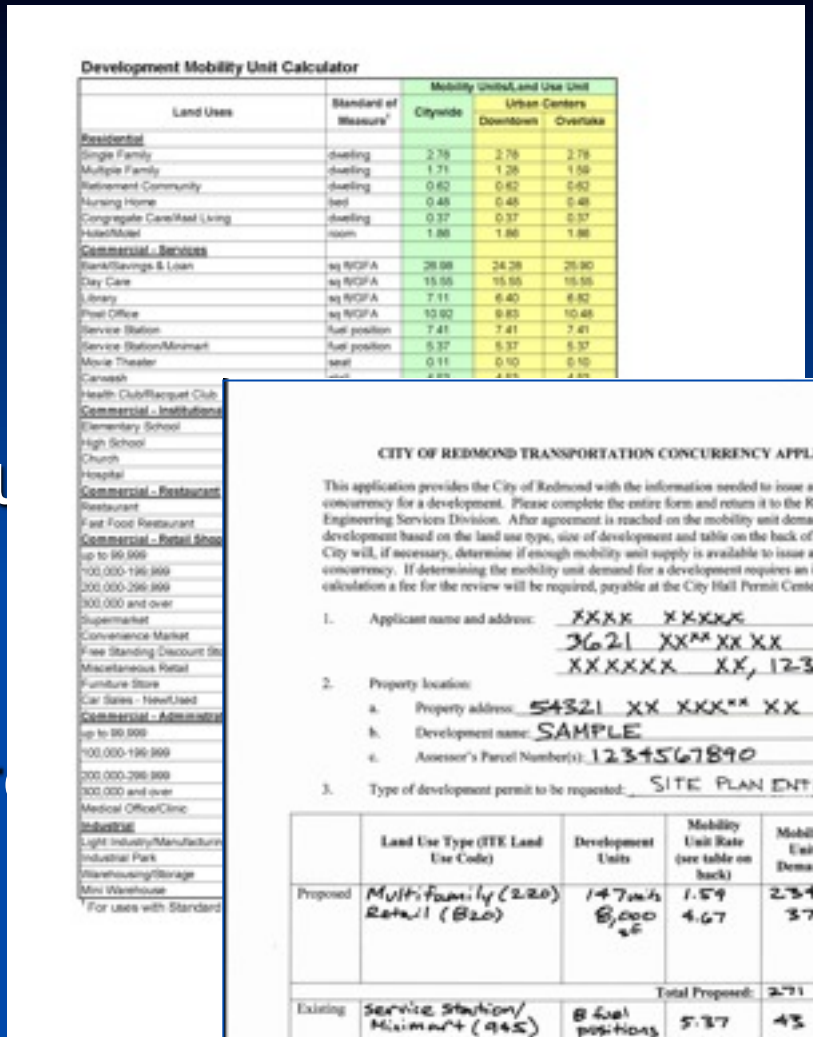
4. Remaining Mobility Units
   - (61) MU_s

Lessons

- You get what you measure
- Nobody cares about concurrency until you hit the threshold
- Concurrency cannot be the only performance measure
- Develop administrative guidelines
- Including TDM has to be done differently
- Scenario testing is important



Development Mobility Unit Calculator

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			Downtown	Overlake
Residential				
Single Family	dwelling	2.78	2.78	2.78
Multiple Family	dwelling	1.71	1.26	1.59
Retirement Community	dwelling	0.62	0.62	0.62
Nursing Home	bed	0.46	0.46	0.46
Congregate Care/Assl Living	dwelling	0.37	0.37	0.37
Hotel/Motel	room	1.88	1.88	1.88
Commercial - Services				
Bank/Savings & Loan	sq ft/GFA	28.68	24.28	25.90
Day Care	sq ft/GFA	15.55	15.55	15.55
Library	sq ft/GFA	7.11	6.40	6.82
Post Office	sq ft/GFA	10.92	9.83	10.46
Service Station	fuel position	7.41	7.41	7.41
Service Station/Minimart	fuel position	5.37	5.37	5.37
Movie Theater	seat	0.11	0.10	0.10
Carwash				
Health Club/Racquet Club				
Commercial - Institutional				
Elementary School				
High School				
Church				
Hospital				
Commercial - Restaurant				
Restaurant				
Fast Food Restaurant				
Commercial - Retail Shop				
up to 99,999				
100,000-199,999				
200,000-299,999				
300,000 and over				
Supermarket				
Convenience Market				
Free Standing Discount Str				
Miscellaneous Retail				
Furniture Store				
Car Sales - New/Used				
Commercial - Administrat				
up to 99,999				
100,000-199,999				
200,000-299,999				
300,000 and over				
Medical Office/Clinic				
Industrial				
Light Industry/Manufacturin				
Industrial Park				
Warehousing/Storage				
Mini Warehouse				

*For uses with Standard

CITY OF REDMOND TRANSPORTATION CONCURRENCY APPLICATION

This application provides the City of Redmond with the information needed to issue a certificate of concurrency for a development. Please complete the entire form and return it to the Redmond Engineering Services Division. After agreement is reached on the mobility unit demand for a development based on the land use type, size of development and table on the back of this application, the City will, if necessary, determine if enough mobility unit supply is available to issue a certificate of concurrency. If determining the mobility unit demand for a development requires an independent calculation a fee for the review will be required, payable at the City Hall Permit Center.

1. Applicant name and address: XXXX XXXXX
   3621 XX^^ XX XX
   XXXXXX XX, 12345
2. Property location:
   a. Property address: 54321 XX XXX^^ XX
   b. Development name: SAMPLE
   c. Assessor's Parcel Number(s): 1234567890
3. Type of development permit to be requested: SITE PLAN ENTITLEMENT

	Land Use Type (ITE Land Use Code)	Development Units	Mobility Unit Rate (see table on back)	Mobility Unit Demand	Notes
Proposed	Multifamily (220)	147 units	1.59	234	Overlake
	Retail (820)	8,000 sf	4.67	37	
			Total Proposed:	271	
Existing	Service Station/ Minimart (945)	8 fuel positions	5.37	43	
			Total Existing:	43	
Net New Mobility Unit Demand (Total Proposed minus Total Existing):				271 − 43 = 228	

Signature of Applicant: [signature] Date: 9/17/09

For Official Use Only:

Mobility Unit Demand calculation reviewed: [initials] 9/17/09 (Initials / Date)

Concurrency certificate required: X Yes ☐ No Mobility Units available: X Yes ☐ No

Application number: 1

N:\Concurrency Update 2007\Documentation\Admin Guidelines\Transportation Concurrency Application 9-09 11pt.doc

Contact Information

- Transportation Master Plan & 2007-2009 Mobility Report Cards:

  http://www.redmond.gov/connectingredmond/policiesplans/tmpprojectdocs.asp
- Transportation Concurrency Report:

  http://www.redmond.gov/connectingredmond/resources/concurrency.asp
- Transportation Concurrency Requirements:

  http://www.redmond.gov/insidecityhall/permitting/ devapps.asp
- Contact Information:
  - Joel Pfundt, AICP, Principal Planner
  - City of Redmond
  - 425-556-2750, jpfundt@redmond.gov

Redmond, Washington Multimodal Plan-Based Transportation

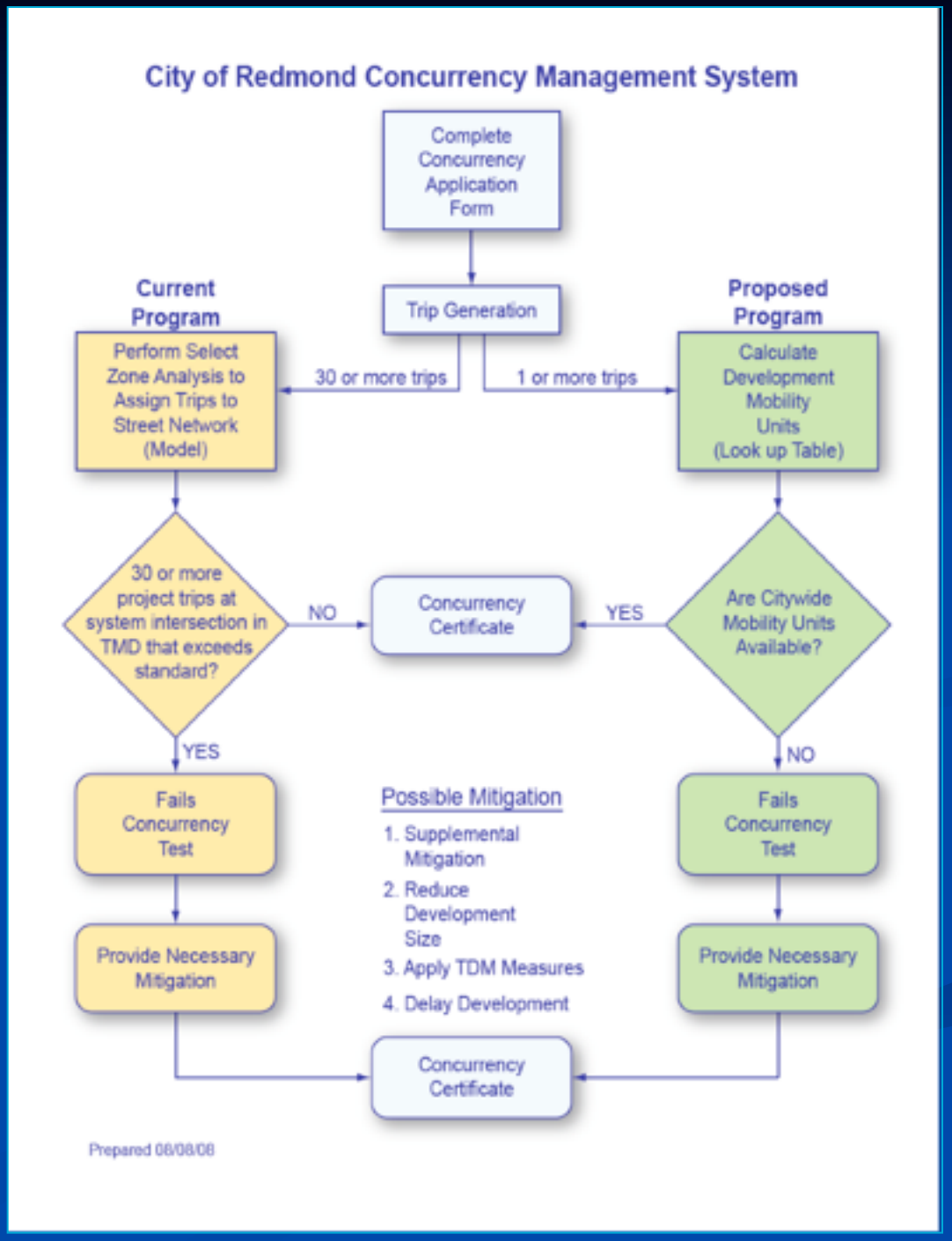
APA Washington Conference

November 12, 2009

How has it been received?

- Initially skeptical of change
- Since there is plenty “room” right now think it is just fine
- Like the simplicity and predictability

Concurrency System



Redmond Comp Plan Goals

- **Conserve** agricultural and rural areas; protect the natural environment
- Retain and enhance **distinctive character** and high quality of life
- Emphasize **choices** in housing, transportation, stores
- Support vibrant **concentrations** of activity in Downtown and Overlake.
- Maintain a strong economy, and provide a **business climate** that helps retain and attract companies
- Promote a variety of **community gathering places** and diverse **cultural opportunities.**
- Provide convenient, safe and environmentally friendly **transportation connections**
- Remain a **community of good neighbors**

Bellingham's Multimodal Transportation Concurrency

American Planning Association

Washington State Conference

Vancouver, WA

November 12, 2009

Click to edit Master subtitle style

Bellingham, WA – "City of Subdued Excitement"

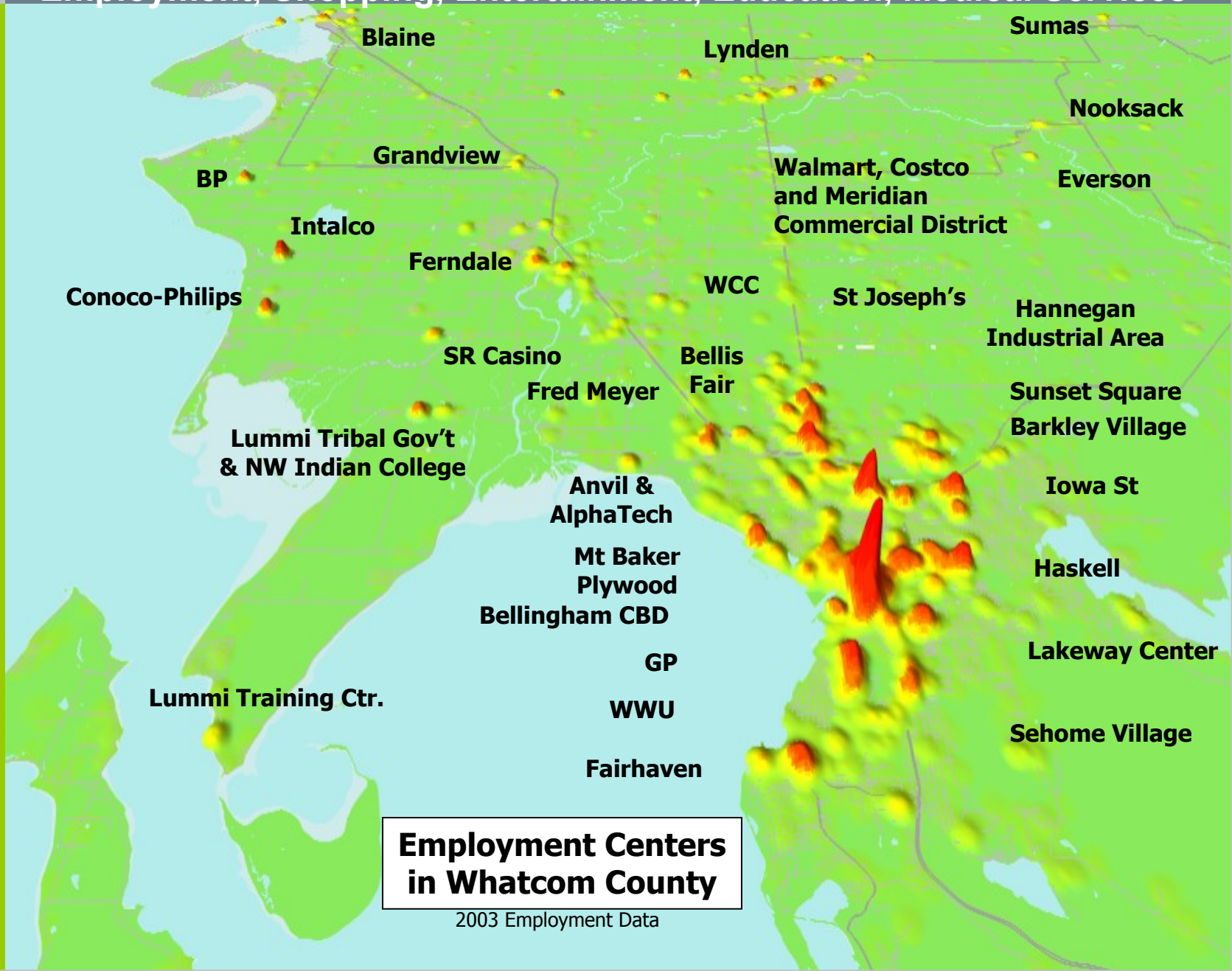
- Bellingham = 77,000 residents
- UGA = 9,000
- Whatcom County = 193,000

- Bellingham & UGA contains 45% of Whatcom County's population

- Bellingham is seat of County government and has 18 of the Top 25 employers in Whatcom County, including:

- Western Washington University
- Whatcom Community College
- Bellingham Technical College
- St. Joseph's Hospital
- Bellingham School District
- City of Bellingham
- Whatcom County

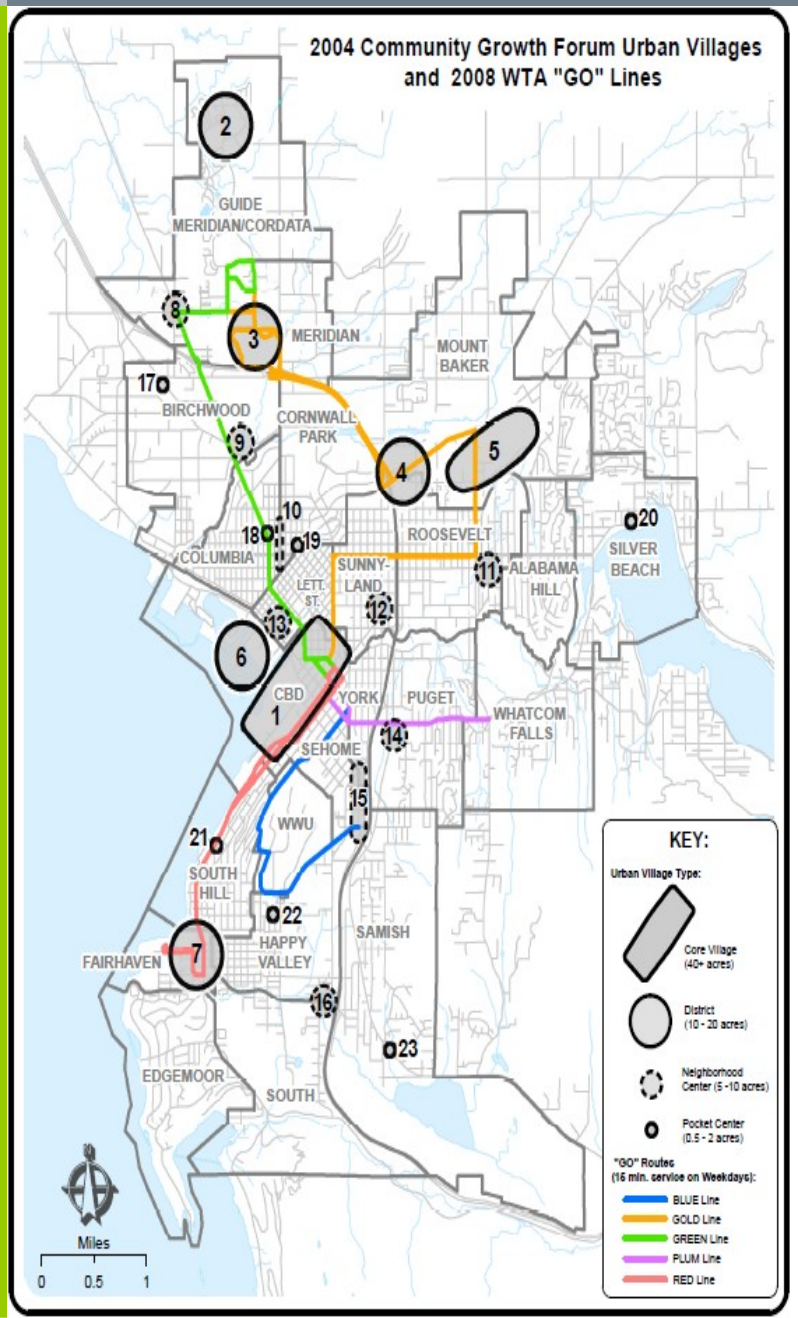
Bellingham is the Regional Center for
Employment, Shopping, Entertainment, Education, Medical Services



Employment Centers in Whatcom County

2003 Employment Data

Bellingham's Urban Villages - Land Use Element



- 23 "Urban Villages" suggested from 2004 "Growth Forum"
- Some not feasible due to zoning, space & height limits, economics, or unacceptable impacts
- Tier 1: Downtown, Barkley, Fairhaven
- Tier 2: Waterfront, Old Town, Sunset, Lakeway, Northwest, North Samish Way
- Tier 3: Bellis Fair, Cordata, Fountain District, Birchwood, Old Fairhaven Parkway, West Maplewood
- Additional "Villages" may be possible in *recently annexed areas,* such as *King Mountain*

Bellingham's Urban Villages - Land Use Element

TG-28: Set target goals to increase the mode share of pedestrian, bicycle, and transit trips and reduce automobile trips as a percentage of total trips, as listed below.

Mode	20041	20102	20152	20222
Auto	87%	84%	80%	75%
Transit	2%	3%	4%	6%
Bike	3%	4%	5%	6%
Ped	8%	9%	11%	13%

Notes:
1. 2004 raw data from FTA/Social Data Study
2. City/WTA recommendations based on 2004 raw data from FTA/Social Data Study

Bellingham's Former LOS, Projections, & Problems

- Originally adopted in 1995 Comprehensive Plan; Re-adopted in 2006 (for GMA compliance only)
- Based on roadway segment volume-to-capacity (v/c) ratios
- Measured only vehicle traffic on arterial streets (traffic counts)
- LOS E (v/c .901-1.00) Peak hour traffic volumes at 90% to 100% of arterial design capacity.
- LOS F (v/c 1.001 - 1.25) Peak hour traffic volumes over 100% of arterial design capacity. (Adopted standard for 13 selected arterial facilities)
- 2007 building MORATORIUM due to LOS violation on Northwest Ave
- Lasted 9 months during peak building cycle due to "once per year Comp Plan LOS amendment "

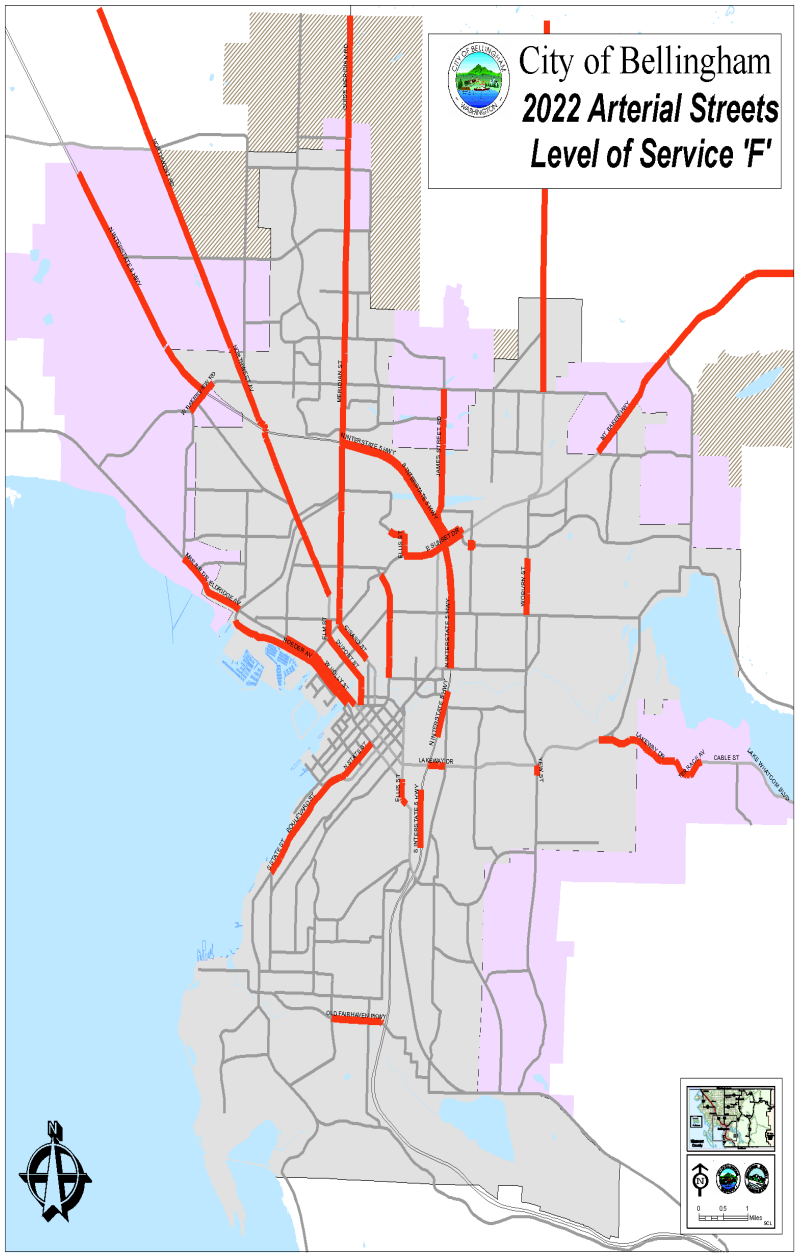
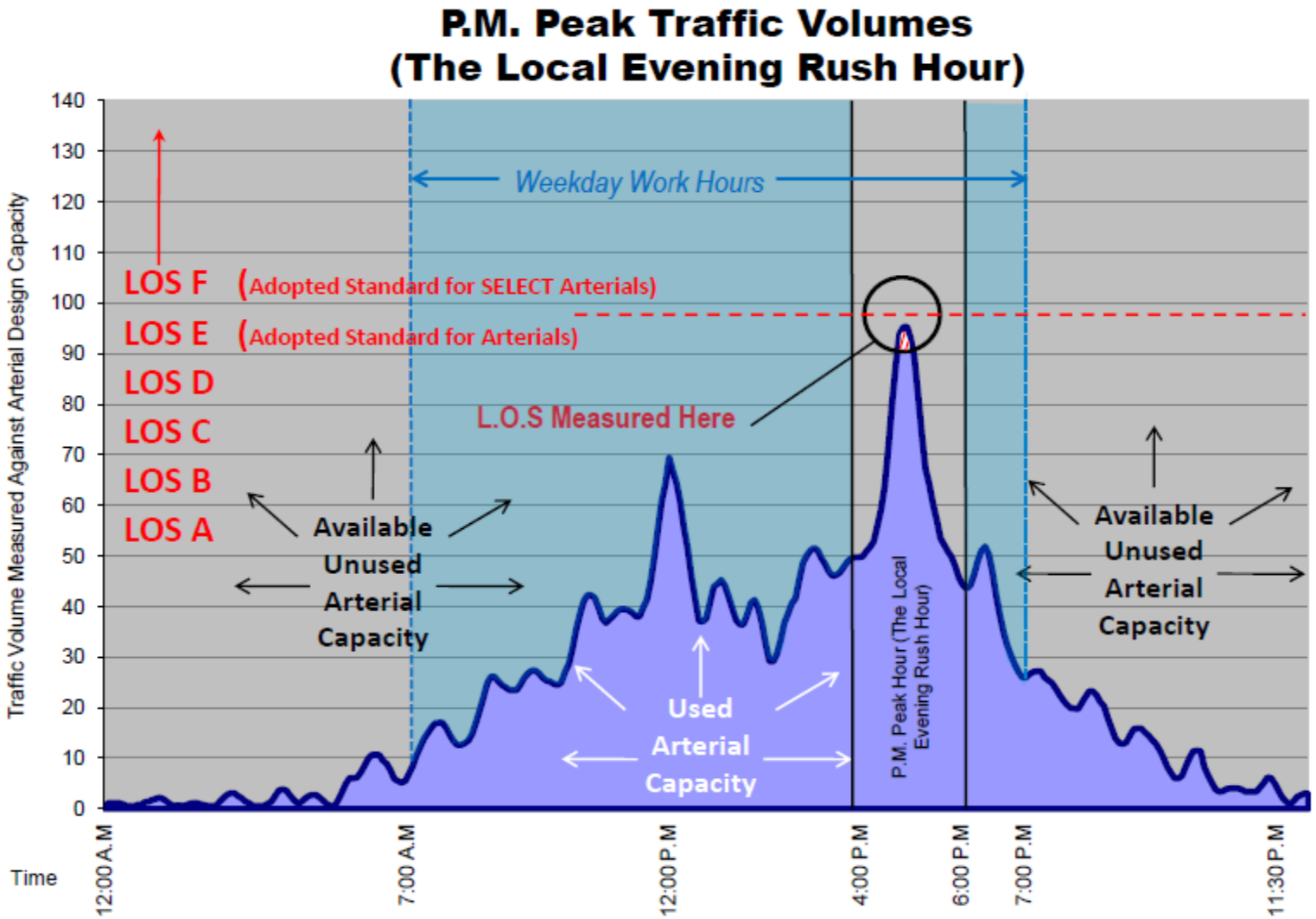


Illustration of PM Peak Hour (Rush Hour)



GMA Land Use & Transportation Elements

RCW 36.70A.70 Comp Plan – Mandatory elements.

"The plan shall be an internally consistent document and all elements shall be consistent with the future land use map."

RCW 36.70A.070 (6) requirements: "A transportation element that implements, and is consistent with, the land use element."

RCW 36.70A.070 (6) (b) "Local jurisdictions must adopt and enforce [transportation concurrency] ordinances which prohibit development approval if the development causes the level of service on a locally owned transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development."

Therefore, if the land use element calls for infill, then the transportation element, and the transportation concurrency ordinance, must support infill and LOS standards must be adopted accordingly to allow infill.

Transportation Concurrency

WAC 365-195-510 (3) (b) Concurrency: *Levels of service* should be set to reflect *realistic expectations consistent with the achievement of* ***growth aims.*** Setting such levels too high could, under some regulatory strategies, result in no growth. As a deliberate policy, *this would be contrary to the act*.

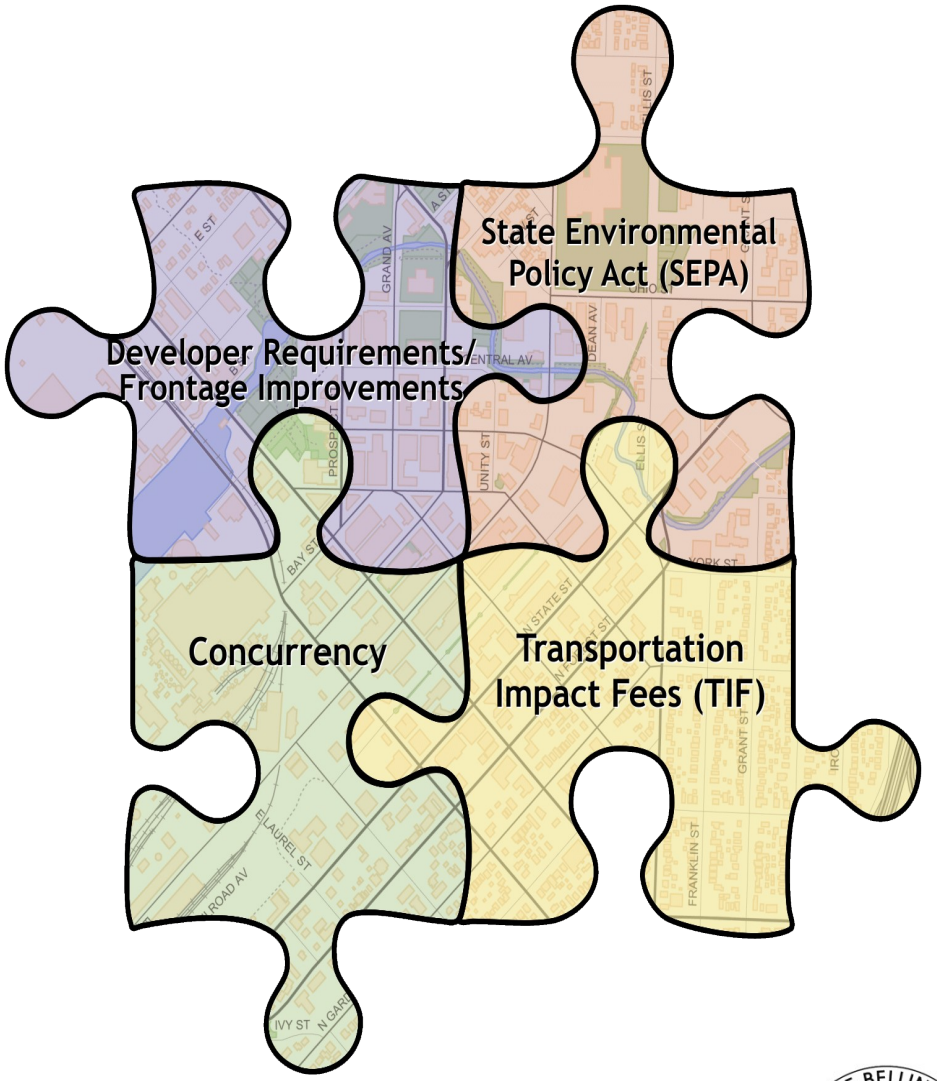
- Transportation Concurrency is *NOT a regulation to stop growth*, but a *performance measure to ensure that* ***adequate*** *transportation facilities are available* to serve new development.

For Bellingham:

- **"Growth Aims"** = ***Infill***, Urban Villages, Multimodal, and Mode Shift
- **"Adequate"** means ***Multimodal*** Transportation Facilities
- **GMA does not define LOS standards for local jurisdictions or the methodology used to monitor, maintain, and enforce LOS**
- **Mitigation only addresses the conditions that are measured**
  Auto-centric LOS standards = Auto-centric mitigation
- **Bellingham adopted LOS standards and a Transportation Concurrency system tailored to achieving *local* goals and priorities for *urban infill* and *multimodal transportation***

Concurrency Is One Piece of The Mitigation Puzzle

- **Mitigation for impacts to transportation systems from new development can come from several legal requirements;**
- **Concurrency is only one of the tools available in the regulatory toolbox;**
- **Multimodal Concurrency: Sidewalks, bike lanes, transit service, and arterial improvements;**
- **SEPA: Traffic signals, turn lanes, safety, connectivity of non-motorized facilities;**
- **Street Standards: Sidewalks, bike lanes, street trees, ADA-ramps;**
- **TIF: Recoup City's capital investment in citywide transportation network.**



Integrating Land Use and Transportation Policy

Bellingham's Assumptions

- As the regional population grows, there will be more traffic congestion in Bellingham
- **No Such Thing As A Free Lunch:** Compact, vibrant cities *cannot* build their way out of increasing traffic congestion.
- Auto-centric LOS standards would not allow Bellingham to achieve infill goals and would not help to complete the multimodal transportation network

Balance & Tradeoffs:

- **Opportunity:** Mixed use urban infill + multimodal facilities
- **Opportunity Cost:** Traffic congestion at peak periods of day
- **Counter-intuitive Effect:** Infill + Multimodal = More opportunities for alternative modes, less auto dependency, less rural sprawl

Bellingham's MULTIMODAL Transportation Concurrency

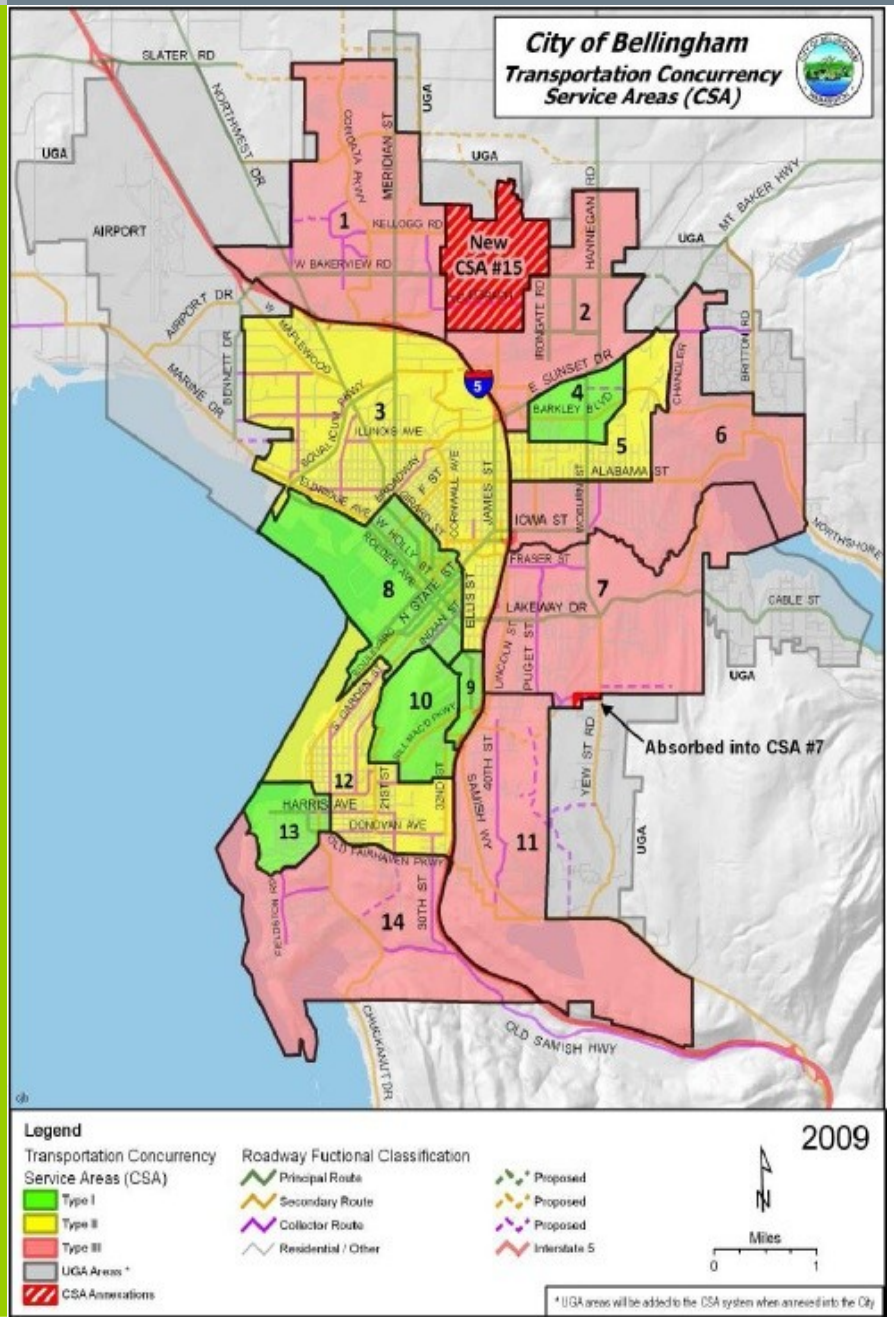
WHAT is being measured?

- **15 Concurrency Service Areas** (CSA) *[May change to 20 in 2010]*
- **Pedestrian & Bicycle** = % completeness of Ped & Bike networks
- **WTA Transit** = seated 2-way capacity and transit ridership counts
- **Vehicles** = pm peak hour 2-way volume-to-capacity (v/c) - HCM

How is measured data used?

- "Policy Dials" = weighting factors applied based on relative importance of mode by land use environment
- Convert above variables to **"Person Trips Available by Concurrency Service Area"** as the new LOS standard *[Effective January 1, 2009]*
- Note: Each CSA includes a **buffer of 500 person trips** to ensure that a CSA does not run out of trips prior to mitigation requirements

Multimodal Transportation Concurrency Service Areas



5 Urban Village (Type 1) Green Concurrency Service Areas

- Downtown-Old Town-Waterfront Districts
- Barkley Village District
- WWU IMP District
- N. Samish Way District
- Fairhaven Village District

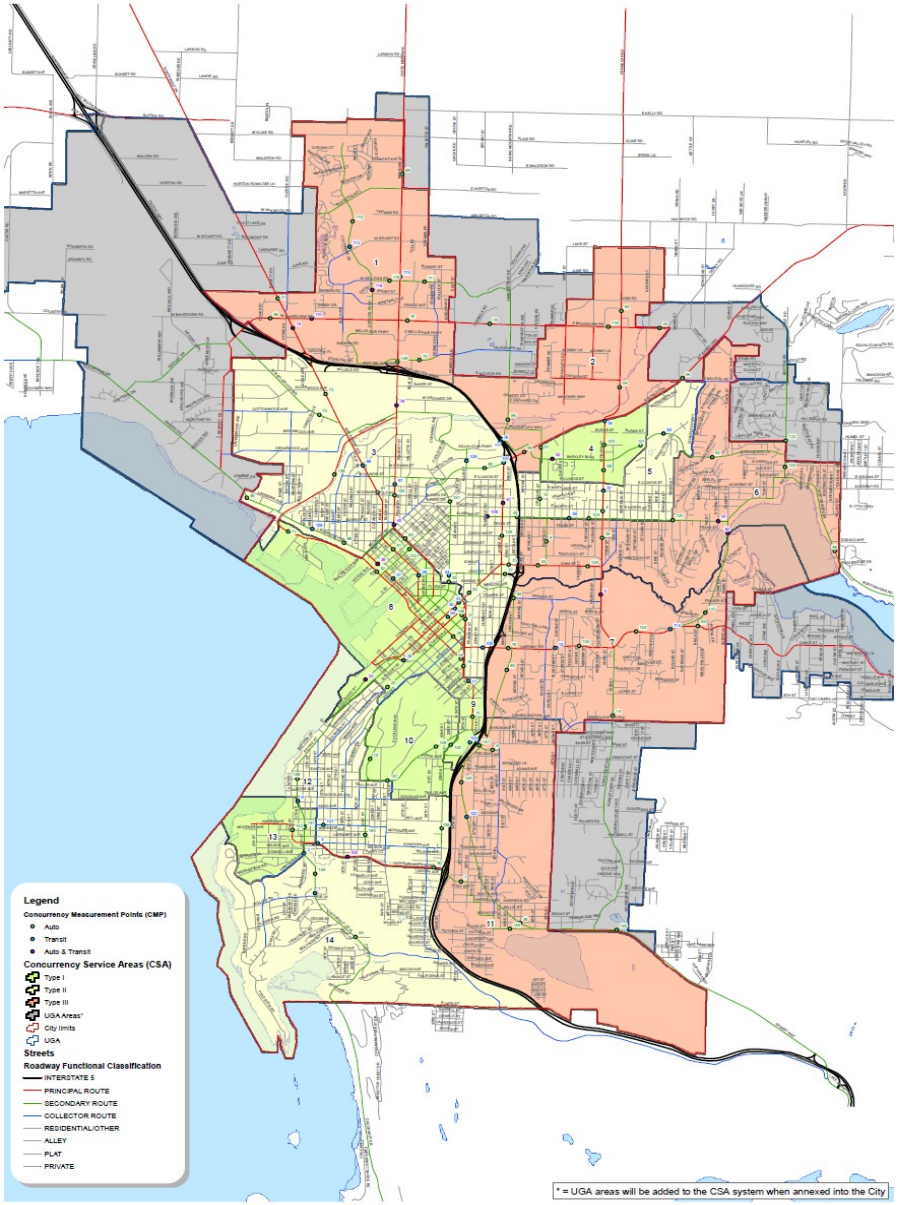
4 Transition (Type 2) Yellow Concurrency Service Areas

5 Suburban (Type 3) Red Concurrency Service Areas

Concurrency Service Area boundaries are based on:

- 53 Concurrency reviews done from June 2006 to Nov 2008
- Trans. Analysis Zones (TAZ)
- City/UGA boundaries
- Neighborhood boundaries
- Transportation Barriers (I-5)
- Land use patterns
- Existing zoning

Automobile & Transit Measurement Points



Transportation Concurrency Service Areas (CSA) & Concurrency Measurement Points (CMP) FIGURE 1

City of Bellingham Transportation Concurrency Program Update

M:\08\08002 Bellingham Concurrency\GIS\Figures\concurrency data set.mxd

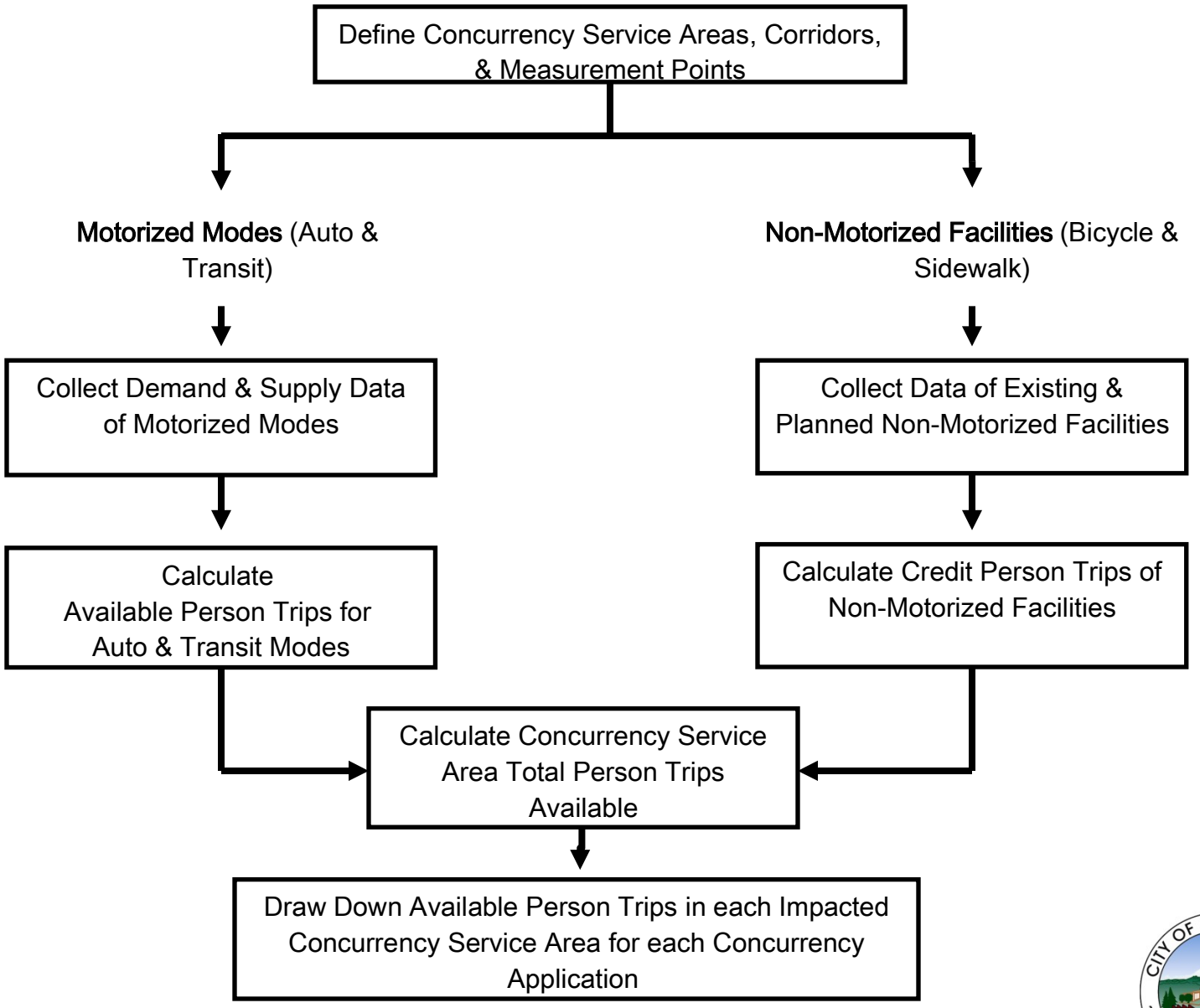
transpoGROUP

- Measures Auto & Transit Modes
- 135 Total Concurrency Measurement Points
  - **89 Auto Only**
  - **32 Transit Only**
  - **14 Auto & Transit**
- Measurement points assigned to each CSA based on importance of facility to move people and serve new infill development (not all arterials are equal)
- Bike & Ped Measures are “completeness” by CSA, not capacity

Multimodal Transportation Concurrency Policy Dials

Mode	Transportation Concurrency Service Areas		
	Type 1	Type 2	Type 3
Motorized			
Auto			
Mode weight factor	**0.70**	**0.80**	**0.90**
Transit			
Mode weight factor	**1.00**	**1.00**	**0.80**
Non-Motorized			
Pedestrian			
Percent threshold for minimum system complete	**50%**	**50%**	**50%**
Person trip credit for 1% greater than minimum threshold	**20**	**20**	**20**
Mode weight factor	**0.60**	**0.60**	**0.60**
Bicycle			
Percent threshold for minimum system complete	**50%**	**50%**	**50%**
Percent credit for 1% greater than threshold	**20**	**20**	**20**
Mode weight factor	**0.40**	**0.40**	**0.40**

Calculation of Person Trips Available



Transportation Report on Annual Concurrency (TRAC)

Figure 1. 2009 Multimodal Transportation Concurrency Person Trips Available for New Development in Bellingham listed by Concurrency Service Area

2009 Person Trips Available (PTA) in 15 Concurrency Service Areas (CSA)									
Concurrency Service Area[1]	Sidewalk Percent Complete	Ped Credit PTA	Bike Lane Percent Complete	Bike Credit PTA	WTA Transit PTA	Vehicle Capacity PTA	Gross CSA PTA	Pending Pipeline Trips[2]	Net CSA PTA[3]
CSA 1	90.1%	480	76.5%	208	607	7,570	8,865	2,674	5,691
CSA 2	46.0%	0	66.3%	128	88	2,780	2,996	900	1,596
CSA 3	91.3%	492	70.3%	160	1,245	4,809	6,706	497	5,709
CSA 4	100.0%	600	100.0%	400	317	3,916	5,232	1,115	3,617
CSA 5	96.2%	552	91.3%	328	548	2,042	3,470	0	2,970
CSA 6	95.0%	540	96.7%	376	250	3,598	4,765	43	4,222
CSA 7	83.3%	396	93.6%	352	170	3,804	4,722	0	4,222
CSA 8	99.6%	600	87.3%	296	1,536	6,581	9,014	530	7,984
CSA 9	100.0%	600	67.0%	136	122	1,480	2,338	0	1,838
CSA 10	82.3%	384	94.9%	360	1,074	307	2,124	0	1,624
CSA 11	53.6%	48	62.6%	104	102	4,126	4,381	0	3,881
CSA 12	83.1%	396	89.4%	312	280	2,093	3,081	1	2,580
CSA 13	69.1%	228	93.9%	352	305	1,476	2,361	0	1,861
CSA 14	51.1%	12	84.7%	280	98	683	1,073	0	573
CSA 15	25.6%	0	7.3%	0	0	1,099	1,099	0	599
Citywide					**Total**	**PTA**	**62,227**	**5,760**	**48,967**

1. Figure 4. Illustrates Concurrency Service Area boundaries (CSA).
2. Pending pipeline trips represent developments that have been issued a Concurrency Certificate, but have not been constructed and therefore not represented in the field data.
3. 500 PTA have been withheld from each CSA to maintain a minimum buffer of 500 PTA in each CSA.

What is TRAC and Why?

- **Transportation Report on Annual Concurrency (TRAC)**
- TRAC is Bellingham's annual demonstration to the public and the State that we are in compliance with the transportation concurrency requirements of the Growth Management Act (RCW 36.70A.070 (6)(b))
- Annual status report on performance of multimodal system
- Helps to inform 6-Year TIP planning process for capital improvements to the transportation network
- Helps with development project review to assess, track, monitor, and where necessary, provide mitigation that now can include bicycle and pedestrian infrastructure
- Helps to implement Land Use and Transportation visions, goals, and policies in Bellingham's Comprehensive Plan

Recommendations - Lessons Learned

- Concurrency programs must be adaptable to changing circumstances (Annexations, large redevelopments, etc) and must be flexible and nimble enough to be adjusted as needed

  Key = Adopt LOS in Comp Plan, but keep methodology in code

- "Right-sizing" Concurrency Service Areas (Mobility Sheds) based on land use environment helps to integrate land use and transportation policies and objectives

- Once adopted, time and implementation experience can reveal program strengths, weaknesses, and adjustments needed

- Data collection, management and administration requires committed staff time and financial resources

- Annual Report (TRAC) allows staff to recommend changes as needed, based on experience with the program, the tracking tools being used, and whether goals are being achieved

Transportation Planning Innovation

- **2009 Washington APA/PAW Award for Transportation Planning**

- Featured in following publications:

  - *Urban Transportation Monitor* (Vol. 22, No. 20., November 14, 2008)

  - *About Growth,* CTED/Commerce quarterly publication (Winter 2009)

  - *Washington Planner*, Washington APA's monthly publication (February 2009)

  - *Bicycle and Pedestrian*, Institute of Transportation Engineering quarterly bicycle and pedestrian publication (Summer 2009)

  - *Practicing Planner*, American Planning Association Professional Journal for AICP members (Vol. 7, No. 3., Case Study, September 2009)

- Statewide Presentations at:

  - Planning Association of Washington Annual Conference, Semiahmoo Resort, Blaine, WA; April 9-10, 2009

  - Washington Chapter American Planning Association Annual Conference, Vancouver, WA; November 11-13, 2009

Contact Information

2009 TRAC available on City web site at

www.cob.org/services/neighborhoods/community-planning/transportat

All questions regarding Bellingham's Multimodal Transportation Concurrency program should be directed to:

Chris Comeau, AICP, Transportation Planner
City of Bellingham Public Works Department
(360) 778-7946; or ccomeau@cob.org

Concurrency Management

In the City of Vancouver

Matt Ransom, AICP
Transportation Planning Manager

Values of Transportation

- Travel Safely and Efficiently
- Ship or receive goods reliably
- Select among modes of travel

Changes Over Time…

- Geography / distance
- Modal choice
- Technologies

Vancouver Comprehensive Plan

Transportation Element

In the Future Vancouver's Transportation System Will:

- Promote accessibility, not just mobility
- Be efficient
- Create livable streets
- Have good connections throughout



Vancouver Transportation System Plan (2001)

In the Future Vancouver's Transportation System Will:

- Support all travel Modes
- Be a truly walkable community
- Promote efficient freight movement
- Support transportation and land-use improvements



Vancouver Transportation System Plan (2001)

Concurrency

Proactive / Reactive Policy?

- RCW 36.70A.020 (12) – GMA Goals
  - Proactive Concept: transportation shall be adequately provided to serve development when development occurs
- WAC 365-195-510 (4) - Concurrency
  - Reactive Concept: possible denial of development approval in areas where transportation facilities are not provided concurrent with development

Concurrency

Policy Framework

- Transportation concurrency can:
  - As a regulatory tool, meter and shape growth
  - Guide timing of infrastructure improvement / resource allocation
  - Exact mitigation to build the transportation system defined in the capital facilities plan
- Transportation concurrency cannot:
  - Stop growth indefinitely
  - Change the land use plan
  - Support unaffordable levels of service

Evolution of Concurrency Policy

Vancouver - *1994 to present*

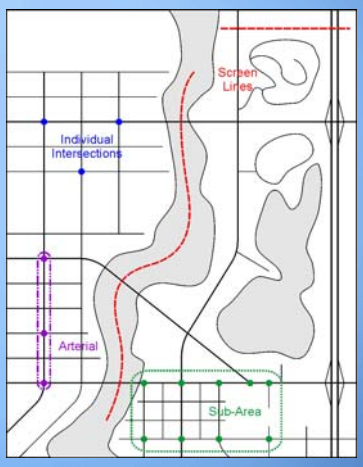
Principles of Concurrency

- Maxim #1: You get what you measure
  - Because concurrency level of service testing is tied directly to mitigation and system improvements, the elements of the transportation system that are tested for concurrency are typically first in line for improvement
- Maxim #2: Techniques and Methods are Evolutionary
  - The state of the art for measuring non-auto transportation system impacts lags somewhat behind the generally accepted practices of measuring automobile capacity impacts of individual developments

Concurrency Measurement

Common Methods

- Road Segments
- Screen Lines
- Individual Intersections
- Grouped Intersections



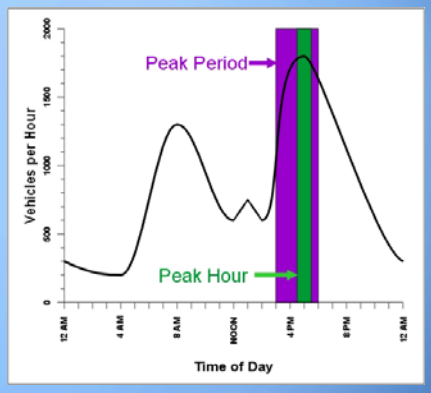
Vancouver's 1st Generation Approach

- Interim Concurrency Ordinance adopted with GMA Comp Plan in 1994.
- Standards based on individual intersection performance
  - Uses Highway Capacity Manual (HCM) methodology: signalized intersection capacity analysis
  - HCM metrics shown as Level-of-Service A-F

Elements of Measurement

Time Period / Intersections

- Weekday Traffic Volume
- Peak Hour Volume
- Peak Period Volume



Vancouver's 2nd Generation Approach

- The City of Vancouver utilizes a corridor travel-time based concurrency system
  - Instead of testing concurrency at a single intersection, the system tests both traffic progression as single intersections within a defined corridor.
  - Geographic areas called Transportation Management Zones (TMZ) have been established and concurrency is directly managed within those zones.

Concurrency Corridors

25 Corridors Citywide

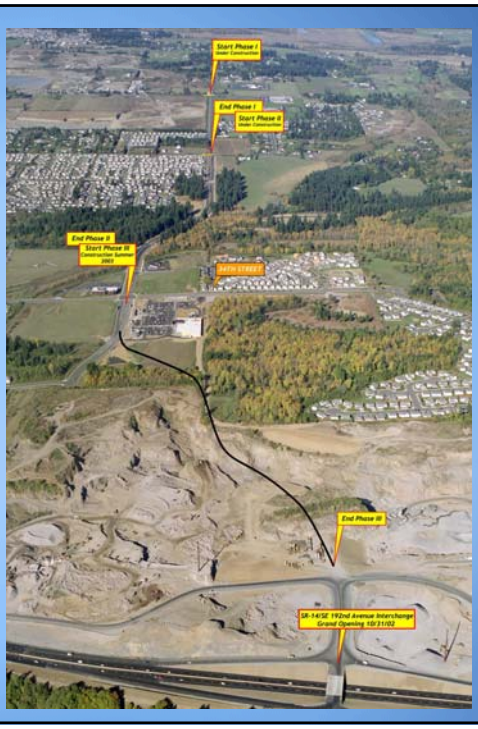
Vancouver's Experience

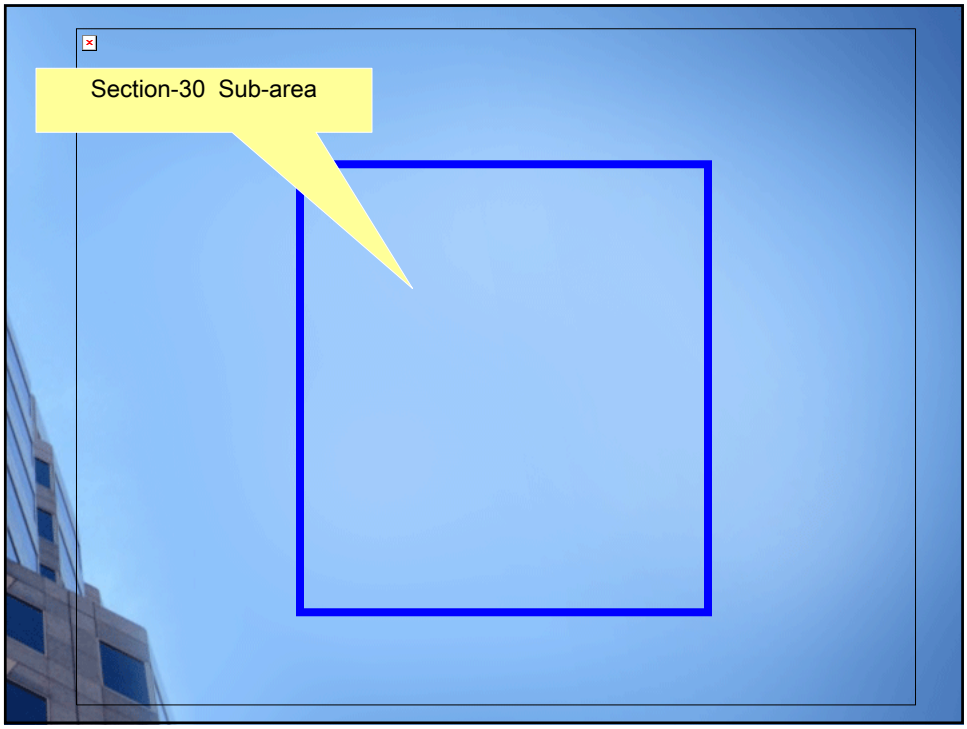
- Single recent experience in Concurrency related moratorium (E. Mill Plain Blvd)
- Shift of thinking in some districts – towards a managed and sustainable oriented policy:
  - Downtown District – zonal based LOS with low standards to foster multi-modal trips to facilitate growth in CBD
  - Major corridor build-out policy; lower LOS
  - Investigating multi-modal LOS

Policy Case Study

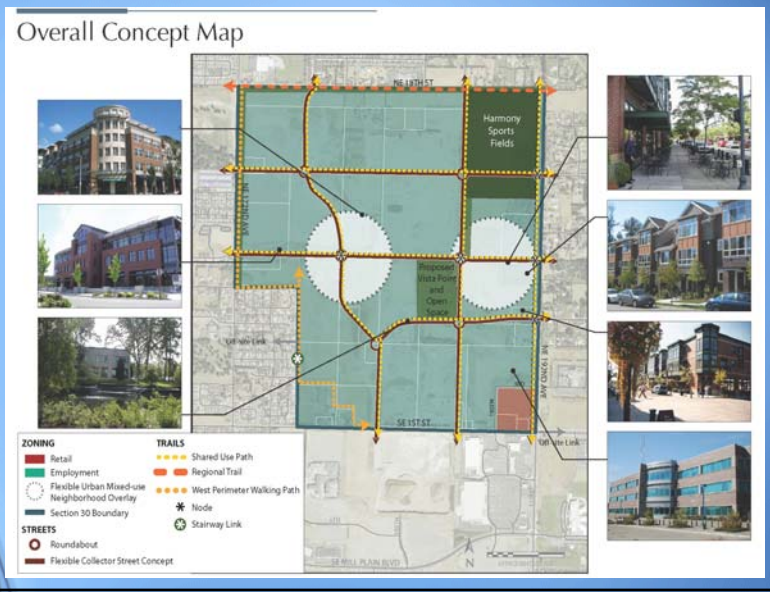
SE 192nd Avenue Corridor

192nd Ave Corridor





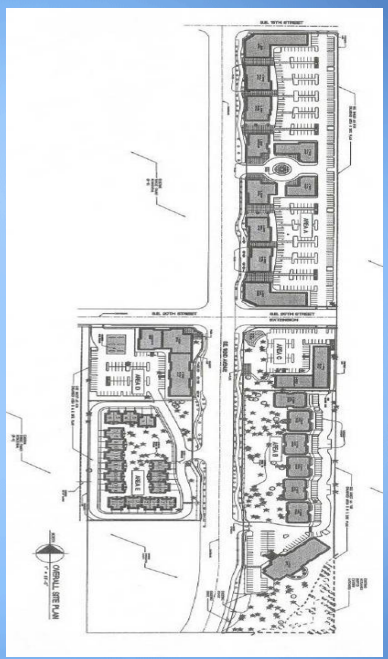
Section 30 Concept Plan



Riverview Gateway

192nd Ave Station

proposed



Concepts for New Transportation Concurrency Policy?

- Comprehensive Plan based and supportive of urban infill and redevelopment
- Accounts for a variety of transportation modes and demand strategies/programs (multi-modal?)
- Based on accepted transportation planning & engineering principles
- Cost effectively monitors arterial traffic conditions
- Legal Implementation
- Fair

Policy Questions
for Comprehensive Plan Update

- What should we do when concurrency outcomes contradict elements of the comprehensive plan?
  - The comprehensive plan represents a balancing of factors affecting community development and livability, concurrency, by contrast, doesn't balance– it's role is to maximize one function in its current form.
- What should we do once a corridor is "built out"?
- Is it time for a third generation concurrency policy?
  - What should it look like?
  - Less administratively burdensome, more predictable for development, fair?
  - Which policies should concurrency emphasize?

Thank You

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