

TRANSPORTATION CONVERSATIONS

PERSPECTIVES ON KIRKLAND'S TRANSPORTATION POLICY



Move
People

Be
Sustainable

Create
Partnerships

Link to
Land use



City of Kirkland Transportation Commission
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PREFACE

Why this is a conversation

What we hope to accomplish

Often, the Transportation Commission is asked to recommend positions on issues for the City Council. Using the principles as a guide will help to give the Commission a uniform way of considering issues, and will also help ensure that the Commission's recommendations are grounded in principles that are supported by the Council and the Community. As the City's Comprehensive Plan undergoes a major update in 2011, revisions to the Transportation Element of the Comprehensive Plan should rest on a foundation of the principles.

INTRODUCTION

The Transportation Commission prepared this report for two major reasons. The first reason is to organize and understand the relationship between seemingly disparate transportation programs within the City of Kirkland. The second reason is to guide development of policy.

It begins with four key principles identified by the Commission. any recommendations for changes policy should support these principles. The principles are:

- Move People
- Be Sustainable
- Create Partnerships
- Link to land use

Throughout this report, evaluations are made between Commission recommendations and the principles. One example of how the Commission has used the principles previously is shown in the figure below. It compares the principles with policy choices for cutting Metro service.

After an amplification of the principles, Three major transportation issues are discussed. For each issue, bullet points breakdown the Commission’s major concerns. Background is given and concluding each discussion is a set of recommendations. The principles are used as a backdrop for analyzing those recommendations. For reference, the recommendations are grouped at the end of the report in outline form.

Service concepts v Commission principles

Principle → Concept ↓	Move people Integrated system that provides reasonable alternatives	Sustainable Environment, Fiscal, performance, maintenance	Partnership Not us v. them, leverage	Link to land use
Routes that perform well in one or more standard measures of effectiveness peak, off peak and night.	Limits the amount of coverage but moves the most people per hour of bus service	Fewer higher frequency routes are cheaper and higher performance. Riders per platform hour is an important measure.	Serve all subareas, but don't be bound by formulas.	
Serve all subareas, but don't be bound by formulas in reductions and adds.	Formulas don't necessarily support this principle		Strict formulas lead to turf wars.	Formulas don't maximize this link.
Focus most on all day routes with a few high performing peak routes. Fewer routes, higher frequencies	All day routes are necessary for true mobility	Peak hour routes cost more in general and can encourage short car trips to park and rides		All day routes support multi-use development
Serve transit supportive land use. Dense, multi use, pay or limited parking.	Opportunity to move more people where this land use exists	These land types are more sustainable		Transit most efficiently serves certain land uses. These tend to be places where cars are less efficient
As routes are cut, restructure for a more efficient system	Try to make existing routes more efficient.			
Fund Transit Now elements such as BRT where money can be leveraged. Don't fund partnerships where ridership will be low.	BRT supports other principles. Case could be made for 255 being branded as BRT in the future.	Funding partnerships on routes with low ridership costs Metro hours that could be better spent elsewhere.	BRT can leverage federal capital dollars.	BRT supports high density land use.

Figure 1 Transportation principles are used to help evaluate policy choices. This table is an example of how the Commission used the principles to consider alternatives for Metro service cuts.

THE PRINCIPLES

MOVE PEOPLE

Focus less on particular modes and more on an integrated transportation system. Provide realistic opportunities for travel by bicycle, transit and walking along with auto options.

For more than 30 years, Kirkland policy makers have strongly supported to transportation by walking, transit and bicycles. Still, many policy decisions are based mainly on how autos will fare. For example, concurrency decisions consider only automobiles and impact fees can be spent only on projects that provide capacity for cars. Capital project spending is not currently balanced across modes; only a small fraction directly benefits cyclists and pedestrians.

<photo of Kirkland complete street>

Although there are key missing links, Kirkland's street system is essentially fully developed for auto travel. In order to have a complete transportation system however, the street system has to be complemented by additional facilities for bicycles and more sidewalks. Improvements that allow buses to have increased speed and on-time performance are also needed.

BE SUSTAINABLE

Considering environmental, fiscal, performance and preservation measures, the transportation system is stable or improves over time.

The Commission identified four areas as hallmarks of a sustainable transportation system:

- Environmental
- Fiscal
- Performance
- Preservation and maintenance

Kirkland faces challenges in each sustainability area. Because approximately 50% of greenhouse gasses are transportation related, it will be impossible to meet the Council's adopted climate change goals without changing the way we travel. Fiscally, even if all the current capital budget were spent on pavement preservation, it's likely that current maintenance standards could not be met. This is without funding construction of other types of projects, like development of ITS and preservation of other transportation infrastructure. New funding methods must be developed and projects must be carefully prioritized in new ways. Although substantial data exists, there is currently no regular, unified reporting of performance measures across the system.

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CREATE PARTNERSHIPS

Partnerships must be created locally –between neighborhoods, businesses and others; as well as regionally – between Kirkland, transportation agencies and other cities. These partnerships are vital to leveraging resources and accomplishing goals.

A renewed vision for transportation policy has to have support from stakeholders. At the same time, once agreement on a plan is achieved, implementation must follow. Too many times in the past plans have been developed –after taking great pains to obtain stakeholder agreement-- only to unravel under public criticism from a small group during implementation. Struggles around downtown land use decisions exemplify this problem.

Kirkland is bisected by I-405 which is the responsibility of the Washington State Department of Transportation. Transit service is provided by King County Metro and Sound Transit both of which are governed by separate boards. Regional policy determines, to a large extent, the land use and therefore the number of trips, that Kirkland must plan for. In order to be effective, bicycle facilities must be continuous across city boundaries. Therefore, working with other agencies is a requirement for achieving Kirkland's transportation goals.

LINK TO LAND USE

Land use and transportation plans cannot be developed without consideration of each other.

Performance of the transportation system depends on land use as much as transportation facilities and programs. For example, performance might be good in a neighborhood of dense, mixed use development with complete sidewalks, pay parking and frequent transit service even if street capacity for cars is limited. On the other hand, the same amount of retail, residential and office space, segregated by use and spread out over a greater area with large amounts of surface parking needs a network of wide streets for good performance. Either concept can be successful, but it requires matching the transportation infrastructure to the amount and distribution of land use.



Figure 2 Transportation system performance is as much a function of land use as it is of facilities and programs.

ISSUES

The next sections of this report examine three large issues in the context of the principles identified above. These issues are relevant, timely and offer opportunities for progress. Taken together, they span Kirkland's transportation spectrum and touch the life of every Kirkland citizen.

Concurrency. The Commission has worked on refining concurrency on and off since the Commission's inception. In 2008, the Commission proposed several ideas for improvements to the system but was not able to achieve adequate consensus to move forward. Concurrency is still in need of improvement. It has important influences on both project funding and land use decisions.

Funding. Project funding and prioritization has not been systematically looked at for 10 years. Ensuring the adequacy of capital funding and its proper allocations is the most important challenge facing Kirkland's transportation system.

Climate change and public health. Increasing attention is being paid to the role of transportation in climate change and in public health issues such as obesity. Kirkland has not yet comprehensively examined this relationship.

The following table shows how the three issues fit within the framework of the principles

TABLE 1 ISSUES AND PRINCIPLES

Transportation Principle → Issue ↓	Move People	Be Sustainable	Create Partnerships	Link to Land Use
Concurrency revision	Transportation concurrency is a key factor in determining what transportation facilities are constructed.	Concurrency is currently auto oriented. Funds to construct concurrency projects currently account for a large portion of the capital budget.	A successful concurrency system requires acceptance from a number of stakeholders.	Concurrency is intended to directly relate land use and transportation facilities.
Funding	Clear funding levels and priorities have not been identified across the entire range of projects.	Current combination of funding levels and performance expectations are not fiscally sustainable.	Discussions about funding will require agreement from many groups	Choices of priorities and funding levels have to reflect land use choices.
Climate change/public health/pollution	Access by means other than cars is needed to address these issues	Environmental sustainability is directly addressed through this issue.		The combination of land use and transportation choices are central to working on these issues.

CONCURRENCY

Issues:

- Kirkland's current system is too complicated. It is difficult for those interested in development; developers themselves, neighbors, City Council, to know when concurrency is close to its limits. It is also difficult to know exactly what would be necessary to make a development project that fails concurrency pass concurrency.
- Concurrency's role is misunderstood. It is not an effective tool for solving congestion problems. Unfortunately, even when a city institutes a growth moratorium (the ultimate concurrency penalty) traffic doesn't necessarily improve—traffic from growth outside its borders impacts the city with the moratorium. At the same time, the economic benefits of growth are lost to the community. Another reason that concurrency's power is always limited is that it only affects a small portion (the redeveloping portion) of a city's land use, while traffic comes from the comparatively vast areas of surrounding communities. Stopping "too much growth or "wrong projects" or even promoting good growth are not the functions of concurrency. These are the roles of a carefully developed and broadly supported land use plan. Concurrency should simply monitor the approved land use and transportation programs and insure that they are being completed in relative harmony.
- Currently, only auto trips enter into concurrency calculations. This generates only auto-oriented capacity projects in response to development. These tend to be more expensive than what Kirkland can afford and not necessarily in keeping with what the community desires.
- Right now, concurrency is too blunt; it either causes a moratorium or does nothing. Triggering growth moratoriums cause harm and don't solve the problem concurrency is intended to solve. Recognizing this, efforts have been made to make sure that concurrency isn't triggered, rendering the entire program a useless burden. Since we must have a concurrency system, the most critical factor in designing it is deciding where the trigger point is in order that concurrency causes as small a problem as possible.
- Traffic impact analysis should be redesigned to match current goals. Although every project is required to complete one, the existing one-size-fits all traffic impact analysis rarely result in mitigations for any but the largest projects. Impact analysis should be designed to collect data and analyze non-auto modes.

Background

As part of the Growth Management Act, jurisdictions are required to have a concurrency program. Concurrency is founded on the well intentioned notion that growth in a jurisdiction should be in step with the transportation facilities available to handle the trips. The idea is that if a (usually auto) transportation level of service isn't good enough, development must stop. Supposedly this will allow time for more facilities to be constructed and the level of service to improve at which time development may resume. Alternatively, the developer may construct additional facilities to improve the level of service. Impact analysis techniques are a different element of the development review process and are used to understand project impacts that are localized and not accounted for through impact fees.

Recommendations

- Agree on the purpose of concurrency. One of the major roadblocks to improving concurrency during previous discussions has been the lack of a shared understanding of concurrency's role in the development process. Agreeing on the purpose will help understand where trigger points should be set.
- Simplify the concurrency process. Very few citizens understand how concurrency works. Without fairly complicated analysis there are no easy ways to understand how much capacity is left or where developments stand relative to concurrency targets.
- Concurrency should be multimodal. The purpose of concurrency should be to determine the capacity of the *entire* transportation system relative to the demand of a given development proposal.

- The traffic impact analysis process should be revised to include a multimodal approach and more explicitly consider the impacts of shared use development. Traffic impact analyses should be more relevant.

TABLE 2 CONCURRENCY RECOMMENDATIONS

Transportation Principle → Recommendation ↓	Move People	Be Sustainable	Create Partnerships	Link to Land Use
Commission facilitates agreement on the purpose of concurrency .	Concurrency should support	Concurrency does not result in funding or in developers constructing projects, because it's activated rarely if ever.	Council, the development community and those concerned with development's impacts have to agree on Concurrency's role.	Don't control land use or transportation projects and programs with concurrency. Instead rely on visions created for land use and transportation
Concurrency should be as simple as possible while still fulfilling its role.	Theoretically, all modes should be considered in concurrency. This will likely add to its complexity however.		Systems that are easy to understand will be easier for others to support.	There should be a simple and direct link to the land use plan
Concurrency should be multimodal	Concurrency should not be limited to tests and improvements for cars.	If concurrency tests are not passed, options should be available for non-auto improvements.		The land use plan requires a support of a multimodal transportation system.
Traffic impact analyses should consider bicycles and pedestrians.				

TRANSPORTATION FUNDING

Issues

- Funding for capital projects is not currently adequate. For example, based on past performance, revenue will <GRAPH> not be adequate to keep Kirkland's pavement at targeted levels.
- Funding sources are not necessarily in line with our goals. For example, impact fees can be spent on sidewalks and bicycle facilities but only if they are part of larger automobile capacity improvement projects.
- Clear priorities need to be identified for spending. It's not currently clear, as an example, whether capacity improvements from the concurrency system or maintenance and preservation of our pavement system, or something else, should get the first available funding. It's also not clear how funds are distributed between transportation improvements and Parks or other macro project categories.
- Transportation Demand Management received city funding for the first time in the 2009-2010. In order to support the stated goals of reducing auto dependence, increased funding must be continued.
- An Intelligent Transportation System master plan was adopted by Council in 2008. It's total cost is relatively small but it has not yet been funded.
- Kirkland does not have a systematic program for replacing traffic signal infrastructure, one should be implemented.
- A multimodal transportation network should be identified. Construction of this network should represent the prime purpose versus v/c based. This would represent a change for the auto network and recognize the fact that realistic and practical additions to the street system are limited.

Background

The City of Kirkland delivers quality projects within schedule and budget. Systems are in place to prioritize sidewalk projects and concurrency projects. Other project categories have needed less precise prioritizing in the past. Council has struggled with funding the projects necessary to meet auto level of service standards, while leaving other categories inadequately funded. Some funding sources are limited in the type of projects they can pay for (chart). This leads to the dilemma of only being able to fund projects that are not necessarily desired. Capital funding for transportation is programmed through the CIP which is updated in even numbered years. Changes in policy, technology and costs make it impossible to precisely determine the funding needs over the next 20 years. Instead we should focus on *priorities* for funding and for project selection. Transit service is determined and supplied by Sound Transit and King County Metro. Therefore it is largely out of the direct control of any particular city.

Recommendations

- First funding priority should be given to preservation of existing investments. Therefore, the maintenance categories (shown in shades of green in Figure 3) should be funded with a greater fraction of available funding than the other capital projects (shades of yellow in Figure 3).
- Clear goals and clear prioritization systems should be developed for those areas where it does not currently exist. (See Figure 3) These will guide funding decisions regardless of the amount of total funding available.
- Concurrency projects should be limited to key connections and improvements that are affordable over a 20 year period and which fit with Kirkland's transportation goals. The list of projects should not be based on what is needed to achieve a specific vehicular level of service.
- State laws govern the use of impact fees and gas tax funding. Some real estate excise tax sources have restrictions as well. Kirkland should work to add flexibility to these laws so that multiple funding sources are available to construct projects in line with Kirkland's goals.

- New funding sources have to be developed in order to fund a full transportation system. The cross-Kirkland trail is a candidate for a voter supported bond issue and a transportation benefit district should be considered.

TABLE 3 FUNDING RECOMMENDATIONS

Transportation Principle → Recommendation ↓	Move People	Be Sustainable	Create Partnerships	Link to Land Use
Fund maintenance first.	The current system is auto oriented. If the current system is only maintained, it may remain out of balance.	Investments in maintenance have a more certain return than investments in system expansions. Pavement maintenance costs increase exponentially without timely intervention.	The idea of “taking care of what you have before getting more” makes sense to most people.	If system expansion is reduced due to lack of funding, land use options may be limited.
Establish clear goals and prioritization methods within and between programs.	Allows spending across all modes based on priorities that everyone understands.	Emphasis can be placed on various categories to meet sustainability targets.	Stakeholders can help determine the priorities.	Priorities can be adjusted to supported land use choices.
Simplify auto capacity project network		Reducing scope of auto network will increase potential for fiscal sustainability		
Align funding sources with goals	Construction of multiple project types is more likely	Financial sustainability will increase	Alignment will require changes in state law	Land use and sources to fund transportation system have to be aligned.
Develop new funding sources	Fully expanding opportunities for all users cannot be done with existing funding	Achieving simultaneous sustainability goals (fiscal, performance, maintenance, environmental), will require additional funding	Substantial funding sources must be voted upon.	

Figure 3 Current Capital Funding categories Maintenance and Capacity. Rows indicate funding categories, columns show category characteristics.

	Program category	Purpose	Projects	Goal	Prioritization system	Current funding (2009-2014)
Maintenance	Pavement Maintenance	Keep pavement in good shape	Overlay plus accessible ramps	PCI rating of?	PCI & classification	Current funding (2009-2014)
	Signal Maintenance	Keep signal system capital up to date	Upgrade equipment	Replace signal electronics every 8 years		Current funding (2009-2014)
	Sidewalk maintenance	Sidewalk safety	Replace damaged sidewalks			Current funding (2009-2014)
	Pavement marking	Maintain pavement markings	All marking related projects	Repaint annually others as needed	Manual	Current funding (2009-2014)
Capacity	New sidewalks	Purpose	Projects	Goals from ATP	Active Transportation Plan	Current funding (2009-2014)
	Bicycle projects	Improve bicycle environment	Non-marking projects for bicycles	Goals from ATP	Active Transportation Plan	Current funding (2009-2014)
	Crosswalks	Improve existing crosswalks	Medians lighting, safety improvements		Trans. Commission memo	Current funding (2009-2014)
	Concurrency	Meet concurrency targets	Usually intersection improvements	Meet v/c targets in Comp Plan	Capacity ranking system	Current funding (2009-2014)
	Intelligent Transportation Systems	Complete ITS plan	ITS master plan		ITS master plan	Current funding (2009-2014)
	Trans Demand Management	Reduce drive alone travel	Mostly programs			Current funding (2009-2014)

TRANSPORTATION, CLIMATE CHANGE AND HEALTH

Issue

Transportation policy goals have not been specifically linked to climate change or pollution goals. At the same time, transportation, by way of cars, represent the largest single source of greenhouse gases, air pollution and water pollution in Kirkland.

The transportation landscape is changing at the federal, state and regional level. Greater emphasis is being placed on reduction of greenhouse gases and vehicle miles of travel. Locally, Kirkland has adopted aggressive goals for reducing green house gases.

Public Health officials have implicated our current transportation system as a contributor to obesity and other “lifestyle” diseases.

Background

It is undeniable that the future of transportation will not rely on automobiles fueled by petroleum. The Federal Government is likely to create a new transportation bill in the next 18 months that radically departs from previous orientations around construction of motor vehicle facilities funded by a gas tax. At the state level, current law calls for reduction in greenhouse gasses and vehicle miles of travel. The Governor recently signed an executive order with the similar intents and more specific reporting requirements. Tolling is being explored on I-405 and is to be implemented next year on SR 520. When it has been placed elsewhere, tolling has had the effect of reducing vehicle trips. Regionally, the transportation plan that is being developed has been criticized for not going far enough with reduction of greenhouse gasses, despite aggressive plans to shift emphasis away from roads toward bicycling, walking and transit. Meeting Kirkland’s own adopted climate change reduction targets will similarly require changes in transportation policy. Changes in automobile technology will be helpful, but the auto fleet is so large meaningful change will take years. Physical inactivity is linked to increases in obesity and chronic disease . Transportation choices such as walking and bicycling are relatively simple ways of increasing physical activity that are available to almost everyone.

Recommendation

- Fund projects and program that support walking, biking and transit. It won’t be possible to meet Kirkland’s adopted GHG targets without offering convenient active transportation and transit options.
- Support pricing. Kirkland has a strong statement supporting pricing. This support should continue in order to put driving cost signals in line with community goals.
- Be proactive in encouraging development of the BNSF right-of-way. Development of a multi use trail on the BNSF right-of-way would provide a first rate transportation corridor. Separate right-of-ways encourage walking and cycling for exercise.

Transportation Principle → Recommendation ↓	Move People	Be Sustainable	Create Partnerships	Link to Land Use
Fund projects and programs that support Active Transportation	The current system is auto oriented. If the current system is only maintained, it may remain out of balance.	Environmental	Supporting Transit will require a partnership with King County Metro	If system expansion is reduced due to lack of funding, land use options may be limited.
Support pricing	Allows spending across all modes based on priorities that everyone understands.	Emphasis can be placed on various categories to meet sustainability targets.	Stakeholders can help determine the priorities.	Priorities can be adjusted to supported land use choices.
Develop BNSF right-of-way				

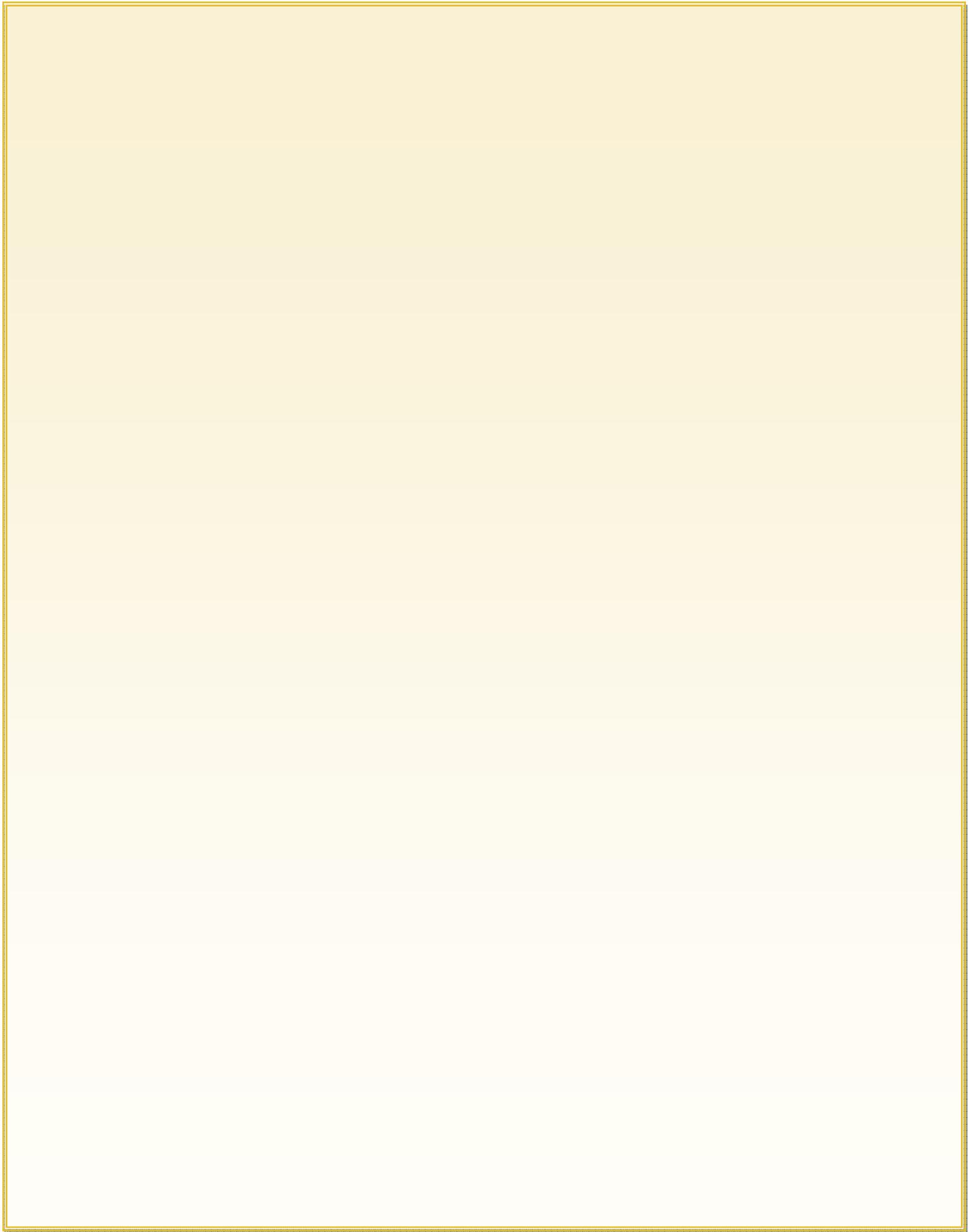
Reducing scope of auto network

Will increase potential for fiscal sustainability	We are in a perfect geographic location			
Manage parking				

Still hanging out there: land use issues Plans and relationships to other things, NTCP, Reporting and tying goal achievement to funding priorities, Transit

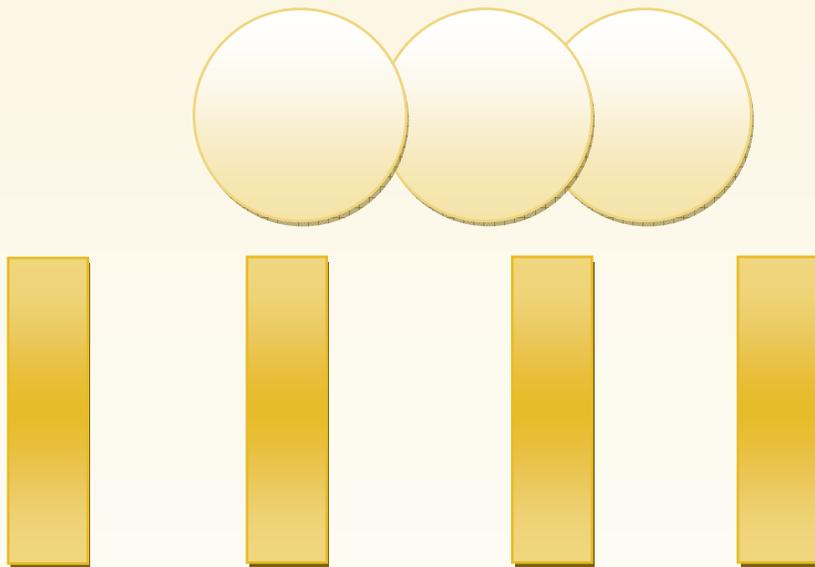
CONCLUSIONS

RECOMMENDATION SUMMARY



TRANSPORTATION CONVERSATIONS

Perspectives on Kirkland's Transportation Policy



City of Kirkland Transportation Commission