

# Transportation Master Plan

## 1. Introduction

- A. Document layout
- B. Three circles approach
- C. Goals, Plans, Projects, Priorities, Funding approach
- D. Target year
- E. Iteration between performance, funding, project types
- F. Philosophy of active transportation. Are we encouraging it or offering it as a viable alternative

## 2. Purpose and Goals of the Plan

- A. Fulfill the objectives of the Transportation Element of the Comprehensive Plan
  - i. Level of Service
  - ii. Concurrency
  - iii. Transportation Goals
  - iv. Ties to financial plans
  - v. Project lists
- B. Be multimodal
- C. Be visionary what is Kirkland's transportation system going to look like in 20 years
- D. Project Selection/Prioritization
- E. Is this a handbook?
- F. Developed by/with the community
- G. How the plan fits into the larger Comprehensive Plan
- H. Goal and policy structure of the Comprehensive Plan.

## 3. Influences: Existing information that gives context and guidance to the Plan

- A. Goals
  - i. Council
    - 1) *Balanced Transportation*
    - 2) *Sustainable infrastructure*
  - ii. Transportation Commission
    - 1) *Land Use*
    - 2) *Sustainable*

- 3) *Move People*
- 4) *Active Partner*

iii. Complete Streets Ordinance also the idea of layered networks

iv. Planning documents --past and current

- 1) *Transportation Elements of Comprehensive Plans*
  - a) 1995
  - b) 2005
- 2) *Other*
  - a) ITS Masterplan
  - b) JHK 1992
  - c) CKC Master Plan (under development)
- 3) *Active Transportation Plans*
  - a) 1995
  - b) 2001
  - c) 2009
- 4) *Other's Transportation Plans (across various modes and land use types)*
  - a) Transportation 2040
  - b) Vision 2040
  - c) Kenmore
  - d) Woodinville
  - e) Redmond
  - f) Bellevue
  - g) WSDOT
  - h) Metro
  - i) Sound Transit
  - j) King County

**B. Policies that shape the transportation facilities we have today and how they are planned, designed, constructed, operated and maintained.**

- i. LOS --not trying to build our way out of congestion, auto travel conditions are getting worse
- ii. Interest in pedestrians
- iii. Interest in bicycles
- iv. Interest in neighborhoods
- v. Emphasis on pavement maintenance
- vi. Less emphasis on signal operation but that is changing
- vii. Transportation Commission

**C. Users**

- i. Disabled
- ii. Old
- iii. Young
- iv. Bike (variety of bike user types)

- v. Ped
- vi. Auto
- vii. Transit

#### **4. Kirkland's Transportation Goals**

- A. How are we going to get these?**
- B. There are eight existing goals in the Comp plan**
- C. Support land use**
- D. Peds and bikes connect**
- E. Transit and ridesharing provide alternatives**
- F. Safe and efficient vehicular**
- G. Establish LOS**
- H. Facilities reflect neighborhood character**
- I. Balance revenue and expenses**
- J. Work on inter-jurisdictional issues.**

#### **5. Existing Conditions What do we have today, mostly in pictures**

##### **A. Facilities and networks owned/operated by Kirkland**

- i. Pavement
  - 1) *Cars*
  - 2) *Bicycle*
  - 3) *Sidewalks*
  - 4) *School walk routes*
- ii. Off street transportation
  - 1) *CKC*
  - 2) *Trails and paths*
  - 3) *Bridges*
- iii. Operations/Safety (across all modes)
  - 1) *Signs*
  - 2) *Signals including TMC and ITS*
  - 3) *Markings*
  - 4) *Lighting*
  - 5) *Guardrails*
  - 6) *Crosswalks*
  - 7) *Medians*
- iv. Parking
  - 1) *Off street*
  - 2) *On street*
  - 3) *Bicycle*
  - 4) *Pay Stations*
  - 5) *Signing*

6) *Marking*

v. Safety performance

1) *Bicycle*

2) *Pedestrian*

3) *Auto*

vi. Maintenance

1) *Replacement cost/schedule*

2) *Condition metrics/goals*

a) Pavement management

b) Bridges

c) Sweeping

d) Sign reflectivity upgrade

vii. Functional classification

**B. Facilities owned and/or operated by others**

i. Metro transit

1) *Routes*

2) *Facilities*

ii. Sound Transit

1) *Routes*

2) *Facilities*

iii. WSDOT

1) *I-405*

2) *SR 520*

3) *Ramps and signals*

**C. Land Use**

i. Distribution of land use

ii. Relation to capacity

**D. Safety**

i. Crashes (across modes)

ii. Conclusions of some kind

**6. Funding**

**A. Description of funding sources**

i. Grants

1) *Role of federal funding*

2) *Other grants*

ii. REET

iii. Impact fees

iv. Parking revenue

v. Levy

- vi. Gas Tax
- vii. Sales Tax
- viii. Others Utilities

**B. How has funding been spent previously across modes and project categories**

**C. What's a reasonable funding level for a 20 year plan**

- i. Existing sources
- ii. Possible new sources

**7. Future Travel Demand**

**A. How does it work**

**B. Important Assumptions**

- i. Regional transportation facilities
  - 1) *Tolling*
  - 2) *Express Toll lanes*
  - 3) *132nd interchange*
  - 4) *Sound Transit*

- ii. Regional land use

**C. The effect of demand on shaping the network. Bikes and peds aren't limited by demand; cars are**

**D. Land Use**

- i. Land use goals requiring and transportation strategies
- ii. Target year
- iii. Regional growth targets
- iv. How land use is distributed

**E. Forecasting travel from Land Use**

- i. Bike
- ii. Pedestrian
- iii. Transit
- iv. Auto
- v. Auto demand management
  - a) CTR
  - b) GTEC
- vi. Trends
  - a) Car ownership
  - b) Changing work environments
  - c) Costs (Direct/indirect, External/internal)

d) Where people are choosing to live

**F. Health and environmental effects of various modes and relationship to Kirkland goals**

**G. Mode split**

**H. What is the travel demand for the target year**

**8. Elements of the Transportation System for 2030**

**A. Opening thoughts on project lists. Iterative nature of problem**

**B. Projects that benefit multiple modes**

**C. Interaction between transportation and land use --are there certain locations where certain projects should be located or certain strategies are appropriate? Like pedestrians in downtown? Density on high frequency transit routes**

**D. Things we want to build**

i. Bikes

- 1) *On street bike lanes*
- 2) *Bicycle boulevards*
- 3) *Neighborhood greenways*
- 4) *Treatments at intersection*
- 5) *Cycle tracks*
- 6) *Other innovative treatments*
- 7) *Markings*
  - a) *Green lanes*
  - b) *Sharrows*
  - c) *At signals*
- 8) *Parking*
- 9) *Connectivity*
- 10) *Bike Share*

ii. Ped

- 1) *ADA*
- 2) *Width*
  - a) *Normal*
  - b) *Special areas*
- 3) *Connectivity*
- 4) *School walk routes*
- 5) *Crosswalk treatments*
  - a) *Lighting*
  - b) *Ped flags*
  - c) *Medians*
  - d) *lighting*
- 6) *Planter strips*
- 7) *lighting*

iii. Auto

- 1) *Capacity*

- a) Road segments
- b) Intersections
- 2) *Operations*
  - a) Signs/Markings
  - b) ITS
  - c) Traveler information
  - d) Parking
- 3) *Safety*
- 4) *Parking*
  - a) Off street
  - b) On street
- 5) *Demand management*
  - a) CTR
  - b) TMP
  - c) GTEC
- 6) *Traffic Calming*

iv. Transit

- 1) *Transit Signal Priority*
- 2) *Other operational improvements*
- 3) *Pedestrians and bicycles*
- 4) *Facilities*
  - a) Stops
  - b) Park and Rides
    - i) *Houghton*
    - ii) *Kingsgate*
    - iii) *South Kirkland*
  - c) Hubs

v. Cross Kirkland Corridor

vi. Freight (equals trucks and uses auto facilities so it's not much of a discussion)

vii. Maintenance

- 1) *Signs*
- 2) *Markings*
- 3) *Pavement*
- 4) *Parking*
- 5) *Signals (including electronic signs, flashers, crosswalks, etc)*
- 6) *ITS*
- 7) *Sweeping*
- 8) *Guardrail*
- 9) *Sidewalk*
- 10) *Paths and trails*

viii. ADA Compliance

- 1) *Sidewalks*
- 2) *Curb ramps*
- 3) *Signals*

4) *Crosswalks*

**E. Parts of the system provided by others**

i. Transit

1) *Key destinations (are there some simplifying assumptions such as current transit routes hit the right destinations?)*

a) Internal

i) *Downtown*

ii) *TLTC*

iii) *Park and Rides*

iv) *Schools/Colleges*

v) *NE 85th Corridor*

b) External

i) *This list could be huge*

2) *Transit routes*

a) *All day*

b) *Peak hour*

c) *Rapid Ride*

3) *Commitment of service providers*

ii. Freeway

1) *Pricing*

2) *I-90*

3) *SR 520*

4) *405 Hot Lanes*

5) *Mitigation*

6) *Interchange reconstruction*

iii. High Capacity Transit

1) *ST3*

2) *Bus Rapid Transit*

3) *Sound Transit Master Plan*

iv. Passenger Ferries

**F. Project costs**

**9. Prioritization**

**A. Unfunded projects --should we have them**

**B. How do projects reach the funded CIP**

This is a major question

**C. Complete streets**

**10. Combining projects, cost and performance**

**A. This is where we thrash out the right mix of projects public involvement needed**

**11. A 2030 project list**

**12. Concurrency**

**A. Describe the method**

**B. Should have all the pieces from elsewhere**

**13. Other Issues**

**A. Through roads/Connectivity**

i. Existing policy

ii. Cars

iii. Peds

iv. Bike

v. Emergency vehicles

**B. Beyond Engineering to make other modes more viable**

i. Biking and walking as transportation

ii. Walking and biking to school

iii. Education

iv. Encouragement

v. Enforcement

**C. Emergency response goals**

**D. Sustainability**

**E. Impact Fees**

**14. Transportation Report Card**

**A. Data**

1) *Purpose*

2) *Ways of getting data*

a) Inrex

b) Traditional Counts

c) ITS

3) *Things we measure*

a) Travel time

b) Congestion

c) Costs

**15. Pulling together the matrix of choices**

**16. Summary did we answer the questions**