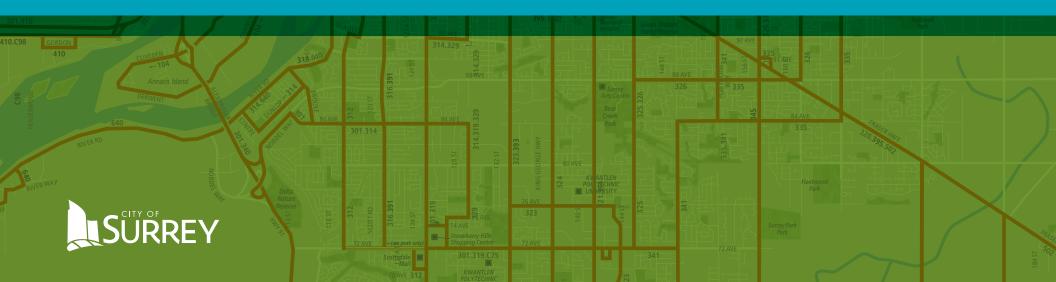
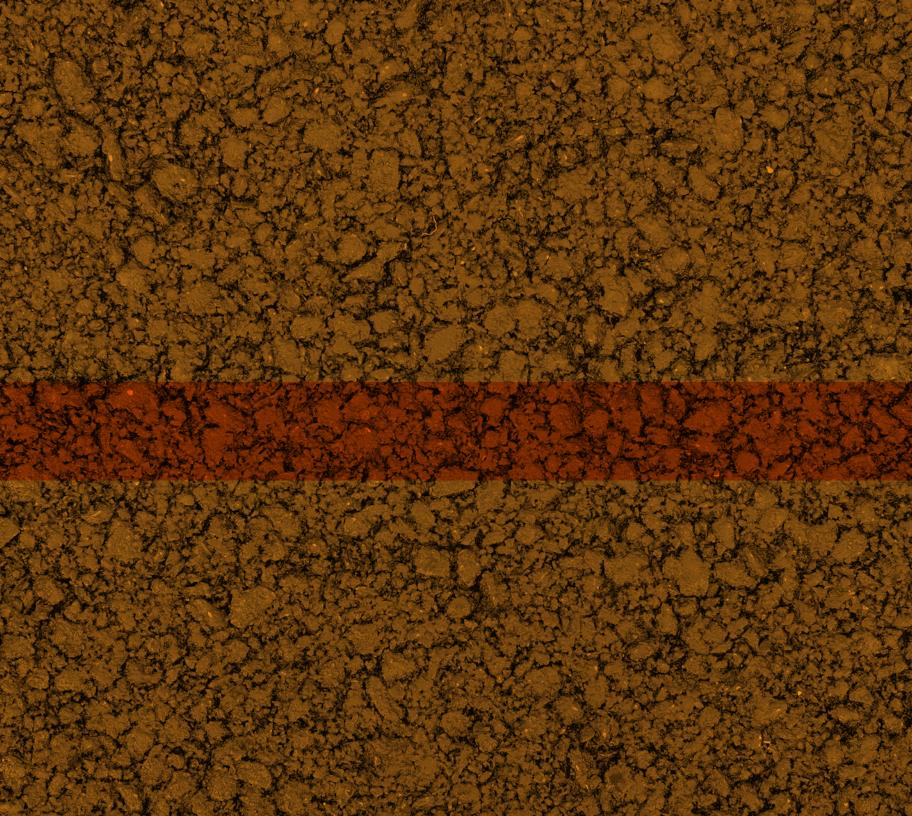


TRANSPORTATION STRATEGIC PLANTransportation Working For Everyone







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FOREWORD



Surrey is a City that is looking to the future and this Strategic Plan reflects what we want to achieve ... We are pleased to introduce the Surrey Transportation Strategic Plan. It has been developed from the successful foundations of the previous Surrey Transportation Plan and sets out our proposals and strategies to deliver a quality, sustainable and integrated transportation system for our City. Transportation planning is a vital and essential public service that we at the City are responsible for. It is a service not just about solving problems but as a means of delivering opportunity for all and enhancing everyone's quality of life. Surrey is a great place to live and work and as we look to the future as one of Canada's leading cities, we will work to make our transportation system fit for the challenges ahead.

The Plan has given us the opportunity to critically examine Surrey's transport needs, providing for business, industry, transit, car, pedestrians and bicycle users. We have focused our attention on a number of key priorities which we believe will make it easier for people to make choices in the way they travel, increasing mobility and accessibility and thereby helping to address the health, social and environmental problems of car dependence.

Surrey is a City that is looking to the future and this Strategic Plan reflects what we want to achieve, not just for transportation itself but also in terms of our environmental, health, community safety and economic future. How we deliver our transportation services is key to our success. This Plan is therefore different in a number of ways. It is the first major policy statement to be produced by the City since adopting our Sustainability Charter. We have taken a fresh look at how we plan, fund and deliver transportation and importantly, we have introduced a performance and monitoring component to demonstrate best value and to gauge the success of the Strategy and its supporting plans.

This Strategic Plan is also different in that it clearly identifies the fundamental relationship between the planning and development of our communities and how this can be done in a way that supports and enhances all modes of transportation. The Principles of this Strategic Plan emphasize the need for transportation choice and the full integration of transportation with land use. How we plan our City is probably the most important factor influencing transportation and it is expected to play the dominant role in determining how far it will be possible to achieving our Vision.

We also have the responsibility of operating and preserving the transportation infrastructure which is the backbone for any successful transportation system. The assets the City is tasked with looking after are enormous and require constant work and investment. Getting these fundamentals right will allow us to promote our policies for the convenient, safe and efficient movement of people, goods and services.

This Strategic Plan has been produced with the assistance of public and stakeholder input but consultation does not stop here. As particular projects and initiatives are promoted we will continue to seek the input of our communities to help ensure what we do is the best for our City.

Dianne Watts - Mayor



EXECUTIVE SUMMARY

AN INTRODUCTION TO THE STRATEGIC PLAN | The

Transportation Strategic Plan is the City's long range planning document that sets out the vision, objectives, proposals and priorities for transportation in Surrey in the future. It also shows how transport, in its widest sense, has a part to play in key policy areas such as the environment, land use, economy, safety and health.

ISSUES, CHALLENGES AND OPPORTUNITIES There are very many, but fundamentally, there is an over-reliance on the car that is having serious implications for congestion and the environment, particularly climate change, safety and health. Peak oil forecasts and escalating fuel costs will impact all aspects of transportation and affect people's transportation decisions and travel patterns. For those who do not have access to a car, or who want to use their car less, getting around can be difficult. The Strategic Plan examines how we can provide a transport system that caters to all mobility needs including the movement of goods and services associated with a successful economy.

A transportation system that improves choice is not antimotorist. Indeed, growth and development of our road system network will remain a significant component of our Strategy and future budgets. By implication, the operation and maintenance of the road system will also remain a major and growing part of our planning. The Strategic Plan is made up of strategies and objectives to manage, maintain and finance the transportation system in ways that are responsive to local needs, are innovative, provide value for money and which are sustainable. The Strategic Plan aims to promote a balanced transport system that gives sustainable choices in the way we travel to, from and within Surrey and which integrates with other policy areas associated with the environment, health and safety, economic well-being and land development.

Transportation has a part to play in all aspects of people's lives and a good system responds to many and varying needs and priorities. This Strategic Plan takes a holistic approach to transportation by:

- 1. Seeking to increase the accessibility and mobility options available to people including the elderly and those with special needs
- 2. Identifying where strategic investments will be needed to complete key networks and support a major shift to lower impact modes of transportation.
- *3. Increasing the safety and security of the system for both motorized and non-motorized users*
- *4. Promoting the efficient management and operation of the system for all modes*
- 5. Ensuring that the system infrastructure is well maintained and preserved
- 6. Recognizing the funding implications of providing new infrastructure
- 7. Supporting the economic vitality of the City, allowing competitiveness, efficiency and job creation
- 8. Protecting and enhancing the environment by promoting sustainability, efficiency, and energy conservation
- 9. Establishing land use patterns, densities and mixes that reduce the need to travel and that support walking, cycling and transit
- 10. Examining and implementing Transportation Demand strategies
- 11. Measuring performance

The Strategic Plan examines how we can provide a transport system that caters to all mobility needs including the movement of goods and services associated with a successful economy. The transportation system is fundamentally linked with the nature, where and how much growth and development takes place. The Strategic Plan explains the important relationship between land use and transportation and makes broad recommendations for sustainable growth. This theme will be developed further and become an important component of the future Official Community Plan review and update.

THE TRANSPORTATION PRINCIPLES | We believe that transportation cannot be thought of as just a means to an end but as a key influence on very many aspects of our lives. Surrey is a diverse, vibrant and growing City and we are working hard on making it an even better place to live and work by tackling crime, incorporating sustainability principles in our decision making, providing the right conditions for employment, enhancing the environment in which we live and improving the liveability of our neighbourhoods and town centres. How the transportation system is planned, improved and operated is fundamental to making these changes happen. To reflect the importance transportation has in delivering these goals, we developed 6 Principles that we believed represented what a good transportation system should achieve.

- 1. Effective And Efficient Network Management
- 2. More Travel Choice
- 3. Safer, Healthier Communities
- 4. Successful Local Economies
- 5. Protection Of Our Built And Natural Environment
- 6. Transportation Integration

These principles are integral to the Strategic Plan and by adopting them it will help Surrey move towards a sustainable, efficient, cost effective, affordable, accessible and environmentally sound transportation system. They also allow us to properly examine the issues around transportation, develop strategies to deal with these and provide a framework for monitoring and communicating our progress.

OUR TRANSPORTATION VISION | The Transportation Vision reflects Surrey's social, environmental, sustainability and economic aspirations that are all key parts of our overall community objectives and which are described within the 6 guiding principles and shaped by our consultation. It seeks to establish important directions and outcomes explaining what we will achieve and why. The detailed how, who, when and where will be addressed through the various policies, programs, funding systems and targets contained in the Strategic Plan. The transportation system is fundamentally linked with the nature, where and how much growth and development takes place.

It is the Year 2031 and Surrey is a vibrant community of 680,000 persons forming the activity centre of the Fraser Valley. Multi-use town centres are high density with mixed use along connecting corridors and transit has operating priority within these corridors. Compact, mixed use communities emphasizing a sense of place, have pedestrian, cycling and transit friendly design. Transit, highways, arterials, the efficient movement of goods and services and parking are planned and co-ordinated throughout the City. The percentage of trips made by walking, cycling, transit and high occupancy autos continues to increase while the percentage of trips made by single occupant autos continues to decrease. The average distance and travel time for peak hour commuter travel within Surrey continues to decline. The citizens, regardless of age, income or disability, enjoy universal access to transportation and the services, educational and recreational opportunities it provides. Transportation infrastructure is in a good state of repair and is adequately funded from stable and sustainable revenue sources. Surrey's elected representatives have the support of a well informed public in making decisions on urban development and the supporting transportation systems.

Our Vision

To help emphasize that transportation cannot be considered in isolation and that it is a means to an end this Strategic Plan summarizes the Vision in the following way:

- The Surrey Transportation System is efficient, equitable, safe and sustainable.
- There is more choice and better access to transportation, land uses that emphasize compact and complete communities and a modern and well funded infrastructure.
- Our transportation planning will support safe, livable and healthy communities with good access to local jobs, education, services and recreation.
- We continue to move our transportation system forward by having an informed and engaged public, strong partnerships with others, supportive elected representatives and sustainable investment.

"Transportation Working For Everyone"

STRATEGY PREPARATION AND DEVELOPMENT | The Strategic

Plan has been produced by the City of Surrey, with meaningful input from Surrey residents, those doing business in Surrey as well as other agencies and organizations. This process of participation has influenced all aspects of the Strategy. Although produced by the City, it is important that it has wider ownership, reflecting the common interests of all who will be affected by its outcomes.

CONSULTATION Transportation has always been a hot topic for people. We all have our views on what is good and bad about our transportation system and it is guaranteed to generate strong opinions and argument. This is because mobility is such an important part of our lives. The City recognizes that consultation is a fundamental part of the planning of the Strategic Plan. In undertaking our consultation some key principles were established as minimum requirements as to how we wanted our consultation to take place:

- Involve a wide group of opinions and views
- Ensure that all members of the community with different transportation needs are given opportunity to contribute including youth, seniors, women, people with mobility difficulties and families
- Establish local issues and priorities
- Employ a range of consultation methods so that we receive broad and representative public comment and feedback

PRIORITIES IDENTIFIED DURING CONSULTATION

- Need for improved Transit
- Traffic congestion and intersection delay
- Impacts of trucks
- Sidewalk provision
- Road maintenance
- Completing the planned strategic road network and improving neighbourhood connectivity
- Better integration between land use and transportation

CONTEXT AND INTEGRATION OF POLICY | The Strategic

Plan has been influenced by the direction given in the Official Community Plan (OCP) and the recently developed Sustainability Charter. Although a local "Made in Surrey" Strategy, it has not been developed in isolation and alignment with other regional plans has been promoted. It is one of a number of City Plans and it will complement other City planning efforts including the Parks Master Plan, the Social Plan, the Employment Lands Strategy, the Sustainability Charter and the Livability Accord between high growth municipalities. OTHER INFLUENCES | The Strategic Plan also:

- Recognizes evolving and changing priorities and increasing complexity of the transportation system
- Provides flexibility to respond to external policy influences
- Identifies a more active City role in "soft" engineering
- Gives attention to maximizing the sphere of influence of the City and working in partnership with other agencies
- Emphasizes the need for a well maintained and efficiently managed transportation asset to support delivery of the Strategy
- Introduces a performance component with ambitious but achievable targets
- Identifies the need for a number of new policies and existing policy updates

THE STRATEGIC AND SERVICE OBJECTIVES The Vision was influenced by our consultation. It was undertaken using the 6 principles as a framework to organize the issues and priorities we were told about by the public and stakeholders. In response, the City developed a range of 6 Strategic Objectives which provide the high level direction for how we want transportation to move forward in the City. For each of these, there are specific Service Objectives which describe in more detail how we plan to turn our Vision into a range of policies and actions.

The Strategic Plan has been produced by the City of Surrey, with meaningful input from Surrey residents, those doing business in Surrey as well as other agencies and organizations.



Effective and efficient network management

PRINCIPLE 1 Effective and efficient network management

It is important that there is a clear appreciation of the fundamental importance that a well operated and maintained transportation infrastructure has in the delivery of the City's Transportation Vision and the increasing demands of keeping assets working efficiently, serviceable and preserved for the future. As public expectations rise, the amount of infrastructure that is in place expands and the use and demands placed upon it rise. The proportion of budgetary demands from the total "transportation pot" will likely have to increase if the City is to avoid a deteriorating transportation infrastructure in the future.

Consultation feedback, priorities and issues

- Need for increased expenditure on maintenance to deal with potholes and rough road surfaces
- ► Improved winter maintenance
- Deterioration of road pavements after periods of extreme winter weather
- A perception of a "piecemeal" approach to road maintenance
- Strong public support for completion of the planned road network
- Noise caused by truck traffic on uneven and potholed roads
- Rutting of some traffic lanes where high truck volumes exist
- Increasing complexity of the transportation system and the need for new and innovative engineering approaches
- Concerns about a potential growing infrastructure deficit in the future without investment now

STRATEGIC OBJECTIVE: Efficiently manage, maintain and improve the transportation system for all modes SERVICE OBJECTIVES

- 1. Maintain and improve the transportation asset and promote best value in asset maintenance and rehabilitation
- 2. Establish sustainable and predictable funding streams

More travel choice

PRINCIPLE 2 More travel choice

The main purpose of the transportation system is to provide access for people to services, recreation, jobs, food and to other people. Surrey has a diverse population with diverse needs. Not everyone in Surrey is being fully served by the transportation system. A poor transportation system disproportionately affects the young, the elderly, low waged or recent immigrants. Demographic trends suggest that up to one third of the population will not have access to a car as a driver by 2031 by virtue of being too old, too young or having mobility or perceptual challenges. Having safe, convenient and affordable transportation helps ensure that everyone can participate fully and equally. Mobility is important and relevant to everyone.

Consultation feedback, priorities and issues

- Poor transit service identified as the number 1 issue during public consultation
- 88% of public agreed that "Transit should be as convenient and attractive as driving a car on City roads"
- About 12% (about 50,000) of Surrey's citizens do not have unhindered access to a car.
- ▶ High level of public priority given to improved sidewalk provision
- Over 50% of the Greenways' network completed

STRATEGIC OBJECTIVE: Promote alternative and sustainable travel choice and provide better accessibility to jobs, education, health and recreation for all

- 1. Promote alternatives to the car by improving walking and cycling opportunities
- 2. Promote alternatives to the car by improving transit
- 3. Protect and improve transportation infrastructure in support of strategic transit expansion and upgrades
- 4. Integrate behavioural change initiatives with transportation improvements

Safer, healthier communities

PRINCIPLE 3 Safer, healthier communities

Promoting safer communities is a key element of the Transportation Strategy. It looks at safety in terms of the risk of being hurt when using our transportation system but also in terms of personal safety and security. Consultation has shown that road safety issues are of concern to people and consultation through the Crime Reduction Strategy has shown that crime and the fear of crime are also a high priority for the public.

Consultation feedback, priorities and issues

- Lack of understanding of City role in road safety
- Pedestrian safety identified as a priority within City Centre
- Lack of respect for traffic laws speeding, red light running, not stopping for pedestrians at crossings. 49% of public identified the need for "considerable or lots of improvement"
- Need for more driver education on traffic laws and safety a priority
- Truck traffic using non-truck routes
- Neighbourhood traffic speeds but mixed response to traffic calming although supported some concerns about too much being introduced.
- Pedestrian safety and absence of sidewalks. 71% of public described safe sidewalks and walking paths as "important" or "very important"
- Crosswalk safety signing, lighting, pavement markings
- Personal security when accessing and using transit at night

STRATEGIC OBJECTIVE: Improve Community Safety, Health and Quality of Life

- 1. Undertake physical measures to improve the safety for all road users
- 2. Support the increased enforcement of speed limits and traffic laws
- 3. Promote a culture of road and community safety into all aspects of engineering services
- 4. Raise awareness of road safety and encourage safer travel in partnership with others
- 5. Reduce Crime and the Fear of Crime
- 6. Improve Community Health and Quality of Life

Successful local economies

PRINCIPLE 4 Successful local economies

Transportation plays a significant role in supporting Surrey's economic development. The businesses and institutions located within our employment lands are valued as being critical to the short, medium and long term economic and social viability of the City. Within Surrey, we want to see a modern, responsive and efficient transportation system that is capable of supporting the competitiveness of our businesses and boosting productivity and access to local, national and international markets. The emphasis of the City's Economic Development Strategy is to maintain Surrey's economic position within the region while supporting local business growth. The existing and future capacity, location and alignment of transportation infrastructure within Surrey and within the Metro Vancouver region are critical factors that will influence the demand for and success of employment lands.

Consultation feedback, priorities and issues

- Congestion and intersection delays Highest ranked improvement area during public consultation with 71% of respondents describing this as needing "considerable or lots of improvement"
- Inefficient operation of traffic signals
- Perceived piecemeal approach to road construction
- Completion of the planned road network a priority for the public
- ▶ Impact of truck traffic
- Rapid growth of the City and concerns over the ability to provide the supporting transportation infrastructure

STRATEGIC OBJECTIVE: Reduce congestion and support the sustainable economic development and vitality of Surrey

- 1. Promote access to employment lands
- 2. Provide transportation infrastructure and services that support sustainable economic growth
- 3. Relieve congestion
- 4. Influence and manage transportation demand and supply

Protection of our built and natural environment

PRINCIPLE 5 Protection of our built and natural environment

Transportation has led to huge improvements in our quality of life by giving individuals unprecedented mobility and access to jobs and a better life. Surrey's natural environment is a high priority for its citizens. It faces real and growing pressures from the expansion of the City. The importance of dealing with growth in ways that minimize environmental impacts is vital and this is a particular challenge with respect to transportation.

Consultation feedback, priorities and issues

- Air quality issues associated with traffic
- Fuck movement and the management of goods movement
- **Disruption to wildlife corridors**
- **•** Recognition of the contribution of transportation to greenhouse gas emissions
- Need for heavy and sustained investment in transit

STRATEGIC OBJECTIVE: Reduce the impacts of transportation on the built and natural environment

- 1. Reduce the impacts of road freight
- 2. Reduce the impacts of traffic on air quality and climate change
- 3. Reduce the impacts of traffic on water quality, vegetation, trees and land consumption

Integration of transportation

PRINCIPLE 6 Integration of transportation

As the responsible authority for guiding development, Surrey is a lead player in promoting sustainable, pedestrian, cycle and transit friendly communities that are well served by all aspects of the transportation system. Many aspects of travel demand such as origin and destination locations, lengths of trips and choice of mode are shaped by land use patterns. How and where we plan and direct growth in the City is probably the most fundamental determinant of the nature and scope of the transportation system we have and how far it will be possible to move towards reduced dependence on the car. With the high growth rates we see in Surrey, there is high potential to bring about a fundamental change during the life of this Strategic Plan.

Consultation feedback, priorities and issues

- Support for facilities to be located within walking and cycling distances shopping, schools and leisure
- Need for more integration of transit with new development
- ▶ Transportation servicing and road building perception of City "catching up"
- ▶ Incomplete road network and missing links. Public support for completion of planned road network
- Increasing understanding of the benefits of a finer grid network, especially in town and City centres for improved routing options and better multi modal connectivity.
- Current poor transit services but an expectation of change through the South of Fraser Area Transit Plan and development of the Frequent Transit Network (FTN)
- ► Need for OCP update
- **•** Rapid growth of City and the lag in transit provision with missed opportunities for transit to shape growth

STRATEGIC OBJECTIVE: Promote integration between transportation and land use to reduce the need for travel and support trips by more sustainable modes

- 1. Co-ordinate transit investment with land use planning in support of high density, mixed use and compact development
- 2. Promote integrated and universal transportation elements within development projects so that modes other than only the private car are supported and improved
- 3. Improve and enhance Surrey's Town Centres and City Centre by promoting integration with transit

The Strategic Plan is therefore made up of strategies and objectives to deliver, manage, maintain and finance the transportation system in ways that are sustainable, responsive to local needs and priorities, flexible, innovative and which provide value for money.

PROJECTS AND PROGRAMS Once we have established our Vision for transportation, and developed the strategic objectives of what the Strategic Plan will be delivering, the City will need to translate these into projects and programs. It is essential that the investments we make are structured and logical so that the City delivers what is needed to service the demand for transportation by all modes, responds to the different community needs and priorities and protects the infrastructure. As we move towards the implementation stages we will look at whether the projects, programs and services we deliver, are being done so in the most effective way. We will look at our funding in a way that helps to integrate projects and initiatives with the strategic objectives and priorities of the Plan and their contribution to other Council priorities. In tandem with the 6 Principles, they will also help provide a framework for monitoring and reporting on performance.

- Core Needs: Core needs would represent our priority, taking first call on resources and include the repair and replacement of our assets such as pavement, sidewalks, traffic signals, street lighting and structures.
- City Networks: City networks would consist of the priority road, bus, cycle and pedestrian networks. Cycling, pedestrian and transit strategies will identify our aims and priorities. Road and intersection improvement priorities will be based on safety and projected road network needs by modeling future traffic volumes from expected development.
- Local Programs: This would consist of smaller scale measures that would be targeted at the neighbourhood level, to promote community priorities such as safety, the impact of traffic on local roads, provision of and access to education and services

and the quality of the local environment. The traffic calming program would be an example. We would explore the support of partners such as the Police, TransLink and ICBC and an expanded role in "non engineering" programs and initiatives to take a more proactive role in educating, informing and encouraging people to make the best use of the transportation system in the safest and most appropriate manner.

IMPLEMENTATION The City influences and guides the nature of the transportation system in many ways. As the responsible authority for guiding development, it has a fundamental part to play in promoting sustainable communities that are well served by all modes. Once in place, through the management and maintenance of the infrastructure, we would want to see the level of choice and quality continue to improve. The Strategic Plan is therefore made up of strategies and objectives to deliver, manage, maintain and finance the transportation system in ways that are sustainable, responsive to local needs and priorities, flexible, innovative and which provide value for money.

The 10 Year Servicing Plan is the current document that presents the planned projects for implementation based on predicted funding. The Plan does not include details on all of the City's transportation activities and initiatives and further work will take place to establish a broader based means of identifying the priorities for the broad spectrum of our responsibilities.

ROOT AND BRANCH DELIVERY Delivery of the City's transportation system will not be achieved only by constructing capital projects. While this will continue to be a huge component of the effort, the City can influence how

transportation is delivered in many other ways. Ultimately, the Strategic Plan should be something that guides and influences a broader spectrum of service provision. How services to the public are delivered, how development is planned and responded to, the way we plan parks and recreational facilities and the day to day "caretaking" of the streets all contribute to the transportation system. The Strategic Plan should allow us to recognize that the construction of a new 20 metre walkway to the local shops as part of a new housing development, or having a bus stop which is free of graffiti and is well lit, is as important as a \$5 million road widening project to ease congestion. It is hoped that the Strategic Plan will guide decision making, funding priorities and planning by all those involved, in the broadest sense, in transportation.

MONITORING AND PERFORMANCE | There is a responsibility to assess whether the effort and money being invested by the City is achieving what we set out to do. The Strategic Plan contains performance indicators based on key indicators that will be used to help judge the performance of the Plan.

FUNDING | The Strategic Plan explores funding sources. Further to the adoption of our Strategic Plan, resource needs will be assessed and funding sources will be identified as each of the supporting implementation Plans are completed. This will ensure that it is achievable, realistic, and financially sustainable.





DEVELOPING A VISION PART 1 DEVELOPING A VISION

PLANNING FOR THE FUTURE

TRANSPORTATION Moving Surrey Forward

Transportation impacts everyone's lives all of the time, and continual planning and management for the transportation system in Surrey is needed. A reliance on the car is having serious implications for congestion, the environment and people's well being and health. There are emerging issues related to the health of our population, social isolation and exclusion from employment and services. For people who do not have access to a car, or who want to use their car less, getting around can be difficult. The City is aiming to develop a transportation system that better caters to everyone's mobility needs by creating a balanced transportation system that gives real choices in the way people travel to, from and within Surrey.

Travel is an important and often essential part of people's daily lives. National surveys show that transportation is the second largest item of household expenditure representing typically 13% of what is spent. More is spent on transport than on food, holidays and clothing. People are traveling more often and over longer distances. About 6% of Surrey households have no car and 35% have access to one car. In our car-dependent way of life this can result in inequalities. Children, people with disabilities and the elderly especially, rely on alternative modes of transport to get around and access the services and facilities they need.

Surrey is a great place to live and more people want to call it home. The City is expected to grow from 450,000 in 2008 to 680,000 in 2031. Managing growth can be a challenge. Un-managed growth can reduce the quality of life due to increased congestion, impact on community safety and health and degradation of the natural environment. However, growth and development also brings huge opportunity to make change providing momentum for promoting a new way of living and moving with better transit, more walking and cycling trips developing in and around higher density, mixed use and compact development.

Surrey is a great place to live and more people want to call it home.

THE TRANSPORTATION PRINCIPLES Our Framework for Change

Transportation has a part to play in most aspects of people's lives and a good system responds to varying needs and priorities. The Transportation Strategic Plan has:

- Sought to increase the accessibility and mobility options available to people
- Enhance the integration between and across modes of transportation
- Increase the safety and security of the system, for both motorized and non-motorized users
- Promote the efficient management and operation of the system
- Ensure funding is in place to make sure the system infrastructure is preserved and able to support the Plan's objectives
- Support the economic vitality of the City, allowing competitiveness and efficiency
- Protect and enhance the environment by promoting sustainability and efficiency and improving the quality of life.

The importance transportation has in people's lives is fundamental. From the time we step out of our home we are within the transportation environment. This is where we travel to meet our employment, social and health needs, shop, exercise and interact with others. Getting transportation working right is therefore a priority for the City. We are responsible for managing this most important environment and the City's decisions, policies and priorities will shape how Surrey will develop and move forward. To ensure we properly reflect this comprehensive and all-encompassing impact that transportation has on people's lives, we have changed how we look at transportation in Surrey. Instead of concentrating on whether people walk, drive, use transit or cycle and then identifying how these can all be accommodated in our system, we have sought to examine transportation in a way that better reflects how it relates to wider environmental, social, economic and health policy. This approach also ensures that transportation is looked at with the three pillars of sustainability at the forefront.

We have summarized the different objectives of what a good transportation system should be seeking to achieve within 6 Principles.

- 1. Effective and Efficient Management of the Road Network
- 2. More Travel Choice
- 3. Safer, Healthier Communities
- 4. Successful Local Economies
- 5. Protection of our Built and Natural Environment
- 6. Transportation Integration

Planning for the Future

QUALITY TRANSPORTATION PLANNING

This Strategic Plan has been structured around a number of criteria:

- External Integration: The nature and performance of the transportation system is influenced by a combination of broader conditions, City policies and priorities and external policies by others such as the Federal and Provincial governments and regional planning bodies such as Metro Vancouver. The City functions in a wider economic and demographic environment and the success of this Plan depends on it being integrated with other strategies. Although a local, "Made in Surrey" Plan, responsive to the issues and challenges within the City, it has not been developed in isolation. The Strategy is based on Shared Priorities and it employs Cross Partnership Strategies to move towards making change.
- Internal Integration: The Strategy aligns with the Sustainability Charter and the Official Community Plan (OCP) and has linkages with other City policies associated with community safety, social inclusion, environmental protection and growth.
- Analysis: The Strategy is built on sound analysis of local transportation problems and opportunities identified through consultation, modeling of our transportation network, an understanding of external changes and pressures and existing monitoring of our system.
- Maximizing value from resources: The Strategic Plan will attempt to deliver the best possible results given the funding available and the current and future state of infrastructure and transport services and to strengthen user-pay principles within our funding mechanisms.

- Involvement: The Strategy has been produced by the City of Surrey, but there has been the input of many individuals, organizations and stakeholders, providing their knowledge and experience to help reach our conclusions. The City of Surrey may have produced the Strategy but it is important that it has a wider ownership, reflecting the common interests of all of those involved.
- Priorities: Identification of Shared Priorities with other City Departments as well as regional bodies and agencies.
- Flexibility: The ability to adapt to changing priorities, changing context and changing funding.
- Performance Management: Significant funding is needed to create an equitable and efficient transportation system and there is a responsibility to assess whether the effort and money being invested is achieving what is in the Plan. The City has established challenging but realistic performance indicators that will be used to help judge the performance of the Strategic Plan.

DELIVERY AND IMPLEMENTATION STRUCTURES

The Strategy is underpinned by public and stakeholder input, technical assessment and financial responsibility. It is much more than a list of highway, transit or cycling investments and programs. It sets transportation in a wider context. Delivery of Surrey's transportation system will not be achieved only by constructing capital projects. Although a huge component of the effort, capital investment alone is insufficient. The City can influence how transportation is delivered in other ways. How services are delivered, our decisions on land use and development, using our advocacy and lobbying influence regionally and nationally, planning of our parks and recreational facilities, making roads safer and the day to day "caretaking" of our streets all contribute. The construction of a new walkway to the local shops or a bus stop free of graffiti and that is well lit can be as important as a multi million dollar road widening project.

Different City policies directly influence how transportation happens in Surrey. As the authority responsible for guiding development, we have a lead role in promoting sustainable, pedestrian, cycle and transit friendly communities that are well served by all aspects of the transportation system. Once in place, the ongoing operation and maintenance of the transportation infrastructure will improve efficiency and level of choice. The Plan is made up of strategies and objectives to manage, maintain and finance the transportation system in ways that are responsive to local needs, are innovative, provide value for money and which are sustainable.

A SHARED RESPONSIBILITY

Planning for sustainable, compact and complete development and continuing to invest in transportation infrastructure are fundamental components of the delivery process and are only part of the answer to tackling the issues. This Strategic Plan identifies an increasing level of attention to developing policies and partnerships with other agencies to bring about behavioral change. This same partnership culture needs to be fostered between the City and the people who live and work here. The City can and will provide the framework and opportunities but at the end of the day progress will be achieved as a result of individuals making a change. Ultimately, positive changes will only happen if, at the individual level, changes in how everyone chooses to travel are made. Deciding to shop at the local store, walking children to school or car sharing with a neighbour for the journey to work are examples of how everyone can help reduce the reliance on the car. When the car is the choice, driving respectfully and carefully or avoiding short cuts though local neighbourhoods will help reduce the impact of traffic on communities. This Plan will succeed only if there is a commitment by everyone to make a change.

The construction of a new walkway to the local shops or a bus stop free of graffiti and that is well lit can be as important as a multi million dollar road widening project...

PARTICIPATION AND INPUT

A common theme of this Plan is that transport cannot be considered in isolation.

THE IMPORTANCE OF CONSULTATION Wider involvement and dialogue

A common theme of this Plan is that transport cannot be considered in isolation. It is important that attention is paid to how it relates to other issues such as the economy, health, education or crime. The Plan is ultimately the responsibility of the City, but for it to respond to the broader context and reflect other policy areas, the City needs to work with other partners, bodies, stakeholders and the public to ensure integration with other initiatives and develop a proper understanding of the issues and priorities that are important to people. The advantages of full involvement are many, with "shared ownership", "awareness and education" and "better quality decision making" identified as key benefits.

The City's involvement and role is broken down into two broad areas:

Partnership: The City has close working relationships with established partners and neighbouring municipalities at staff and elected representative level. Transportation, economic, social and environmental issues do not stop at the edge of the City. Surrey is part of a larger community of municipalities and agencies all with responsibility for the wider transportation system. The City wants this Strategy to have a broad level of support and ownership and a common interest shared by all, with all agencies, organizations and residents.

Public Participation: The consultation initiatives undertaken during the development of this Strategy will allow us to better understand the needs and priorities of the public and in turn gain broader support for what the Plan is seeking to achieve.

THE CONSULTATION STRATEGY

Although an ongoing process throughout the development of the Strategic Plan, there were discrete steps integrated into the process where we engaged with the public and stakeholders. The key phases of consultation were:

Issues and Attitudes Consultation:

This consultation sought to get a better understanding of the main issues and actions for change by listening to stakeholders including advocacy groups, Business Improvement Associations, Community Associations and transport operators. We also engaged with the public, undertaking focus group meetings followed up by telephone and web-based surveys.

Testing Understanding Consultation:

Having been told what the attitudes were towards transportation, strategies were developed incorporating the many and varied opinions and views. Further consultation was undertaken to make sure the issues and priorities were understood and that there was a level of agreement, shared understanding and ownership of the Plan and what it was setting out to achieve.

Confirming Completeness Consultation:

Before finalizing the Plan the City submitted the draft to the public to get reaction and feedback on what it was saying.

In undertaking this staged approach to the consultation, the City set itself some minimum requirements as to what was to be achieved from the process. Participation should:

- Involve a wide group of opinions and views
- Ensure that all members of the community with different transportation needs were represented including youth, seniors, women, people with mobility difficulties, the unemployed, people with families.
- Establish local issues and priorities
- Employ a range of consultation methods so that we receive broad and representative feedback and comment

HOW PARTICIPATION HAS SHAPED THE STRATEGY

Consultation with the public identified 4 strategic principles that the plan should incorporate:

- ► The Strategy should facilitate choice, mobility and balance in transportation
- In doing this, the plan should promote attractive, safe, affordable and convenient alternatives
- Surrey should plan and invest for the long term and for substantial growth
- Sustainable and secure funding for transportation should be achieved

What was very clear during the consultation was that people were interested in issues like finding employment, accessing health care being able to enjoy recreational opportunities and feeling safe. Transportation in itself was not the goal. Transportation was required to get to the goal.

FUTURE INVOLVEMENT AND MONITORING

Success in delivering the objectives of the Plan will rely on the involvement of the public and stakeholders as partners, as well as clients. Surrey's residents will want and expect to see changes made and efforts to shape how travel and transportation occur in the City will rely on partnerships. The City will be responsive and accountable, helped in part by our commitment to setting targets. By joining with others to create change, rather than imposing it on them, the City can both inform and learn. A robust and continuing dialogue with the public will improve the City's understanding of what their needs and expectations are. Participation and Input

THE SURREY VISION

Because of the impact transport has on everyone's lives, it has a central part to play, affecting and supporting the broader Surrey Vision.

POLICY CONTEXT

This Strategic Plan sets out the priorities for transportation over the coming years. It has been developed with reference to the wider goals and objectives for Surrey. This broader City Vision is achieved by bringing together all the roles and responsibilities of the City under the Surrey Strategic Plan so that there can be a common, complementary and consistent direction in the services provided. Because of the impact transport has on everyone's lives, it has a central part to play, affecting and supporting the broader Surrey Vision.

SURREY'S OFFICIAL COMMUNITY PLAN

The Transportation Strategic Plan aligns with City priorities identified in other plans and strategies including the Crime Reduction Strategy, the Social Plan and the Employment Lands Strategy. The Official Community Plan (OCP) is perhaps the most important of these plans in terms of the cross-cutting strategies between it and the Transportation Strategic Plan. It guides land use management, economic and residential growth, transportation systems, community development, provision of City services and environmental protection. It provides the framework for which the other Community Plans are developed and which together deliver the objectives and priorities of the City. Of particular relevance are the following policies of the OCP:

- Manage Growth for Compact Communities
- Build a Sustainable Local Economy
- Enhance Image and Character
- ► Increase Transportation Choice
- Protect Natural Areas
- ► Improve the "Quality of Community"

SUSTAINABILITY

A sustainable vision for Surrey is vital for the City's future development and our vision for transportation includes economic, environmental and social goals. Increasingly the roles and responsibilities of the City need to be underpinned by sustainability. The concept of sustainable transportation promotes a balance between transportation's economic and social benefits and the need to protect the environment. One definition of sustainable transportation is:

Allowing individuals to meet their access needs in a manner that is safe, equitable, affordable and efficient, offering transportation choice that supports a vibrant economy, in a manner consistent with human and ecosystem health within and between generations

Surrey is putting sustainability at the front of its agenda. The City's Sustainability Charter has been created to act as an overarching policy document for the City and as such, this Strategic Plan has been structured in a way that aligns with the Charter goals and vision and many of the specific Charter objectives are explicitly identified. The Charter identifies the three pillars of sustainability: socio-cultural, economic and environmental. This Strategy has been established in a way that embeds these sustainability fundamentals into the 6 Core Principles and from this starting point, the social, economic and environmental aspects of transportation are repeatedly highlighted throughout the Plan.

THE TRANSPORTATION VISION

The Vision for the previous Transportation Plan described:

- busy, high density town centres
- priority given to the movement of transit on important routes
- more opportunities for cycling, walking and use of transit through good land use design
- ▶ fair and universal access to transportation
- ► an improving environment
- a well operated and properly maintained infrastructure
- ▶ an involved public

The policies, objectives and vision described within the Plan reflected an appreciation of the challenges directly associated with a dependence on the private car including:

- congestion
- the public health impacts of automobile use
- *community safety*
- ► sprawl

Many of the aspirations and objectives described in the previous Transportation Plan Vision are also seen within the 6 Core Principles of this Transportation Strategic Plan.

- 1. Effective and Efficient Management of the Road Network
- 2. More Travel Choice
- 3. Safer, Healthier Communities
- 4. Successful Local Economies
- 5. Protection of our Built and Natural Environment
- 6. Transportation Integration

The Surrey Vision

Our Vision

OUR VISION

The fundamental direction provided within the previous Transportation Plan remains valid and that is why it features within our Vision for this Plan as we continue to move forward.

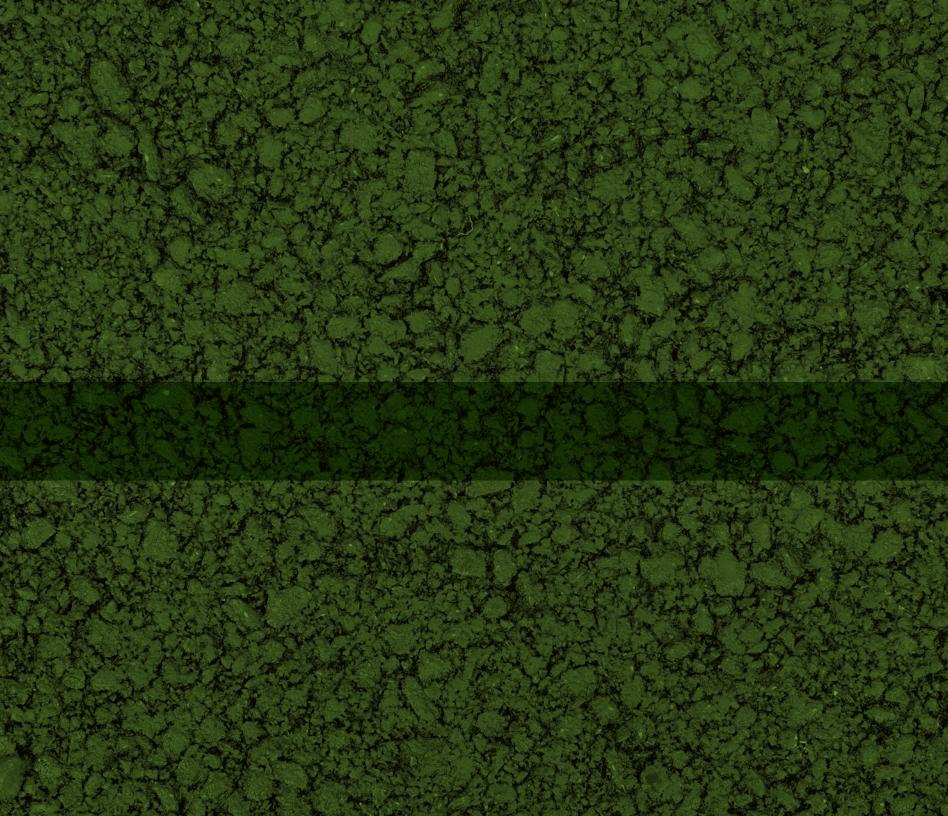
It is the Year 2031 and Surrey is an active and healthy community of 680,000 persons. Multi-use town centres are high density with mixed use along connecting corridors supporting transit that has operating priority. Compact, mixed use and connected communities emphasize a sense of place and have pedestrian, cycling and transit friendly design. Transit, walking, bicycle and road networks, the efficient movement of goods and services and parking are planned and co-ordinated throughout the City. The percentage of trips made by walking, cycling, transit and high occupancy autos continues to increase while the number of trips made by single occupant cars decreases. The average distance and travel time for peak hour commuter travel within Surrey continues to decline. The citizens, regardless of age, income or disability, enjoy universal access to transportation and the services, educational and recreational opportunities it provides. Transportation infrastructure is in a good state of repair and is adequately funded from stable and sustainable revenue sources. Surrey's elected representatives have the support of a well informed public in making decisions on urban development and the supporting transportation systems.

To help emphasize that transportation cannot be considered in isolation and that it is a means to an end this strategy summarizes the Vision in the following way:

- The transportation system is efficient, equitable, safe and sustainable.
- There is more choice and better access to transportation, land uses that emphasize compact and complete communities and a modern and well funded infrastructure.
- Our transportation planning will support safe, livable and healthy communities with good access to local jobs, education, services and recreation.
- We continue to move our transportation system forward by having an informed and engaged public, strong partnerships with others, supportive elected representatives and sustainable investment.

The Vision reflects Surrey's social, environmental, sustainability and economic aspirations that are all key parts of our overall community objectives. The Vision expresses important directions and outcomes rather than specific projects or services. It seeks to establish what we will achieve and why. The detailed how, who, when and where will be addressed through the various policies, programs, funding systems and performance indicators that will be developed from the Plan.

The Vision reflects Surrey's social, environmental, sustainability and economic aspirations that are all key parts of our overall community objectives.



PART 2 STRATEGIC DIRECTIONS

MEETING THE CHALLENGE

MADE IN SURREY

The Strategic Plan is intended to be responsive and applicable to Surrey. It has been produced by the City and has been influenced and shaped by the people, businesses and transport providers in Surrey. However, Surrey's Vision needs to complement broader federal and regional policy if it is to be successfully delivered. Through the Plan, the City will seek to provide sustainable improvements in the economy, promote better access to employment, health and leisure, protect and improve the local environment and support a high quality of life. To achieve this, the Transportation and other strategic plans of the City need to be based on partnership working, co-ordination between service delivery, sufficient and sustainable funding, responsible and efficient use of resources and meaningful input from users.

STRATEGY DEVELOPMENT

This Transportation Strategic Plan looks at how the City will deliver the transportation system for the years ahead. It sets out the wider agenda for mobility and deals with principles and objectives while at the same time establishing the framework for translating these into an implementation program, with appropriate targets and objectives in the future.

Local transportation planning, perhaps more than any other area of local policy needs to be "joined-up" with the wider planning and policy framework. This means that transport needs to be set in a wider context and must consider linkages with land use planning, economic development, social planning and community safety. It also means that the City's approach to transport needs to link with the plans of others. Transportation is not an end in itself. It exists to support the achievement of other, wider policy objectives, such as economic development, social inclusion, reduced levels of crime and improvements to health and fitness. These factors all ultimately lead to improved quality of life for the people of Surrey.

The development of the Transportation Strategy consists of a number of stages:

STAGE 1 The 6 Key Principles

The 6 Principles are one of the constant features of this Plan and provide the plain English, understandable explanation of what the City is seeking to achieve. These principles provide the framework for understanding the issues and describing the strategic aims and implementation approaches contained within it.

- Effective and efficient management of the road network
- More travel choice
- Safer, healthier communities
- Successful local economies
- Protection of our built and natural environment
- Transportation integration

STAGE 2 Context, Issues and Priorities

Through the feedback we received from our consultation and our analysis we have organized the main issues and priorities that the Plan needs to respond to. Although a large range of issues have been raised the following broad themes have been identified:

- Operating, preserving and modernizing infrastructure
- Accessibility and social inclusion
- **•** Road and community safety, health and quality of life
- Congestion, economic activity, sustainable growth and development and goods movement
- Environmental impact and protection
- ► Integration with land use
- Funding
- Personal attitudes and choices

STAGE 3 The Transportation Vision

Having established our Plan structure and identified the issues and priorities, a clear explanation of where we want the City to be in the future has been developed. This Vision reflects Surrey's social, environmental, sustainability and economic aspirations that are all key parts of our overall community objectives and which are contained within the 6 guiding principles. It responds to our assessment of the issues and the public priorities highlighted in our consultation. The Vision describes important directions and outcomes rather than specific projects or services seeking to establish what we will achieve and why.

It describes a City where the transportation system is efficient, safe, available to everyone, promoting good access to employment and services, supported by livable, healthy and sustainable neighbourhoods which emphasize compact and complete communities and which is underpinned by secure and sufficient funding and a supportive public. This balanced approach to transportation will create an equitable, needs-based transportation system that will reduce the reliance on the car...

STAGE 4 Transportation Strategies

OVERALL TRANSPORTATION STRATEGY The Balanced Approach

The overall strategy direction emphasizes a balanced approach that provides for wider travel choice and opportunity through improved walking, cycling and transit, while acknowledging the need for improved roads and accommodating sustainable levels of traffic growth. The balanced approach to the Plan combines many elements to improve the transportation system including:

- Recognition of the need to invest in improving and maintaining the road network
- Continued planning and investment in the development of the road network
- Strongly advocating for greatly improved transit at all levels and supporting it by providing the necessary framework and conditions
- Improving facilities for pedestrians, cyclists and transit users
- Facilitating wider accessibility to transportation for everyone
- Giving attention to tackling the number and severity of collisions
- Managing the impact of traffic on residential neighbourhoods

This balanced approach to transportation will create an equitable, needs-based transportation system that will seek to reduce the reliance on the car, promote social inclusion, encourage a buoyant local economy and help protect our environment.

STRATEGIC TRANSPORTATION OBJECTIVES

Strategic objectives have been developed for each one of the 6 Key Principles. They reflect the issues identified by stakeholders and the public, the Vision and the identified priorities of the different stakeholders. They provide a clear indication of what the City wants to deliver. Sometimes, these are translated into discrete projects and initiatives identified in the 10 Year Servicing Plan but they will also be achieved through the day to day activities and decisions of planners and engineers, through collaboration with transport providers and those responsible for enforcement and public education.

The Strategic Transportation Objectives are:

- Efficiently manage, maintain and improve the transportation system for all modes
- Promote alternative and sustainable travel choice and provide better accessibility to jobs, education, health and recreation for all
- Improve community safety, health and quality of life
- Reduce congestion and support the sustainable economic development and vitality of Surrey
- Reduce the impacts of transportation on the built and natural environment
- Promote integration between transportation and land use to reduce the need to travel and support trips by more sustainable modes

For these to be achieved we will:

- **Establish stable and secure funding**
- ► Measure performance towards identified targets

STAGE 5 Service Delivery Plans

Having developed the Strategic Transportation Objectives, these must be turned into actions. These provide the level of detail needed around which to organize future planning effort, and particular programs and projects. In doing so, the City needs to consider the funding realities and the demands on individual budgets. To help ensure the resources we have are used well and provide the best value, a system of performance management will be developed which will measure our success in achieving targets.

RELATIONSHIP BETWEEN THE DIFFERENT STRATEGIC OBJECTIVES

For the City, there are a number of key challenges that relate back to efficient maintenance and management. The Strategic Objective to efficiently manage, maintain and improve the transportation network is a long-term challenge and forms the basic building block of all the other strategies. Failure to preserve and modernize our transportation infrastructure will act as an obstacle to delivering the other strategies. Our Strategic Objectives are therefore presented in a way that clearly identifies this underpinning role in achieving the other Strategic Objectives.



This inter-relationship will be reflected in how the Capital Program is organized. The quality and suitability of the network is basic to the successful implementation of our strategies so this must be reflected in the program of projects and programs undertaken. The following structure has been developed which will help with the prioritization of capital investment:

Core Needs - These are our priority, taking first call on our resources and would include repair and maintenance of our assets and safety Projects

City Networks - City networks consist of the key road, bus, cycle and pedestrian networks. The program includes road and intersection improvements, strategic bicycle network projects and strategic transit infrastructure improvement projects

Local Programs - Local measures will be promoted for neighbourhoods, building on the City Networks to reflect community priorities. The program includes responding to the impact of traffic on local roads, safety around schools, improved pedestrian facilities and environmental improvements A fundamental theme within this Plan has been identifying and promoting integration with broader policy.

ACHIEVING BALANCE

It is important to note that the Strategic Plan embodies a variety of objectives that represent the interests and aspirations of a wide range of individuals, stakeholders and constituents. Because of this, there may be apparent conflicts among the Strategic Objectives. The Plan must therefore be flexible enough to accommodate these differences and seek to promote a balanced approach and be able to accommodate compromise and trade-offs. Unfortunately, there is currently no Provincial Transportation Strategy and therefore more "local" transportation planning is often undertaken in the absence of an overarching Provincial context. This can lead to disjointed planning so Surrey will therefore support the development of a Provincial Transportation Strategy. Even without this, there is much commonality between our policies and those of other levels of government.

SHARED PRIORITIES AND CROSS CUTTING POLICIES

A fundamental theme within this Plan has been identifying and promoting integration with broader policy. There are commonalities between this Plan and the other policies and objectives that exist within the City and with other agencies and levels of government. Although these are discrete policies, there are Shared Priorities. It is important to understand these because they show the links between regional and national policy and how the Transportation Strategic Plan provides a good fit and complements the higher-level plans. To help ensure these are properly responded to, the policies and strategies contained within the Transportation Strategic Plan have not been developed in isolation. By relating the Plan back to the Sustainability Charter and the OCP, we have made sure that there is consistency between the policies contained within this Plan and the other policies and objectives of the City as well as the policies of other levels of government and agencies.

The shared priorities are:

- Better interaction between land use and transportation
- Promotion of the equitable provision and improved choice within transport
- Funding of infrastructure and improvements
- Managing growth in a sustainable manner by supporting compact, vibrant, transit friendly communities
- Reducing congestion in support of more efficient goods movement and economic vitality
- Supporting sustainable Economic Development
- Reducing the environmental impact of transportation
- Enhancing livability, quality of life, a sense of space and safer roads – healthy neighbourhoods
- Increasing attention to managing both the supply of and demand for transportation

SUMMARY OF STRATEGIC TRANSPORTATION OBJECTIVES

PRINCIPLE Effective and Efficient Network Management			
Strategic ObjectiveEfficiently manage, maintain and improve the transportation system for all modesMaintain and improve the transportation network and promote best value in asset maintenance and rehabilitation Establish secure, sustainable and predictable funding streams			
PRINCIPLE More Travel Choice			
Strategic Objective Promote alternative and sustainable travel choice and provide better accessibility to jobs, education, health and recreation for all	 Promote alternatives to the car by improving walking and cycling opportunities Promote alternatives to the car by improving public transit Protect and improve transportation infrastructure in support of strategic transit expansion and upgrades Integrate behavioral change initiatives with sustainable transport infrastructure and service developments 		
PRINCIPLE Safer, Healthier Communities			
Strategic Objective Improve community safety, health and quality of life	 Undertake physical measures to improve the safety of all road users Promote a culture of road and community safety into all aspects of engineering service provision Raise awareness of road safety issues and encourage safer travel by working in partnership with others Reduce crime and the fear of crime Improve community health and the quality of life 		
PRINCIPLE Successful Local Economies			
Strategic Objective Reduce congestion and support the sustainable economic development and vitality of Surrey	 Promote access to employment lands Provide a transportation infrastructure and support transportation services that foster sustainable economic growth Relieve congestion Influence and manage transportation demand and supply 		
PRINCIPLE Protection of Our Built and Natural Environment			
Strategic Objective Reduce the impacts of transportation on the built and natural environment	 Reduce the impacts of road freight Reduce the impacts of traffic on air quality and climate change Reduce the impacts of traffic on water quality, vegetation and trees and land consumption 		
PRINCIPLE Transportation Integration			
Strategic Objective Promote integration between transportation and land use to reduce the need for travel and support trips by more sustainable modes	 Co-ordinate transit investment with land use planning in support of high density, mixed use and compact development Promote integrated and universal transportation elements within development projects so that they can be accessed by and in turn support means other than the private car Improve and enhance Surrey's town centres and City Centre by promoting integration with transit 		

EFFECTIVE AND EFFICIENT NETWORK MANAGEMENT

STRATEGIC OBJECTIVE

Efficiently manage, maintain and improve the transportation system for all modes

BACKGROUND

While users don't often think about the road network, this is the largest and most visible asset the City owns. In a City experiencing population growth of about 1000 people a month the size of the asset is also growing and what we already have is under increasing and competing demands. The road network is the backbone of how people, goods and services move around the City and it also represents the largest public open space the City has. The way this asset is managed and maintained is hugely important. Keeping this infrastructure "fit for purpose" is a 24 hour job and costs many millions of dollars. It falls to the City to take responsibility for it and in practice, the City's largest task is its management and maintenance. Effective and timely maintenance of the system helps reduce the burden of costs in the future. The road network is used daily by people who live and work in the City and it is fundamental to the local economic, social and environmental well-being of the City.

It is important that there is a clear appreciation of the fundamental importance that a well operated and maintained transportation infrastructure has in the delivery of the City's transportation vision and the increasing demands of in keeping assets working efficiently, serviceable and preserved for the future. As public expectations rise, the amount of infrastructure that is in place expands and the use and demands placed upon it increase. The proportion of budgetary demands from the total "transportation pot" will likely have to increase if the City is to avoid a deteriorating transportation infrastructure in the future.

CONSULTATION FEEDBACK, PRIORITIES AND INFLUENCES

- Need for increased expenditure on maintenance to deal with potholes and rough road surfaces
- ▶ Improved winter maintenance
- Rapid deterioration of road pavements after periods of extreme winter weather
- ► A public perception of "piecemeal" approach to road maintenance
- Strong public support for completion of the planned road network
- Noise caused by truck traffic on uneven and potholed roads
- Rutting of some traffic lanes where high truck volumes exist
- ▶ Increasing complexity of the transportation system and the need for new and innovative engineering approaches
- Concerns about a potential growing infrastructure deficit in the future without investment now

The road network is the backbone of how people, goods and services move around the City and it also represents the largest public open space the City has.

SERVICE OBJECTIVES 1. Maintain and improve the transportation

asset and promote best value in asset maintenance and rehabilitation

Any investment in the highway network for maintenance needs to be carefully planned, efficiently managed and supported by effective technical and management systems. The City carries out programs of road inspections, pavement condition surveys and employs a Pavement Management System (PMS) that predicts how the road pavement deteriorates over time in response to varying levels of traffic loading. This helps determine how much investment is needed and when. The PMS seeks to maximize the service life of the pavement asset at the least cost and where and how to invest the rehabilitation budget to preserve the road system most effectively and efficiently. Adopting this "life cycle cost" approach helps ensure the City achieves best value from the resources it employs and that intervention is not undertaken on a "worst first" basis. The funding decisions and intervention strategies we implement need to relate to the future so that we can avoid building an infrastructure funding deficit for later generations.

The statistics of the road network are impressive in their numbers and in the complexity they imply. Since the last Transportation Plan was produced, the City has grown considerably and so too has the amount of transportation infrastructure. In the very simplest terms, the City is responsible for maintaining and managing a range of assets which include:

	2007
ARTERIAL ROADS (INC. MRN ROADS)	378 km
COLLECTOR ROADS	212 km
LOCAL ROADS	1,045 km
CITY MULTI USE PATHWAYS	52 km
There is also supporting infrastructure includi	ng:
STREET LIGHTS	25,000
TRAFFIC SIGNALS	300
BRIDGES AND STRUCTURES	49
TRAFFIC SIGNS	70,000

Actions for Change:

- Target structural maintenance to those roads in greatest need and with the largest traffic volumes on the basis of road hierarchy and condition
- Employ life cycle costing principles when identifying rehabilitation projects and programs
- > Promote life cycle costing principles within all traffic, safety and road improvement projects
- Examine alternative and cost effective maintenance strategies
- Maximize the efficient use of existing infrastructure
- Develop road and transport asset management plans
- Service re-design to undertake all levels of preventative maintenance and replacement through the City pavement management system (PMS)
- Establish systems to compensate for impact on pavement life due to trucking activity
- **b** Establish a GIS database for improved tracking and management of infrastructure
- Enhance and expand monitoring systems to better direct maintenance programs and achieve value for money



2. Establish secure, sustainable and predictable funding streams

Construction materials, labour and maintenance costs are currently rising at a faster rate than general inflation. The current energy market, of which bitumen, used in paving, is a by-product, continues to escalate in price making disproportionate demands on funding levels. The cost of lighting our streets and running our traffic signals is going up as are the costs of other materials such as concrete and labour. The expectation is that these costs will continue to rise more steeply than other costs.

This Strategy creates a framework to explore secure additional transportation funding and increase revenue from other sources. Part Four of the Transportation Strategy examines funding issues in more detail. The City will lessen its dependence on property taxes and seek a greater proportion of funding directly from users. The increased use of "user pay" principles will allow the City to more effectively influence individual travel choices through the price of transportation.

Actions for Change:

- Develop a Transportation Utility Charge
- Strengthen the "User Pay" component of transportation funding
- Establish additional and alternative funding sources for transportation.

STRATEGIC OBJECTIVE

Efficiently manage, maintain and improve the transportation system for all modes

ISSUES & INFLUENCES	OBJECTIVE	ACTIONS FOR CHANGE	OUTCOMES
 New legislative responsibilities (PSAB) for asset management & absence of AM plans Growing asset and inventory Broader range of inventory in response to increasing complexity of transportation system Aging infrastructure and increasing asset. Increased maintenance liabilities with new traffic, safety and road improvement projects Maintaining condition of arterial and collector road network but deterioration of local road network Funding gap Rising labour and material costs Rising energy costs Increasing claims and litigation 	1. Maintain and improve the asset of the transport network and promote best value in asset maintenance and rehabilitation	 Develop road and transport asset management plans Service re-design to undertake all levels of preventative pavement maintenance and replacement through PMS Establish a GIS database for improved tracking and management of infrastructure Enhance and expand monitoring systems to better direct maintenance programs and achieve value for money Target structural maintenance to those roads in greatest need and with the largest traffic volumes on the basis of road hierarchy and condition Employ life cycle costing principles when identifying rehabilitation projects and programs Promote life cycle costing principles within all traffic, safety and road improvement projects Examine alternative and cost effective maintenance strategies Maximize efficient use of existing infrastructure Establish systems to compensate for impact on pavement life due to trucking activity 	 Reduced proportion of roads, bridges and structures where structural maintenance needs to be considered Improved understanding of funding needs and priorities Increased asset life and reduced proportion of roads where structural maintenance needs to be considered A reduced (or at least stabilized) demand on revenue maintenance funds from new projects Improved efficiencies and better value for money Increased user satisfaction with the condition of roads
	2. Establish secure, sustainable and predictable funding streams	 Develop Transportation Utility charge Strengthen the user pay component of transportation funding Establish additional and alternative funding sources for transportation 	 Confidence and certainty for longer term investment Reduced greenhouse gas emissions and lower energy costs Reduced number of personal injury claims arising from maintenance issues Reduced longer term funding liabilities and needs

effective and efficient network management

The City will lessen its dependence on property taxes and seek a greater proportion of funding directly from users.

IMPROVED ACCESSIBILITY

STRATEGIC OBJECTIVE

Promote **alternative** and **sustainable** travel choice and provide better **accessibility** to jobs, education, health and recreation for all

BACKGROUND

The main purpose of transportation is to provide mobility and access for people to services, goods and other people. Surrey has a very diverse population with diverse needs that are not all being met by the current transportation system. Access to safe, convenient and affordable transportation helps ensure that everyone can participate fully and equally within society. The transportation system should properly address the needs of all the population regardless of age, ability or economic circumstances. This desire for full, universal access, while often presented in terms of the needs of some, has benefits for all. At one time or another, everyone will have experienced some level of mobility impairment, so good access to transport, in the very broadest sense, is relevant to everyone.

Recent surveys in the City have shown that about 12% of residents do not have regular access to a car. That equates to about 50,000 people. This means that many residents are reliant on others with cars, or alternative modes of transport such as transit, taxis, walking or cycling. The current level of transit services in the City, combined with the comparatively high costs, has left some individuals with limited or inflexible travel choices. The City believes that access to opportunity and the ability to fully participate in society should not be dependent on access to a car.

CONSULTATION FEEDBACK, PRIORITIES AND INFLUENCES

- Poor transit service identified as the number 1 issue during public consultation
- 88% of public agreed that "Transit should be as convenient and attractive as driving a car on City Roads"
- ▶ About 12% (about 50,000) of Surrey's residents do not have unhindered access to a car
- ► High level of public priority given to sidewalk provision
- Incomplete road network and lack of cross-city connectivity for transit services
- City's Greenway network over 50% complete

The City believes that access to opportunity and the ability to fully participate in society should not be dependent on access to a car.

Hierarchy of Consideration

The planned order for transportation consideration is:

- 1. Walking
- 2. Transit
- 3. Bicycles
- 4. Commercial Traffic and Trucks
- 5. High Occupancy Vehicles
- 6. Single Occupancy Vehicles

The hierarchy is used to help ensure that the needs and safety of each group of road users are sequentially considered when a project is prepared, that each group of users is given proper consideration and that the measures will not make existing conditions worse for more vulnerable transport users. Each and every time a new roadway is designed or an existing one improved, opportunities for improving walking and cycling will be routinely reviewed. The approach does not mean that users at the top of the list will always receive the most beneficial treatment. It is recognized that it is often not possible to provide for all users' demands and compromises have to be made. The weight given to the different user groups will recognize:

- The nature of the location involved
- The relative levels of competing demands for facilities
- The ability of the transport network to accommodate the range of facilities involved
- The funding resources available for the measures under consideration

Taxis

Taxis provide a demand responsive, flexible, 24-hour, door to door service and it is important that they play their full role in helping to meet the needs of both current and potential passengers in Surrey. The services provided by taxis support the principles of the Transportation Strategy by:

- Offering accessibility for those with mobility or sight disabilities
- Providing affordable travel choice for people otherwise excluded, the ability to get to work, enjoy cultural and leisure opportunities and access health and education services
- Integrating with other modes of transportation as the often first or last link in a journey

As part of our efforts to support the role of taxis in the transportation system the City will:

Promote the accommodation of taxis within the design of major development proposals, advocate for the integration of taxis within major transit projects promoted by other agencies and consider the needs of taxis within the on-street environment, mindful of the often high level of competition for loading, transit and parking.

Accessibility Issues

When looking at accessibility there are key areas of opportunity and service provision that are relevant especially access to health care, education, employment, food shopping, leisure and recreation. There are some very basic issues that need addressing. For example, being able to arrive in time for hospital appointments and returning home in a reasonable time, the inability to access the full range of employment opportunities due to misalignment between transit services and shift times or the difficulty of carrying more than a few items of food or multiple strollers. Not owning a car, whether by necessity or choice, should not limit the ability of the people of Surrey to access opportunities.

more travel choice

A street that is safe and comfortable to use and which offers interest and enjoyment is not just good for encouraging walking or cycling, it is also good at enhancing the quality of the local environment ...

SERVICE OBJECTIVES

1. Promote alternatives to the car by improving walking and cycling opportunities

The integration of cycling and walking into our wider transport operations and land use decision making forms the key means by which these modes will be used to improve accessibility. We will increase our consideration of the needs of cyclists and pedestrians in transport projects, and will follow this through into other City services such as land development, spatial planning and parks and greenways developments. For example, the Engineering and Parks, Recreation and Culture Departments will work together to update and complete the new Greenway/Blueway Master Plan. Providing safe and comfortable routes to schools will encourage good habits to be established early on in children's lives and in support of the Community Safety Principle, lighting of important walking links will be examined. Promoting walking and cycling is not just a means to an end. By doing so, individuals see health benefits and community cohesiveness and character is enhanced.

Getting the environment right at street level and creating a sense of place will make people want to get out of their cars in order to walk or cycle to the local shops or collect their children from school. Although opportunities are greater at some locations than others, if our streets are thought of as the largest and most heavily used public space the City is responsible for, we can begin to better understand the importance of getting that physical environment right. A street that is safe and comfortable to use and which offers interest and enjoyment is not just good for encouraging walking or cycling, it is also good at enhancing the quality of the local environment, creating and strengthening community cohesion and reducing the fear of crime.

More needs to be done to continue to further develop cycling and walking as real transportation alternatives. The City will undertake a review of the "Bicycle Blueprint" with input from Metro Vancouver and TransLink and update the Pedestrian Master Plan. These will become key supporting and fully integrated components of our Strategic Plan.

Actions for Change:

- Continue implementation of the strategic bicycle network
- Update the Pedestrian Master Plan
- Develop School Safety Zone and Safe routes to school programs
- Update the Bicycle Blueprint

Improved Accessibility

2. Promote alternatives to the car by improving transit

The City expects to see year on year improvements to transit being provided by other agencies and supported by higher levels of government. The main mechanism for the delivery of transit within the City is TransLink's South of Fraser Area Transit Plan (SoFA TP). This provides a detailed 7 year investment and delivery plan and for the first time it has included a long range Vision for transit in the South of Fraser area. The SoFA TP represents a very important planning tool for the City as it gives us the necessary guidance to start improving specific corridors where improvements are planned and it confirms where the City needs to be strategically protecting and improving the transportation systems to accommodate future improvements including Rapidbus and rail.

Through the SoFA TP, Surrey residents and workers will for the first time begin to get a level of transportation choice that is fairer and more equitable when compared with the rest of Metro Vancouver, and with the additional funding resources from the Provincial Government we can anticipate moving towards this in the shorter term. In the first 5 to 7 years of the SoFA Plan, there will be an almost doubling of the number of buses operating within the City. These will be used to improve frequencies on existing routes, extend the hours of operation of routes and introduce of entirely new routes to improve the "fineness" of the transit network. However, the medium and longer term transit expansion plans are currently not funded and without a major review of how Transit is funded by TransLink and higher levels of Government, Surrey and the region could experience a reduction in transit service. This would undermine many core policies of the Transportation Strategic Plan, seriously impacting on our ability to make change. Therefore, the City will actively participate in the debate on TransLink funding and continue to strongly advocate for the full and rapid implementation of all aspects of the SoFA Plan.

Actions for Change:

- Support the expansion and effectiveness of the TransLink Frequent Transit Network by developing a Transit Improvement Plan in partnership with TransLink (including transit priority measures and improvements to transit infrastructure)
- Provide an appropriate level of transit infrastructure funding to match the expansion of bus services within the City identified within the SoFA Transit Plan
- Give priority to transit infrastructure at locations where competition for curb space exists
- Jointly identify and implement an annual program of localized road improvements at transit "pinch points" with TransLink
- Work with TransLink to establish future alignment, technology and timing of implementation of rail within the City
- Actively participate in funding discussions with TransLink, the Provincial and Federal governments to ensure the full and timely implementation of the SoFA TP

3. Protect and improve corridors and infrastructure in support of strategic transportation expansion and upgrades

Surrey does not provide the transit services within the City but that does not mean that we have a passive role to play in supporting better and higher level transit. With a growing population the City needs to plan for significant expansions and enhancements to the transit system. Through our policies to provide transit priority and safe and comfortable bus stop infrastructure, we recognize the fundamental role of buses in the transit system. Our policies to complete missing road links and establish a finer grid network also provide the framework for more improved transit penetration throughout the City. Buses will always remain the backbone of any system. However, in themselves, traditional bus services cannot meet the growing demands for alternatives to the car. Higher-level transit service will come to Surrey and the City must be ready for this. By protecting the required road right-of-way on strategic corridors throughout the City including King George Highway, Fraser Highway and 104 Avenue and alignments such as for the urban rail, we will ensure that rapid transit can extend further into Surrey.

The City can also ensure other rights-of-way are protected for future transportation use and we will identify opportunities within developments for establishing walkways and cycleways on the alignment of utility corridors where this is practical.

Actions for Change:

- Protect strategic corridors for future rail service
- Complete the strategic road network and promote a finer grid system for transit service
- Seek additional road Right-of-Way on strategic corridors for future rapid bus or rail transit service through the land development process
- Collaborate with the transit service providers to deliver the implementation of the supporting infrastructure including transit exchanges, maintenance facilities and rail yards
- Identify and promote the use of utility corridors for walking and cycling routes

4. Integrate behavioral change initiatives with sustainable transport infrastructure and service developments

Progress will only be achieved by individuals making changes in how they think about transportation. Traditionally, the City has promoted a program of capital projects identified within the 10 Year Servicing Plan aimed at maintaining and improving the road, walking, cycling and transit networks. When it comes to promoting the use of more sustainable forms of transport, it is recognized that it is insufficient simply to build the infrastructure and expect people to use it. The City does produce publicity material to let people know of the alternatives to the car, such as the Bike Map but there is opportunity for a more proactive role in promoting travel awareness and "smarter choices". Through this Strategic Plan the City will start to develop an expanded program of initiatives to influence travel behavior towards more sustainable and responsible travel decisions.

Actions for Change:

- Through the sustainability development check list encourage developments to incorporate travel plan initiatives
- Encourage adoption of school travel plans
- Undertake travel awareness and behavioural change campaigns under the banner of "Travelwise Surrey".
- Advocate for personalized travel planning recognizing the value of promoting tailored travel plans for individuals

• With a growing population the City needs to plan for significant expansions and enhancements to the transit system.

STRATEGIC OBJECTIVE

Promote **alternative** and **sustainable** travel choice and provide better **accessibility** to jobs, education, health and recreation for all

ISSUES & INFLUENCES	OBJECTIVE	ACTIONS FOR CHANGE	OUTCOMES
 Sidewalk provision an identified priority for the public Bicycle network incomplete and piecemeal Currently low modal share Role of taxis in the transportation "chain" 	1. Promote alternatives to the car by improving access to walking and cycling opportunities	 Develop School Safety Zone and Safe Routes to school program Review and update Bicycle Blueprint Continue implementation of the strategic bicycle network Review and update Pedestrian Master Plan 	 Reduced use of SOVs particularly at peak periods Increased transit modal share Increased number of children traveling to school by non car modes Improved road safety awareness for children Increased cycling usage Increased walking trips
 External funding mechanisms inequitable and uncertain Competition for funding Low transit use associated with insufficient level of service and choice Inequitable transit service within Metro Vancouver Provincial transit plan funding Strong public desire for improved transit service Some transit priority measures likely to reduce level of service for private car users Rising costs of operating private cars 	2. Promote alternatives to the car by improving public transit	 Support the expansion and effectiveness of the TransLink FTN by developing a Transit Improvement Plan Provide an appropriate level of transit infrastructure funding to match the expansion of bus services within the City identified within the SoFA TP Give priority to transit infrastructure at sites where competition for curb space exists Jointly identify and implement an annual program of localized road improvements at transit "pinch points" with Translink Work with TransLink to establish future alignment, technology and timing of rail within the City Actively participate in funding discussions with TransLink, the Provincial and Federal Governments to ensure the full and timely implementation of the SoFA TP 	 Increased transit modal share Improved "people moving" efficiency of road network Improved access to employment, health, education and leisure opportunities for all Increased profile for Transit Reduced congestion
 Insing tosts of operating private cars Competition for funding Heavy reliance on City to successfully negotiate transit improvements through land development Enhanced funding and statutory powers for TransLink Heavy reliance on City to successfully negotiate adoption of travel planning through land development process 	3. Protect and improve transportation infrastructure in support of strategic transit expansion and upgrades	 Protect strategic corridors for future rail service Complete strategic road network and promote finer grid system for transit service Seek additional right-of-way on strategic corridors for future rapid bus or rail transit service through the land development process Collaborate with the transit service providers to deliver the implementation of the supporting infrastructure including transit exchanges, maintenance facilities and rail yards Identify and promote use of utility corridors for walking & cycling 	 Increased cycling usage Increased transit modal share Increased profile for Transit Increased walking trips Improved access to employment Increased network flexibility and options
 "Soft" engineering measures reliant on revenue funding Opportunities for partnership working with other agencies 	4. Integrate behavioral change initiatives with sustainable transport infrastructure and service developments	 Through the Sustainability development check list encourage developments to incorporate travel planning initiatives Encourage adoption of school travel plans Undertake travel awareness campaigns under the banner of "Travelwise Surrey" Advocate for personalized travel planning recognizing the value of promoting tailored travel plans for individuals 	 Increased cycling usage Increased transit modal share Increased profile for Transit Increased walking trips Improved access to employment

COMMUNITY SAFETY AND HEALTH

Road and community safety can be an emotive subject and many agencies are working to a common goal.

STRATEGIC OBJECTIVE

Improve community safety, health and quality of life

BACKGROUND

Promoting safer communities is a key element of the Transportation Strategic Plan. It looks at safety in terms of the risk of being hurt when using our roads but also in terms of personal safety and security. The Community Safety and Health strategy seeks to address these issues by providing a clear framework around which we can improve casualty reduction, maintaining and improving street and sidewalk lighting, examining an expanded role for the City to be involved in road safety education and publicity and by continuing to work closely with partners, especially the police but also health providers, ICBC, TransLink and the Surrey School Board.

Our consultations have identified road safety as important to local people. ICBC data from 2005 shows that there were approximately 2700 injuries plus 30 fatalities on Surrey's roads. The consequences of being involved in a collision to an individual or the friends and relatives of someone can be equally as devastating. In addition to this, we know that the collisions taking place on our roads are resulting in significant costs to society and the local economy through increased insurance premiums, delays to traffic, costs for the emergency services, both short and long term health care and rehabilitation costs as well as individuals being "non productive" to society through injury. Through this strategy we will begin the process of establishing a more consistent approach to how road safety is incorporated into our decision-making.

safer, healthier communities

Improving road safety is achieved by targeting the issue from different directions. The City has taken the lead in making Surrey a better and safer place to live and do business. Our Crime Reduction Strategy contains a series of bold and innovative strategies to tackle the root causes of crime and begin to put in place more effective and streamlined mechanisms and structures to deal with offenders. The strategy is intended to reduce crime and the fear of crime.

The Transportation Strategy can provide support by influencing:

- Safety accessing public transit.
- Safety in our Town and City Centres.
- **b** Location and design of transit exchanges
- Caretaking of streets and condition of streets

Road and community safety can be an emotive subject and many agencies are working to a common goal. There are existing long established methods of working together with other agencies to bring about a reduction in casualties. Consultation identified the public felt that road safety was primarily the responsibility of other agencies such as the police and ICBC. This has highlighted a gap in people's knowledge of what the City does with respect to road safety and the need to raise the profile of collision reduction in the work we do.

CONSULTATION FEEDBACK, PRIORITIES AND INFLUENCES

- Lack of understanding of City role in road safety
- Pedestrian Safety identified as a priority within City Centre
- Lack of respect for traffic laws speeding, red light running, not stopping for pedestrians at crossings.
 49% of public identify need for "considerable or lots of improvement"
- Need for more driver education and enforcement of traffic laws a public priority
- Truck traffic off of truck routes
- Neighbourhood traffic speeds but mixed response to traffic calming – although supported some concerns about too much being introduced.
- Opportunities for an expanded City role in promoting healthier travel modes
- Pedestrian safety and absence of sidewalks. 71% of public described safe sidewalks and walking paths as "important" or "very important"
- Crosswalk safety signing, lighting, pavement markings
- Personal safety when accessing transit at night

Actions for Change:

- Develop a School Safety Zone program and best routes to school program
- Introduce a speed management program and speed limit review
- Use signal co-ordination to support more consistent and safer driving speeds along corridors
- Improve pedestrian routes to and from transit facilities
- Target road maintenance at sites where we know intervention will reduce collisions
- Establish a discrete local safety projects program

SERVICE OBJECTIVES

1. Undertake physical measures to improve safety of all road users

Casualty reduction and prevention already forms a component of the work undertaken by the City at every level. For example, the designs of large capital projects are checked to make sure they are safe, reviews to speed limits, the promotion of projects in and around schools and our on-going maintenance of signs and pavement markings also helps keep the road system safe. Even with this attention, we know that collisions still occur and there is a need to respond to these through continued engineering and education efforts.

Consultation showed a desire to reduce the effects of excessive or inappropriate speeds in our communities. There is increasing research and evidence showing the relationship between speed and the risk of collision and the severity of injury. Giving attention to managing speeds is important. Vulnerable road users such as cyclists and pedestrians are particularly exposed to the effects of speed. Pedestrians have a 90% chance of survival if involved in a collision with a vehicle traveling at about 30 km/h, decreasing to a 10% chance of survival at just over 60 km/h.

High traffic speeds also contribute to a poor environment for pedestrians and cyclists and can promote community severance. There is a need to critically look at our speed limits to ensure they are appropriate for the particular road conditions and surrounding environment. Although there is a need to be flexible in how speed limits are applied, there is an equally important desire to maintain consistency so that drivers can readily understand what a speed limit is and why it has been introduced. By implication, this means that any review might include raising the speed limit in some locations although this is appropriate, if there is to be driver understanding and respect for the speed limits and a realistic chance for the police to enforce them. As part of our reviews we will seek to support the speed limits along corridors by promoting signal progression based on the posted speed limit. Our review of speed limits will be guided by the outcome of the National Speed Limit Review of which the City is an active member of the steering group. In conjunction with the implementation of any speed limit changes, we will seek the active participation of our partners including ICBC and the RCMP to promote and help educate the public on the importance of respecting speed limits.

A Local Safety Project Program will become the established method of delivering cost effective casualty reduction and will be a key element of our Community Safety Strategy. Safety projects are by their very nature reactive to local safety problems and aim to improve the safety of existing infrastructure. Analysis of casualty trends can identify the priority issues that need dealing with. However, there are a number of challenges that need to be addressed in relation to the form of the ICBC data and the City will engage with the agency to seek ways to enhance the value and usability of it.

Promote a culture of road and community safety into all aspects of engineering services

The transportation system represents the largest City controlled public space. As such there are huge responsibilities and equally large opportunities to improve how this space is safe and comfortable to use. The way the City designs, implements and maintains its transportation infrastructure dictates to a large degree how safe it is. The City will apply a more structured approach in its design, management, operations and maintenance systems with respect to road safety.

There are opportunities for the City to undertake a more organized and proactive role in collision reduction through its maintenance activities (for example, by aligning its program of repaving projects with locations where there has been a history of collisions involving skidding or loss of control). Potentially modest increases in resources towards signing and pavement markings repair and replacement can offer very large rates of return in terms of collision reductions. This has already been recognized by the City though its enhancement of pavement marking capabilities allowing more frequent re-painting cycles. These added road safety benefits demonstrate the good value for money that the maintenance program can provide.

Actions for Change:

- "Audit" major rehabilitation projects for casualty reduction benefits
- Recognize the contribution of well maintained street lighting, pavement markings and signing to collision reduction
- Promote "safety audit" of larger design assignments
- Enhance relevant contracts to include safety elements (street lighting, bus stop shelters, graffiti and traffic signals)
- Use collision data to help inform need for additional "non maintenance" works within projects eg: medians, pedestrian barrier fencing or anti-skid paving
- Formalize casualty reduction and road safety projects and programs within a new Road Safety Strategy

The transportation system represents the largest City controlled public space.

The Surrey RCMP is committed to reducing both the levels of road casualties and the levels of crime.

3. Raise awareness of road safety and encourage safer travel in partnership with others

Many collisions occur because road users are either not trained to meet the challenges of modern driving or because their behaviour leads to greater risks for themselves and other road users. Although road safety is generally viewed as a responsibility of other agencies the City should and will take a more proactive and collaborative role to support the current strategies and initiatives undertaken by our partners. There are existing long established methods of working together with other agencies to bring about a reduction in casualties. The benefits of inter-agency working with respect to road safety cannot be overestimated and the City needs to make full use of the opportunities provided. By identifying common priorities, partnership working can deliver more than the individual agencies are able to. Examples include promoting safer driving and speed reduction campaigns.

As the prime agency responsible for the design, implementation, maintenance and operation of the transportation network as well as the enforcement of many of the rules and regulations associated with it, the City is a central player. The City already has in place a Traffic Advisory Safety Committee consisting of City staff, the Police, ICBC and the School Board to consider safety issues particularly in and around schools. The role of this Committee will be reviewed and its scope expanded to further improve the level of collaboration and coordination between the City and other agencies. The Surrey RCMP is committed to reducing both the levels of road casualties and the levels of crime. The City has close liaison and working practices with the police and they provide essential education and enforcement to help reduce speeding, maintain respect for traffic laws, reduce aggressive and dangerous driving, drinking and driving, promotion of the use of seatbelts and ensuring vehicles are kept in a roadworthy condition. Much of the current enforcement activities are targeted at high crash locations. Through the Traffic Safety Committee, the City will work with the police in achieving a more pro-active and expanded speed enforcement role.

Actions for Change:

- Develop promotion of road safety educational programs with others
- Further develop working in partnership with others to address road safety issues
- Work with ICBC to improve the accuracy of collision data
- Advocate for the use of more technology, including red light cameras on the road network to assist enforcement at high crash locations
- Advocate for a review of the use of speed cameras on the road network at high crash locations
- Seek an expansion of the traffic and speed enforcement role of the RCMP

The City will work collaboratively with TransLink to plan the new transit exchanges that will accompany service expansion within Surrey to ensure they are safe, attractive and welcoming places...

4. Reduce Crime and the Fear of Crime

Our town centres are also the location of some of the larger transit exchanges and these can become a focus for anti-social behaviour. The City will work collaboratively with TransLink to plan the new transit exchanges that will accompany service expansion within Surrey to ensure they are safe, attractive and welcoming places and fully integrated within the town centres. We know that the presence of graffiti creates a very negative perception of an environment and that its quick and complete removal is hugely important in creating safe, accessible and active town centres.

Actions for Change:

- Through the Local Safety Project Program and Crime Reduction Manager and other agencies, identify locations for new and improved street lighting
- Develop a strategy to improve lighting and other relevant assets on key walking and cycling connections within communities
- Introduce accessible, integrated and safe bus stop infrastructure
- Promote improved safety and security at transit facilities in liaison with transit operators
- Ensure adequacy of graffiti removal contract to ensure timely removal of graffiti

Sater, healthier communities



5. Improve Community Health and Quality of Life

There is a growing recognition of the role that transport planning can play in improving health and quality of life. It includes the health protective value of increased physical activity and a recognition of the positive social function that streets have in local communities.

We recognize the role that transportation has in the health of our residents and we know that an active lifestyle can play a big part in reducing certain illnesses such as Type 2 diabetes, heart disease and strokes. For example, approximately 25% of all deaths in Surrey are associated with heart disease. The City knows that active transportation choices such as walking and cycling can make a big contribution to individual health.

Actions for Change:

- Promote an annual program of community identified traffic calming projects
- Expand the Engineering Department's contribution to the promotion of active and healthy living programs such as "go for 20" in partnership with the Parks, Recreation and Culture Department and health service providers to promote an active and healthy City using our transportation system

STRATEGIC OBJECTIVE

Improve community safety, health and quality of life

ISSUES & INFLUENCES	OBJECTIVE	ACTIONS FOR CHANGE	OUTCOMES
 2700 people killed or injured on Surrey roads each year Vulnerable road users, especially cyclists and pedestrians are more likely to suffer more severe injuries in a collision Huge societal costs associated with deaths and injury on the roads Competition for funding Potential for service re-design to improve delivery Public perceptions of road safety responsibilities Cross cutting, multi disciplinary approach needed 	 Undertake physical measures to improve safety of all road users Promote a culture 	 Develop School Safety Zone program and Best Routes to school program Undertake City-wide speed limit review. Develop a program of speed limit changes and supporting measures including corridor signal progression plans Improve pedestrian routes used to access transit Align road maintenance at sites where there is an issue Develop a local safety projects program "Audit" major rehabilitation projects for casualty reduction. 	 Fewer people killed or injured in road traffic collisions Increased number of children traveling to school by non-car modes Better road safety awareness for children Improved community quality of life Increased transit, walking and cycling trips "Added Value" to maintenance projects Fewer people killed or injured in road traffic collisions
	of road and community safety into all aspects of engineering service provision	 Recognize the contribution projects on casadiry reduction. Recognize the contribution of well maintained street lighting, pavement markings and signing to collision reduction Enhance relevant contracts to include safety considerations (street lighting, bus shelter, graffiti and traffic signal contracts) Use collision data to help determin the need for additional "non maintenance" works within projects 	 Increased transit, walking and cycling trips "Added Value" to maintenance projects Improved community quality of life Less crime and the fear of crime in town centres and on transit Improved economic viability and vitality of town centres Reduced criminal damage and anti-social behaviour
 Reducing crime identified as a City priority Historical high demand for neighbourhood speed management but support for use of traffic calming not universal Increased delays on strategic road network leading to more neighbourhood "rat running" 	3. Raise awareness of road safety issues and encourage safer travel by working in partnership with others	 Develop road safety educational programs with partners Continue to develop partnership working to address road safety issues Work with ICBC to improve accuracy of collision data Support the use of new technology, including red light and speed cameras on the road network to assist enforcement at high crash locations Advocate for a review of the use of speed cameras on the road network at high crash locations Advocate for an expansion of the enforcement role of the RCMP 	 Improved public road safety awareness Fewer people killed or injured in road traffic collisions Increased cycling usage Increased user satisfaction
	4. Reduce crime and the fear of crime	 Work with the Crime Reduction Manager and other agencies to help identify program of lighting improvements on key walking and cycling connections within communities including routes to transit and local services Introduce accessible, integrated and safe bus stop infrastructure in conjunction with our Transit Improvement Plan Liaise with transit operators on transit security Ensure adequacy of graffiti removal contract to ensure timely removal of graffiti 	 Fewer people being the victims of crime and feeling unsafe when in town or city centres and when using public transit Increased transit modal share Increased walking and cycling trips Improved access to employment, health, education and leisure Increased user satisfaction Improved economic viability and vitality for town centres Reduced criminal damage and anti-social behaviour
	5. Improve community health and quality of life	 Promote an annual program of community identified traffic calming projects Expand contribution to the promotion of active and healthy living programs such as "go for 20" in partnership with Parks, Recreation & Culture Department and health service providers using our transportation system 	 Improved neighbourhood quality of life Reduced impact of traffic on communities

Community Safety and Health

EFFICIENT ECONOMY

STRATEGIC OBJECTIVE

Reduce congestion and support the sustainable economic development and vitality of Surrey

BACKGROUND

Transportation plays a significant role in supporting Surrey's economic development. The businesses and institutions located within our employment lands are valued as being critical to the short, medium and long term economic and social viability of the City. Within Surrey, we want to see a modern, responsive and efficient transportation system that is capable of supporting the competitiveness of our businesses and boost productivity and access to local, national and international markets. The emphasis of the City's Economic Development Strategy is to maintain Surrey's economic position within the region while supporting local business growth. The existing and future capacity, location and alignment of transportation infrastructure within Surrey and within the Metro Vancouver region are critical factors which will influence the demand for employment lands.

Transportation itself cannot create growth, but a high performing system is an important supporter of sustained economic prosperity. Historically, new connections have played a pivotal role in economic growth. This remains the case in Surrey where new employment lands are being developed, but increasingly in our maturing transportation system, it is constraints within the existing system that will likely have a significant impact. Our location in the region means that our transportation corridors are the arteries for both domestic and international trade. Surrey's transportation system needs to provide the right connections, in the right places to support the level of mobility that is needed for the economic growth.

There are over 18,000 businesses in Surrey and there is a diversified industrial manufacturing and service base. Surrey has over 20 million sq. ft. of industrial buildings that represents almost 45% of the total inventory for the Fraser Valley. Over the next 25 years, some 106,000 jobs are expected to be created, requiring an estimated 47 million sq. ft. of building space on about 2,850 acres of land. This represents a 57% increase over the 4,960 acres in use today.

successful local economies

Within Surrey, we want to see a modern, responsive and efficient transportation system that is capable of supporting the competitiveness of our businesses and boost productivity and access to local, national and international markets.

Efficient Economy

The growth of Surrey within the region has made the City a central, and no longer peripheral, location in transportation terms. Changes in the regional road network are being undertaken by higher levels of Government. These are intended to both improve existing deficiencies in the system and position the region to support an expanding Pacific Gateway role. The importance of the Gateway to Canada's international trade and travel will increase as the Asia Pacific economies expand their shares of world trade. Any changes in regional transportation infrastructure are important for Surrey and we recognize that any widening of Highway 1, twinning of the Port Mann Bridge, replacement of Pattullo Bridge, the new Golden Ears bridge, improvements to Highways 10 and 15, the South Fraser Perimeter Road or extensions to rapid transit will all impact on Surrey, particularly the north. Guildford especially, which could be poised to become one of the most important locations within the City for employment. In addition, Surrey is impacted by:

The Vancouver Fraser Port. This is Canada's largest port and within Surrey, the Fraser Surrey Docks is a deep sea facility on the Fraser River. About 25 million tonnes of cargo with an economic impact of over \$9 billion, moves through Fraser Port each year. This volume has made Fraser Surrey Docks the third largest port in Canada. Locally, more than 350 businesses depend on the port and port related activities. They provide more than 11,000 direct and indirect jobs and annually contribute about \$65 million into the local economy.

Container traffic in the region is projected to increase significantly with the expansion of the Port. At this time there are about two million containers moved through the region annually and this is expected to rise to six million by 2020. A third of containers and other freight movements are moved by truck and the increase in freight movements will therefore have an impact on truck traffic movements on the Major Road Network and Provincial highways. **International border crossings.** The Pacific Highway and Peace Arch Pacific Highway #15 crossing is the second largest commercial crossing between Canada and the United States.

Surrey's location within the Pacific Gateway and with two major international crossing points means that our transportation corridors are the arteries of both domestic and international trade. Surrey is part of a globalized economy. Surrey's transportation system needs to provide the right connections, in the right places to support the journeys that matter to economic performance.

 The growth of Surrey within the region has made the City a central, and no longer peripheral, location in transportation terms.

CONGESTION ISSUES

Congestion already exists on parts of our network and will increase rapidly if nothing is done. With the policies and programs identified in this Strategy, the rate of traffic growth and congestion can be reduced. Although it wastes the time of all road users, importantly, success for business depends on the ability to move goods and services efficiently and safely. Our strategy to tackle congestion therefore sits alongside our work on supporting sustainable economic and land use development. These businesses are looking for relief from delays and given the adverse effects that congestion has on economic activity and the quality of life, measures must be adopted to improve the movement of traffic and the flow of people on our transportation network. Modeling of the City's road network based on current anticipated development types and patterns has shown that projected growth in travel will require massive investment in the road network to accommodate the additional car traffic. The scale of infrastructure improvements required in the coming years is broadly known but there is a recognition that expansion of the road system alone will not be sufficient to service all the traffic growth being predicted. No other high growth City in the world has been able to eliminate congestion by focusing just on road building. Although it will remain the major part of the City's efforts for some years, continued road building and widening cannot be sustained indefinitely in terms of funding, managing the demand for movement or the impact on the environment. There is a growing case for investment in the existing infrastructure to achieve maximum value for money. "Better use" measures such as elimination of temporary traffic obstructions or more efficient traffic signals can offer large returns on investment. Smaller improvement projects that unblock pinch points, infrastructure projects that support transit and targeted international gateway infrastructure access projects are likely to offer the highest returns. The importance of the City's land use planning in reducing the demand for travel, supporting fewer car trips and lower car ownership and generating more walking, transit and cycling trips as a means of delaying or negating the need for additional road infrastructure is central.

Congestion Related Problems

A reduction in congestion could make a big contribution to our ability to make changes in our other priorities including:

- Improving air quality.
- Improving the safety of vulnerable road users.
- Enhancing transit reliability.
- Reducing maintenance costs.

Consultation Feedback, Priorities and Influences

- Congestion and intersection delays Highest ranked improvement area during public consultation with 71% of respondents describing this as needing "considerable or lots of improvement"
- Inefficient operation of traffic signals
- Piecemeal approach to road construction
- Completion of the planned road network a priority for the public. Completion of east-west routes a priority for the business community
- ▶ Impact of truck traffic
- Rapid growth of the City and concerns over the ability to provide the supporting transportation infrastructure
- Increasing importance of Vancouver Port
- Pacific Gateway influence

SERVICE OBJECTIVES

1. Promote access to employment lands

The City will advocate for good transit access to all economic lands, both existing and planned, that meets the particular needs of shift working and unusual hours to ensure there is full opportunity provided to local employment opportunities and to reduce the reliance on the private car. The City's objective of providing one job per resident worker from the current 0.63 jobs per worker will help reduce long distance travel and support the local economy.

In areas such as Campbell Heights with a build-out employment population estimated to be 40,000 there are obvious advantages in providing good transit to reduce the traffic generation. Some of the current employment lands are located adjacent to residential areas within walking and cycling distance. Through the Accessibility Strategy, the City will ensure that safe and convenient walking and cycling opportunities are provided.

2. Provide transportation infrastructure and services that support sustainable economic growth

The City is often characterized only in terms of expansion of the built environment. However, increasing attention needs to be given to intensification of those parts of the City that are already developed but which will experience redevelopment in the future. Within this context, as land uses change and higher densities are encouraged all forms of traffic, whether walking, cycling, cars or transit become increasingly important. These transportation corridors provide an important resource in terms of supporting employment related growth and routes such as King George Highway, 104 Avenue between the City Centre and Guildford, Fraser Highway and Scott Road present important opportunities to promote mixed use development. With redevelopment opportunities, reviews of our Official Community Plan and Neighbourhood Concept Plans, intensification of land use in areas already serviced by transportation or where there is an expectation of improvements is the best way to maximize existing infrastructure to accommodate employment demand. Within the City Centre for example, where transit services are already good and expected to improve greatly, 48% of the land is underutilized and 20% is vacant.

Actions for Change:

- Improve the strategic road network that services economic lands
- Support Provincial projects to improve road access to major employment land
- Promote road network improvements that support economic development and which reduce the impact of trucks on communities
- Promote a grid road network and completion of missing road network links
- Support spatial planning of new development to better align with alternative transportation opportunities

Actions for Change:

- Advocate for improved transit service to planned and existing employment areas
- Introduce fully accessible, integrated, safe and comfortable bus stop infrastructure linked to TransLink Frequent Transit Network
- Review Truck Route Network

Contributions from Land Development

The contribution development makes to transportation infrastructure is most evident in those areas where new roads are being built to service a particular development site. However, there is significant potential for the development community to undertake its responsibilities on reducing the impact of its development traffic through the provision of infrastructure to help ease congestion based on a road system that incorporates an internal network providing routing options and connectivity. Add to this the attention that could be given to parking provision, the accessibility of development to transit and the walkability of a development, and the contribution of good spatial and site specific development in dealing with congestion can start to be seen as the most important and the fundamental shaping tool available to the City to deal with traffic growth and congestion.

Efficient Economy



3. Relieve congestion

Transit is a key consideration in Surrey's congestion issues and is part of the solution. As part of our future transit improvement plans contained within the "Improved Accessibility" Strategy we will seek to improve transit infrastructure and priority in partnership with other agencies.

Often the most effective and most appropriate response to a local congestion problem, even taking into account the alternative approaches available to us, will be to remove a traffic "bottleneck". This should always be approached with some caution. We are not seeking to encourage the use of cars by people who have a realistic alternative. In any case, research indicates that the amount of time spent traveling has been constant over the years and the main effect of easing the flow of traffic, whether by relieving congestion or building increased road capacity, is not to save time but to enable longer distances to be traveled. Even so, this in itself is not justification for leaving untouched any situation that is affecting transit reliability, local air quality and the general economic well being of an area.

Efficient operation of the transportation system

The City supports the use of regional road tolling to help reduce the demand for car travel. Tolling of individual pieces of the strategic network is not supported as this introduces inequity and potentially increases traffic demands on other parts of the road network where tolling is absent. For example, the long periods of congestion currently occurring on Highway 1 through Surrey suggest a considerable latent demand for access to Highway 1. While the widening to the Highway will divert traffic from parallel routes in Surrey to Highway 1, it will also add traffic to connecting routes such as 152 Street, 160 Street and 104 Avenue. Tolling of the Port Mann bridge will also create demand for a free or cheaper alternative. Some of this will be taken up by transit but the City would expect Pattullo Bridge to experience traffic increases of approximately 11% in the morning. The City will advocate for the Province to introduce broader tolling systems.

Traffic Signals and Intelligent Transportation Systems

One of the most powerful tools in the movement of traffic within the City is the operation of its over 300 traffic signals. In addition, improvements to the efficient operation of our system help delay the need for expensive new road infrastructure. Traffic signals are found mainly on the busier collector and arterial roads with upgrades offering significant benefits and at a very low cost. Regular reviews and monitoring of the performance of the traffic signals can offer large improvements.

Examples of initiatives include:

- Using the signal controllers as traffic counters to receive real time traffic information as a basis for updating signal timing plans
- Half of the City's traffic signals are now monitored in real time, remotely from a central location allowing engineers to quickly respond to problems such as damage to detector loops or loss of power
- Investment in UPS (Uninterrupted Power Supply) for strategically important signals to improve the robustness of the system during emergencies and power outages
- When replacing old signal controllers the City is investing in replacements capable of multiple functions
- Expanding the number of routes to benefit from traffic signal co-ordination plans
- Increased frequency of updates for signal coordination plans and individual signal timing plans to better reflect changing traffic conditions

Improvements in traffic signals is technology driven. Investment in new, modern equipment and the latest technologies will move the contribution of traffic signals in relieving congestion a step further. In addition, the more sophisticated the traffic signals the greater the ability to offer more opportunities to other road users such as transit or pedestrians. The City will continue to improve and modernize the traffic signal system and seek to make full use of the existing signal capabilities already available. We will actively examine opportunities for further investment in the most modern and capable signal infrastructure and technology and create a Traffic Signal Operations Centre. This centre will co-ordinate system monitoring, tracking of signal equipment faults and the dispatch of repair crews, assessment of the operation and performance of individual signals as well as optimizing movement along major traffic corridors.

Temporary Obstructions and Traffic Management

The City has a responsibility to ensure the safe and efficient movement of people and traffic on our road network. This responsibility is impacted upon by many external and internal influences and has links with the City's day-to-day maintenance activities and the coherence of our traffic management activities. The road network is significantly impacted upon by the numerous land developments, road improvement and construction projects taking place, with controls over truck traffic, lane and road closures often impacting on other traffic sometimes at those times when traffic levels are at their highest. As the City grows and the roads get busier, the need for a coordinated and strategic approach to managing temporary traffic obstructions associated with maintenance and construction is needed. On a typical working day, there are some 100 active construction sites generating traffic on and off the public road system. A new roadworks and temporary obstructions management policy will be developed backed up by enhanced inspection and enforcement.

Actions for Change:

- Concentrate site specific traffic flow enhancements at intersections where there are identified congestion issues
- Implement a program of intersection and link improvements to assist traffic flows.
 When on TransLink FTN routes incorporate transit priority measures
- Plan for strategic road improvements and protect necessary road right-of-way based on traffic modeling
- Develop a corridor based traffic signal improvement program. When on the TransLink FTN, include transit priority measures
- Make better use of traffic signal technology already available to the City
- **Create a Traffic Signal Operations Centre**
- Develop an ITS Investment Strategy for improved traffic signal operation
- Promote localized improvements at transit "pinch points"
- Establish a roadworks and temporary obstructions management policy

Efficient Economy

We are not seeking to encourage the use of cars by people who have a realistic alternative.

3. Influence and manage transportation demand and supply

Transportation Demand Management (TDM) is the use of policies, programs and services to influence whether, why, when, where and how people travel. The most important outcomes of TDM measures are new behaviours which result in modal shift (more people choosing to walk, cycle, take transit, carshare), trip reductions (more people choosing to telework, shop online or conduct personal business by telephone), driving reductions (more drivers making fewer trips by car and to closer destinations) and time and route shifting (more drivers changing the time or route of their driving trip to avoid traffic congestion).

There are two main categories of TDM initiatives:

- Education, promotion and outreach raise individuals' awareness, improve their understanding and build positive attitudes about sustainable transportation choices.
- Incentives and disincentives offer tangible benefits or disbenefits related to personal travel choices, making those choices more or less attractive.

Benefits of TDM

TDM makes personal travel decisions more efficient. Many drivers make travel decisions based on poor information and a lack of experience with nonautomobile options. TDM improves their awareness and understanding of options and their willingness to try them.

- TDM maximizes the City's return on infrastructure spending. Studies have shown that good information can significantly increase ridership on new transit infrastructure and services.
- TDM makes the most of the City's current assets. It saves people money and time by helping them make efficient travel decisions and it improves health by promoting physical activity and less-polluting modes. It benefits employers by increasing productivity, reducing parking costs, and helping to attract and retain workers. It promotes economic development by reducing congestion and enhancing worker mobility.
- TDM is a versatile and flexible management tool that can be customized for specific transportation users (e.g. car commuters), destinations (e.g. major hospitals), travel modes (e.g. cyclists), travel corridors (e.g. a congested major arterial road), trip purposes (e.g. school) or specific timeframes (e.g. major events). There is also the potential for them to be delivered in terms of months, rather than years.
- TDM initiatives have multimodal benefits. They recognize that people see alternatives to driving as a "suite" of options. Non-drivers tend to be transit users, carpoolers, pedestrians or cyclists at different times, for different reasons.
- TDM works at the scale of individuals but incrementally has huge power across a community. If every person who drives to work in a community decided to leave their car at home just one day a month, the 5% reduction in commuter traffic could significantly ease daily congestion.

The City has started to develop and apply a number of TDM tools but as the list above shows there is potential for many and varied approaches to be used, and across many of the City's transportation areas of influence and decision making. Whether it is our role in promoting smarter travel choices or encouraging car co-ops in support of parking relaxations near transit corridors, the introduction of more walking and cycling infrastructure or promotive of transit priority, to better organize and maximize the opportunities that exist with TDM, we will develop a "toolbox" of policies and approaches that can be used. This will be undertaken in collaboration with the development of the planned sustainability checklist arising out of the Sustainability Charter.

Parking – On street. The City regards parking management as one of the important demand management tools available. The use of comprehensive on-street parking controls including paid parking, allied with the provision of transportation alternatives, represents a powerful tool in influencing travel demand and is a core component in achieving success with transit-oriented development. Parking has also been identified within other strategy areas given its prominence in helping ensure the free and safe movement of traffic, the buffer effect it can provide between moving traffic and pedestrians and its role in supporting shops and businesses.

Parking - Off street. Parking cannot be looked at in isolation and in the same way that on-street parking is an important tool for the City to use to encourage alternative transportation use, so to is the supply of street parking off street. Where development is located close to good transit services or where there is a good balance of mixed use residential development with close access to services and employment, the need for a car is reduced. To reduce reliance on the car, the City will develop revised off-street parking standards related to the availability of alternative transportation choices. A suite of other incentives will be expanded to include supporting reductions in parking in conjunction with for example, car co-op initiatives, encouraging shared use of parking facilities where peak demands are at different times or the City securing a cash in lieu contribution for any relaxation in parking to be used for investment in transit, walking, cycling or City managed parking infrastructure.

 Education, promotion and outreach raise individuals' awareness, improve their understanding and build positive attitudes about sustainable transportation choices.

MANAGING SUPPLY

In the same way that TDM has increased in importance as a means of shaping demand to meet available supply, so too has the notion of supply management become important as a way to make the most of the existing facilities. Maximizing their current capacity is vital to deferring or eliminating the need for very costly new or wider roads at some locations. One principle that has been very evident in this Strategic Plan has been the need to properly manage and maintain the transportation assets. At the heart of any supply management strategies is the realization that building infrastructure is just the first step toward a successful transportation system. Once these are built, facilities must be maintained and renewed, optimized for financial efficiency and effective levels of service.

Actions for Change:

- Develop a TDM "toolbox"
- Develop on-street parking management strategy and reorganize service delivery structures
- Develop new development parking standards to include maximum parking stalls allowed
- Promote walking and cycling through application of sustainability development checklist
- Promote transit facilities and linkages through developer checklist

At the heart of any supply management strategies is the realization that building infrastructure is just the first step toward a successful transportation system.

STRATEGIC OBJECTIVE

Reduce congestion and support the sustainable economic development and vitality of Surrey

ISSUES & INFLUENCES	OBJECTIVE	ACTIONS FOR CHANGE	OUTCOMES
 Low transit use associated with insufficient level of service and choice Strategic location of Surrey in regional road network Growth of Vancouver Port and increased rail freight Competition for funding 	1. Promote access to employment lands	 Advocate for improved transit service to planned and existing employment lands Introduce fully accessible, integrated, safe and comfortable bus stop infrastructure linked to TransLink FTN Review truck route network 	 Increased transit modal share Improved "people moving" efficiency of road network Improved access to local employment (including shift and night time working) Reduced congestion Improved viability and success of employment lands Improved truck access and moving efficiency
 Influence of Pacific Gateway Traffic growth and increasing car ownership Impact of congestion on transit reliability and therefore constrains travel choice Tensions between economic growth and development and traffic growth Cost and sustainability of road 	2. Provide transportation infrastructure and services that foster sustainable economic growth.	 Improve strategic roads that service economic lands Support Provincial projects to improve road access to major employment land (such as SFPR, New South Westminster & Port Kells) Promote a grid road network and completion of missing links Promote road network improvements that support economic development and which reduce impact of truck traffic on communities Support spatial planning of new development that better aligns with alternative transportation opportunities. 	 Reduced use of SOVs particularly at peak periods Increased transit modal share Improved access to local employment Improved viability and success of employment lands
 building Growing appreciation of "best use" of existing infrastructure 	3. Relieve congestion	 Concentrate site specific traffic flow enhancements at intersections where there are identified congestion issues Undertake intersection and link upgrades and widenings to assist traffic flows Incorporate transit priority measures on FTN routes. Develop corridor based traffic signal improvement strategy. When on FTN, to include transit priority measures Make better use of traffic signal technology available to City Develop an ITS Investment Strategy for improved traffic signal operation Create a traffic signal operations centre Plan for strategic road improvements and protect necessary road RoW based on traffic modeling. Establish a roadworks and temporary obstructions management policy 	 Increased transit modal share Increased profile for transit Increased walking trips Improved access to local employment Reduced congestion Improved reliability Quicker access to local employment
	4. Influence and manage transportation demand and supply	 Develop TDM "toolbox" Develop on-street parking management plan Develop new development parking standard maximums Promote walking and cycling through application of development sustainability checklist Promote transit facilities and linkages through develpes checklist 	 Reduced congestion Increased cycling usage Increased transit modal share Increased profile for transit Increased walking trips

PROTECTION OF THE ENVIRONMENT

STRATEGIC OBJECTIVE

Reduce the impacts of transportation on the built and natural environment

BACKGROUND

Surrey's natural environment is a high priority of its residents. The importance of dealing with growth in ways that minimize environmental impacts is vital and this is a particular challenge with respect to transportation.

Transportation has led to huge improvements in our quality of life by giving individuals unprecedented opportunities to travel and access better jobs and a better life. These improvements and advances come at a cost. Transportation can affect the landscape, generate noise and pollution that can affect human health and the environment and the majority of fuels that power the transportation systems are the cause of significant greenhouse emissions. They are the single largest source of air pollution in the Lower Mainland with on average, about 75% of carbon monoxide emissions, 48% of nitrogen oxides and 13% of atmospheric particulates produced by cars, trucks and buses. Athough newer cars create far less air pollution than older ones, unless the region can rely less on the car, the increase in the number of cars and the longer time taken to travel could mean that these improvements will be overtaken by the overall increase in vehicle emissions.

Car and truck traffic is estimated to contribute about 35% of greenhouse gas emissions in Metro Vancouver and it is the fastest rising source of carbon emissions within the economy. Addressing the challenge of climate change has important implications for any long-term transportation strategy. Air pollution and the reduction in greenhouse gases must be tackled on a regional basis and transportation policies have a key part in helping reduce the long term trend. Very large increases in the use of transit are needed with supportive land uses allowing fewer and shorter trips, many of which can be by walking or cycling. However, the car can and will remain a legitimate and widely used form of transport and thus the focus must be given to encouraging fewer and shorter car trips.

The importance of dealing with growth in ways that minimize environmental impacts is vital and this is a particular challenge with respect to transportation.

Consultation, Feedback, Priorities and Influences

- Concerns over air quality issues associated with traffic
- Truck movements and the management of goods movement
- Disruption to wildlife corridors
- Loss of trees
- ▶ Impact on watercourses
- Recognition of contribution of transportation to greenhouse gas emissions
- Need for heavy and sustained investment in transit
- Need to defer and minimize road and traffic growth adjacent to agricultural lands

SERVICE OBJECTIVES

1. Reduce the impacts of road freight

In a modern economy, trucks are the main form of movement of the majority of our goods and services. Our town centres rely on truck access to service the stores and businesses with the goods we need and expect. The transportation of goods is an important activity within Surrey and the surrounding region. Freight is carried by road, rail, sea and air and often a combination of these. Surrey's central location within the region means that it has an important role in supporting this activity which in turn creates wealth and economic growth both for the City and for the region. In addition, a significant number of people are directly employed within the trucking industry or in services associated with it. Recognizing the important function of truck traffic in keeping the economy moving, we must manage the movement of trucks on our network so as to reduce the impact they can have on neighbourhoods and the wear and tear on our transportation infrastructure. The noise, pollution, and street level impact of trucks, especially where they are waiting or turning, can be significant.

One of the main outcomes of the last Transportation Plan was the introduction of the truck route network in response to the public concern over truck traffic. Public consultation through this Transportation Strategic Plan has identified that truck traffic remains a priority issue.

The movement of freight on our roads is a good barometer of economic well being. The trucks we see moving within and across the City carry the goods we rely on in a modern society. They are a fact of life and we must acknowledge their presence on our network especially on strategic routes and where mixed use development has been promoted. Nevertheless, there are a number of initiatives the City can undertake to reduce their impact.

Spatial and Land Use Planning

Freight issues are also very important in the consideration of spatial and land use planning. The servicing of new employment generating developments have specific requirements and issues. From a transport point of view the City wants to encourage development in locations served easily by rail and major roads thus aiming to reduce congestion and impact on local routes. The City also needs to encourage the provision of safe and secure service facilities and overnight truck parking in appropriate locations.

Actions for Change:

- Review and update the City Truck Route Network
- Develop Truck Parking Policy and work with the trucking industry to address the shortage of parking available
- Increase the enforcement and monitoring of truck licensing and routing as governed by the appropriate by-laws
- Support more short sea shipping for the movement of freight
- Support the increased use of rail for the movement of freight

2. Reduce the impacts of traffic on air quality and climatic change

Our strategies to reduce congestion in support of a healthy local economy also have an important contribution to make to the reduction of greenhouse gas emissions. The efficient and effective management of our transportation systems will keep traffic moving freely and smoothly, and minimizing delays and congestion improves vehicle efficiency and reduces carbon emissions. The level of contribution will depend on how pro-active the City is in giving priority to alternative transportation modes. The largest reductions in carbon emissions will be achieved by making difficult and potentially controversial choices such as giving more priority to cleaner and more efficient people moving modes even if this means cars are delayed.

The City will support transportation related measures that can reduce the emission of greenhouse gases that cause climate change. While future growth in population and traffic volumes may cause total vehicle emissions to rise, the City must achieve a reduction on a per capita basis. The Provincial Government's environmental legislation identifies transportation as an important contributor to greenhouse gas emissions. The municipalities have a key role to play in delivering the targets being set and Surrey as one of the fastest growing municipalities in Metro Vancouver, will likely be prominent. Fundamental to the City making a contribution to greenhouse gas emissions is the rapid development of high quality transit services which will allow the City to promote sustainable, compact and complete communities located along these corridors and nodes. Through the recommendations within the City's Sustainability Charter, in order to reduce the causes of climate change as much as possible and to mitigate the potential impacts, the City will work within the framework of the British Columbia Climate Change Charter and implement a Climate Change Action Plan.

Actions for Change:

- Promote alternatives to private car travel to help protect and enhance air quality and reduce carbon emissions.
- Reduce congestion
- Promote land use patterns that are oriented to transit services
- Maximize efficiency of existing infrastructure before providing new infrastructure
- Inform, involve and educate the public, identifying ways to reduce the impacts of transportation through measures such as anti-idling regulations, the promotion of fuel efficient vehicle purchases, driving habits, fuel choices and maintenance of vehicles.
- Adopt a leadership role in the reduction of greenhouse gas emissions by encouraging alternatives to driving for City employees and reducing the use of carbon emitting fuels in City vehicles
- Reduce Energy consumption for City Infrastructure

protection of our built and natural environment

Protection of the Environment

3. Reduce the impacts of traffic on water quality, vegetation, trees and land consumption

Water quality. Paved streets, driveways and parking lots prevent water from soaking into the ground and increase storm water volumes in the drainage system. In order to improve the quality of storm runoff and reduce its volume, the City will encourage shared parking facilities and reduce the size and number of parking lots, reduce the parking requirements for some land uses, encourage shared driveways and encourage the use of permeable surfaces for driveways and parking lots. Transportation facilities will incorporate storm water management principles and techniques into approved drainage designs. This will include for example opportunities to incorporate side street and parking lot bioswales to reduce flooding and erosion within river courses, while also filtering and trapping pollutants including silt, rubber compounds, heavy metals, oils and chemicals. Applying techniques such as this are part of a growing attention being given to the management of non point source pollution that also includes looking at the City's street sweeping and catchbasin cleaning regimes.

Green Streets. The City places high importance in greening our streets. Extensive planting and landscaping make them more attractive and comfortable for walking and cycling. They reduce heat at street level in the summer months and enhance the quality of the environment making neighbourhoods attractive and pleasant places to live. To stay in pristine condition they require regular maintenance and upkeep. Transportation infrastructure projects sometimes require the removal of natural vegetation and trees but measures can be taken to help avoid or mitigate this such as meandering sidewalks, altering the road or boulevard cross section and shifting the road alignment to protect significant trees. Extensive tree planting also takes place within all road projects.

Land consumption. Approximately 35% of Surrey is designated agricultural land and much is still actively farmed. To reduce the possible consumption of valuable agricultural and natural resource lands by transportation infrastructure expansion, the City will seek to maximize the efficient operation of existing facilities in tandem with any expansion of the system. A wide range of strategies will also help to increase the use of walking, cycling and transit which can move a given number of people in less physical space than needed for cars. Within Surrey there are a number of arterial roads that bisect the Agricultural Land Reserve (ALR) and with the growth of the City these are seeing significant increases in traffic volumes and increasing pressure for road widening. They also link with the regional road network including Highway 15 and Highway 10 both of which have undergone major upgrades as part of the Border Infrastructure Program. Some of these roads are located on poor sub soils and are susceptible to settlement and increased maintenance costs as traffic volumes increase. Therefore it is in the interest of the City to seek alternatives to mitigate the impacts of additional traffic on these routes. The City will promote projects on those corridors that will assist in reducing the need for significant expansion of some of the more vulnerable corridors.

Actions for Change:

- Incorporate best practices for storm water management design into transportation projects
- Develop systems to better manage non point source pollution including street sweeping and catch-basin cleaning cycles and the use of side street bioswales
- Continue to maximize enhanced greening guidelines for landscaping and tree planting in transportation corridors including roads, multi use paths and greenways. Streetscaping will be part of all reconstruction and construction projects for all City road projects
- Seek to maximize the efficient operation of existing road infrastructure to delay the need for expansion of roads within the ALR
- Incorporate meandering of sidewalks and modifying road cross sections and changing alignments, where possible, to help protect significant trees



STRATEGIC OBJECTIVE

Reduce the impacts of transportation on the built and natural environment

ISSUES & INFLUENCES	OBJECTIVE	ACTIONS FOR CHANGE	OUTCOMES
 Impact of truck traffic on Surrey road network including pavement maintenance, noise and vibration Loss of trees Funding constraints Impact on watercourses Traffic growth and increasing car ownership Concerns about air quality and transportation Impact of congestion on transit reliability and therefore constrains travel choice Need to reduce traffic growth on roads through ALR Tensions between economic growth and development and traffic growth Reduce the impacts of traffic on air quality and climate change Reduce the impacts of traffic on air quality and climate change Reduce the impacts of traffic on air quality with the effect on air quality and climate change Reduce the impacts of traffic on air quality with and development and traffic growth and development and traffic growth Reduce the impacts of traffic on simulation 	of road freight	 Review and update the City Truck Route Network Increase enforcement and monitoring of truck licensing and routing as governed by appropriate by-laws Support the increased use of rail for the movement of freight Support more short sea shipping for the movement of freight Develop Truck Parking Policy to address the shortage of parking available Reduce congestion Premeta alternative to spin to go truck to belo protect and ophone air 	Improved compliance with Truck Route Network Reduced impact of trucks in town centres Reduced congestion Reduced noise Improved customer satisfaction Less truck traffic Reduced use of SOVs particularly at peak periods Increased transit modal share
	 Promote alternatives to private car travel to help protect and enhance air quality and reduce carbon emissions Maximize the efficiency of existing infrastructure before providing new infrastructure Inform, involve & educate the public on reducing impact of transportation Adopt a leadership role in greenhouse gas reduction Reduce energy consumption for City infrastructure Promote land use patterns that are oriented to transit services 	 Increased transit modal share Increased cycling usage More walking Reduced energy costs for City Reduced greenhouse gas emissions Improved air quality Improved neighbourhood quality of life 	
	of traffic on water quality, vegetation and trees and land	 Incorporate best practices for storm water management design into transportation projects Develop systems to better manage non point source pollution Continue to maximize enhanced greening of transportation corridors Seek to maximize the efficient operation of existing road infrastructure Incorporate meandering of sidewalks and modifying road cross-sections to help protect significant trees 	 Reduced storm water run-off Improved street level environment for walking and cycling Enhanced image for City Reduced need for road widening projects

INTEGRATION OF TRANSPORTATION

With consistent application of land use policies much can be done to reduce the demand for travel generated by new development ...

STRATEGIC OBJECTIVE

Promote integration between transportation and land use to reduce the need to travel and support trips by more sustainable modes

BACKGROUND Transportation and Land Use – A fundamental relationship

As the responsible authority for guiding development, Surrey is a lead player in promoting sustainable, pedestrian, cycle and transit friendly communities that are well served by all aspects of the transportation system. Many aspects of travel demand such as origin and destination locations, lengths of trips and choice of mode are shaped by land use patterns so how and where we plan and direct growth in the City is probably the most fundamental determinant of the nature and scope of the transportation system we have and how far it will be possible to move towards reduced dependence on the car. With consistent application of land use policies much can be done to reduce the demand for travel generated by new development and it could well be expected to play the dominant role in determining how far it will be possible to achieve the Vision. With the high growth rates we see in Surrey, there is big potential to bring about a change in the status quo within the life of this Plan.

The location and form of development are principle determinants of the potential for urban transportation systems to be sustainable. At the same time, it is equally true that transportation systems greatly influence the form and nature of development. More recent development locations and forms respond to the pre-dominance of the private car and often the ability to access these by other means is greatly limited. With strategic, long term and sustained investment in alternative transportation, particularly transit, there is a huge potential for an alternative way for transportation to shape growth and the form of development. For these reasons, transportation and land use should be viewed as interdependent.

integration of transportation

SURREY'S OFFICIAL COMMUNITY PLAN

The Transportation Strategy structure, based on the care of our assets, providing choice and access to transportation, improving community safety, supporting sustainable economic development, protecting the environment and seeking integration with development is intended to align with the Official Community Plan (OCP).

OCP Policies

- ► Manage Growth for Compact Communities -Efficient land use allows the City to continue growing while preserving open space and agricultural areas. A compact form of development contains future growth within planned areas, provides new opportunities for housing, business and mobility, and allows more efficient use of City utilities, amenities and finances.
- Build a Sustainable Local Economy The OCP is committed to the concept of a complete City, built upon a strong and sustainable local economy, balanced with a high quality residential environment.
- Build Complete Communities Complete communities have a wide range of housing choices, opportunities for employment, recreation and leisure activities. Complete communities will be distinct in character, livable and energy efficient, and will be designed to be safe and attractive places for people to walk and cycle to a variety of places and activities close to home.
- Increase Transportation Choice The road network will be improved to move people and goods more effectively and to support the development pattern of businesses, workplace centres, towns and neighbourhoods in the City. Other improvements include providing alternatives to car travel such as bicycles, walking routes and better transit service.

Consultation Feedback, Priorities and Influences

- Support for shopping, schools and leisure to be located within walking and cycling distances of communities
- Need for more integration of transit with new development
- Transportation servicing and road building.
 Perception of City "catching up"
- Incomplete road network and missing links. Public support for completion of planned road network
- Current poor transit services but an expectation of change through the South of Fraser Area Transit Plan and development of the Frequent Transit Network (FTN)
- OCP Update
- Rapid growth of City and the lag in transit provision with missed opportunities for transit to shape growth

Land use changes are happening all the time and there are few places where this is more evident than in Surrey.

SERVICE OBJECTIVES

1. Co-ordinate transit investment with land use planning in support of high density, mixed use and compact development

Land use changes are happening all the time and there are few places where this is more evident than in Surrey. Opportunities are now becoming available and will continue over the life of this Strategy to fit our development patterns with transit improvements. This is a two-way relationship with development both supporting transit and transit shaping development. The City has for many years been protecting the necessary road right-ofway on strategic corridors to allow future improvements to transit. With the confirmation of the TransLink Frequent Transit Network (FTN), incorporating local bus services, rapid bus and future rail, there is now an expectation that this strategic planning can now start producing significant and rapid change. In addition, the City needs to update its OCP to formalize the relationship and identify those priority locations in need of new or updated NCPs which will align with the planned transit infrastructure improvements with a view to promoting compact, mixed use, transit oriented development along these transit corridors and at transit exchanges. Commitment from the transit service providers on the timing and levels of improvement is needed to provide the City and the development community certainty to plan for transit. Surrey believes the creation of the FTN is an important first step and we will continue to lobby for on-going expansion of the FTN network and advocate for transit upgrades to be delivered quickly to deal with the regional inequities, reflect the growth of the City

and allow planning and shaping of future development. Improvements to the bus system are important but future rail commitments are also critical in supporting the sustainable growth of the City. Through its partnering position within the strategic planning of future rapid bus and rail, we will seek commitments from TransLink for the early development of the alignment, technology and timing of future investments in the City. To help facilitate our collaboration on planning of these transit improvements as well as the co-ordination, management, monitoring and reporting of progress of all aspects of the SoFA Plan, the City will foster enhanced interorganizational relationships and working practices.

It is recognized that these nodes and corridors will also be places of economic activity and employment. Economic activity within the City incorporates a range of land use types and there is a need for intensification and redevelopment of existing centres and corridors with a mix of commercial, institutional, service and residential uses which have adequate amenities and existing or planned transit.

INTER AGENCY WORKING Linking Densities with Transit

While it is instinctively known that higher density and transit go hand in hand, the City needs to understand what land use characteristics are required for transit of a certain level to be promoted. The City is seeking to encourage more and better transit in Surrey and with Transit Service Indicators the City can better provide the conditions necessary for transit to be introduced. These indicators are based on:

- Population and employment densities
- Walking distances and times to access transit
- Minimum transit vehicle operating speeds

Applying these indicators creates a "contract" between the City and the transit providers and they provide a tool to better promote transit supportive development densities through the OCP and NCP planning processes and allow partnership-based promotion of transit in the future.

Actions for Change:

- Collaborate with TransLink to establish Transit Service Indicators to help inform future land use decision making
- Densities identified within the future OCP update and new and updated NCPs to incorporate and reflect all levels of the Frequent Transit Network and future BRT and rail lines
- Establish a joint City/TransLink steering group to co-ordinate transit implementation

2. Promote integrated and universal transportation elements within development projects so that they can support other means than the private car

Approval of new development and redevelopment should be based on considerations that include high levels of transit, pedestrian, cyclist and car connectivity allowing more direct travel by motorized and non-motorized travel. For the pedestrian, cyclist and transit user realms, the facilities and infrastructure must be of a high quality. In the town centres this will include supporting and protecting the provision of appropriate transit exchanges and facilities. Through the development approvals process the City can encourage the provision of convenient and secure parking and storage for cycles and motorcycles in new developments, existing public spaces and public facilities. We can ensure new development provides for accessible transit services including developer contributions where necessary and address mobility access issues for new development. By promoting a finer grid network, communities will benefit from having improved connectivity, improved transit and walking options and a reduced need for circulation of traffic. To help us understand where these deficiencies in the road network exist, we will undertake a review of our road concept plans looking for appropriate locations where additional transportation connections can be made.

Actions for Change:

- Promote walking, cycling and transit through the application of the development sustainability checklist
- Secure improved parking for cyclists within new developments and fully apply the bicycle parking by law
- *Revise bicycle parking design criteria*
- Promote employer travel planning programs
- Secure transit infrastructure close to activity generators and destinations
- Promote community connectivity for all modes through the development of a finer grid network and reduction in the number of cul-de-sacs
- Undertake a review of the City's road concept plans to support improved routing options and connectivity for all modes.
- Undertake a review of the missing links within the City's strategic road system identifying priorities for completion of the planned network for inclusion within the 10 Year Servicing Plan
- Incorporate TDM measures within new development including initiatives for car co-ops and the application of maximum parking standards.



3. Improve and enhance Surrey's Town Centres and City Centre by promoting integration with transit

Strengthening the position and role of the Town Centres of Guildford, Newton, Fleetwood, Cloverdale and Semiahmoo is one of the main OCP goals. These are more than just locations for shopping, business, leisure and education. They are vital components of the working and expansion of the transportation system being the location of the main transit exchanges. With the initiatives within the City Centre requiring the relocation of transit layover to other locations, combined with steadily increasing transit service identified in the South of Fraser Area Transit Plan (SoFA TP), the City needs to be planning for sufficiently sized and suitably located transit facilities. These will be crucial parts of the transit system that support vibrant and vital town centres, with sustainable, transit oriented development. The City works closely with other transportation providers to secure more and better transit services. In doing so there is a responsibility to promote and protect the required facilities to allow this to happen.

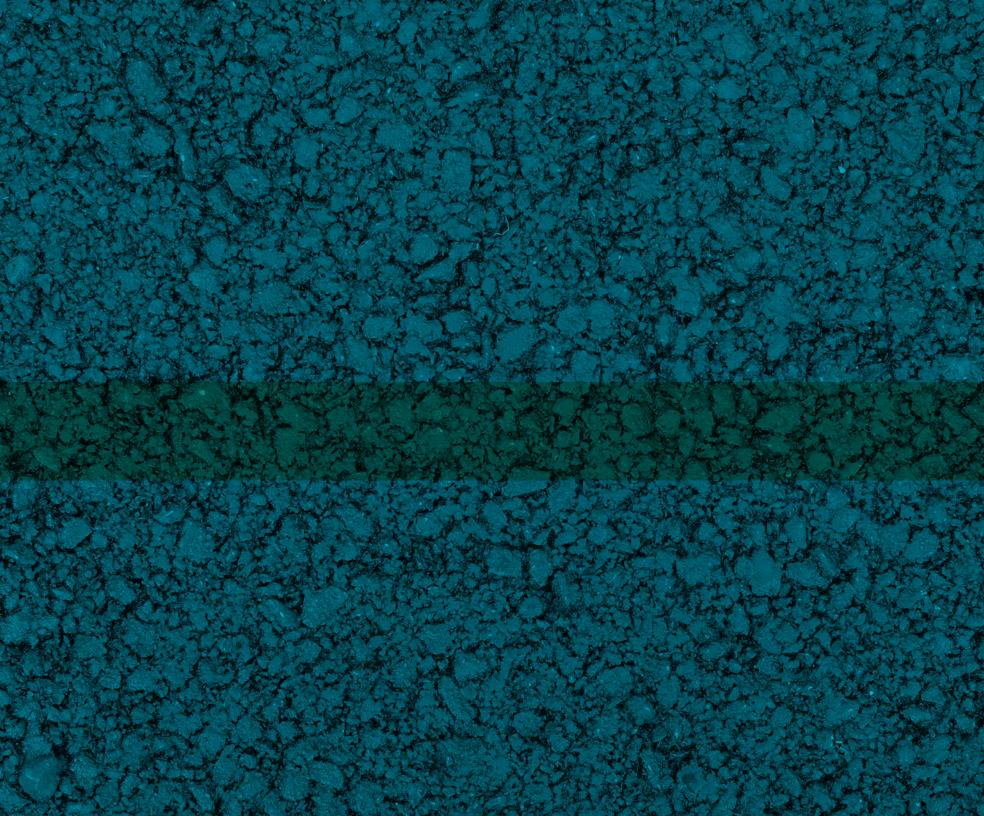
Actions for Change:

- Collaborate with the transit service providers to ensure integrated and high quality transit exchanges as part of town centre improvements
- Future NCPs to identify transit corridors, stations and exchanges to ensure integration with town centres and incorporate supporting land uses.

STRATEGIC OBJECTIVE

Promote integration between transportation and land use to reduce the need to travel and support trips by more sustainable modes

ISSUES & INFLUENCES	OBJECTIVE	ACTIONS FOR CHANGE	OUTCOMES
 Public support for facilities to be located within walking and cycling distances – shopping schools and leisure TransLink FTN development Provincial Transit Plan Incomplete road network and missing links OCP update Poor Transit services Integration of transit with new development Land Development process Transportation servicing and road building – perception of City "catching up" SoFA Transit Plan New NCPs 	1. Coordinate transit investment with land use planning in support of high density, mixed use and compact development	 Collaborate with TransLink to establish Transit Service Indicators to help inform future land use decision making Densities identified within the future OCP update and new and updated NCPs to incorporate and reflect all levels of the Frequent Transit Network and future BRT and rail lines Establish joint City/TransLink steering group to co-ordinate transit implementation 	 Reduced use of SOVs particularly at peak periods Increased transit modal share Increased cycling usage More walking Reduced greenhouse gas emissions Improved air quality Reduced congestion
	2. Promote integrated and universal transportation elements within development projects so that they can be accessed by and in turn support other means than the private car	 Promote walking, cycling and transit through the application of sustainability checklist Secure improved parking for cyclists within new developments and fully apply the bicycle parking by law Revise bicycle parking design criteria Promote employer travel planning programs Secure transit infrastructure close to activity generators and destinations Promote community connectivity for all modes through the development of a finer grid network and reduction in the number of cul-de-sacs Undertake a review of the City's road concept plans to support improved routing options and connectivity for all modes Incorporate TDM measures within new development including initiatives for car co-ops and the application of maximum parking standards Undertake a review of the missing links within the City's strategic road system identifying priorities for the completion of the planned network for inclusion within the 10 year servicing plan 	 Reduced use of SOVs particularly at peak periods Increased transit modal share Increased cycling usage More walking Reduced energy costs for City Reduced greenhouse gas emissions Improved air quality Improved neighbourhood quality of life
	3. Improve and enhance Surrey's Town Centres and City Centre by promoting integration with Transit	 Collaborate with the transit service providers to ensure integrated and high quality transit exchanges as part of town centre improvements Future NCPs to identify transit corridors, stations and exchanges to ensure integration with town centres and incorporate supporting land use. 	 Improved street level environment for walking and cycling Enhanced image for City Improved accessibility options for home to work for an increasing proportion of the population



PART 3 MEASURING PERFORMANCE

IDENTIFYING INDICATORS AND SETTING TARGETS

It is important that the policies and proposals made within this Strategy are not seen as an end in themselves but as a means of achieving the strategic objectives contained within the Strategy.

TRACKING PROGRESS TOWARDS THE VISION

The Transportation Vision drives everything we want to achieve in this Strategic Plan. It can be difficult to quantify the Vision and to precisely measure "success". However, we can look at what we are trying to achieve in transportation terms and set targets in different areas to help measure success. Introducing performance management into the Plan means that plans and policies that will be produced from it, will be scrutinized and examined to determine whether the City is achieving what it said it would and in turn introduce accountability. The City needs to better understand how well it is performing, that we are heading in the right direction and that we are making progress towards our goals. Our approach to performance is based on:

- ldentify, analyze and plan
- Implement
- Monitor
- **Review and adjust**

LINKING PERFORMANCE WITH STRATEGIES

It is important that the policies and proposals identified within this Strategic Plan are not seen as an end in themselves but as a means of achieving the strategic objectives. The City will develop a performance measurement process, focusing on actions taken and the progress made toward the identified strategic objectives. Key targets and indicators will be created and the required data collection and monitoring mechanisms identified.

NEW POLICIES AND PLANS

The Transportation Strategic Plan identifies many areas of policy and practice that need to be updated or developed with, for example, updates to the pedestrian master plan and the establishment of a transportation asset management plan. In themselves the development of these "daughter" plans are targets that the City must meet. These plans will be developed in a way that ensures they align with the performance indicators identified within the Strategic Plan. Within these implementation plans there will be a performance component and as they are developed, new and additional indicators may

be identified and monitored that support those contained within this Strategic Plan. As they are developed or updated, there may also be a need to revise the targets or develop new indicators.

Decision makers, the public and other stakeholders require an approach that remains relevant to changing circumstances and so we will remain alert to changing circumstances and the need to adjust the Plan. In addition, we will identify the potential risks in delivering what we set out to achieve and establish delivery systems that help mitigate these.

Indicators for the Strategic Plan and the plans that will be produced from it are important as they allow the City to compare itself with others, analyze trends and evaluate policy options and policy decisions. They also provide the basis for assessing the value for money for the projects and programs we promote. The City will also report on its progress. Reporting is a very important part of performance monitoring as it keeps decision makers and stakeholders informed of successes, failures and challenges as circumstances change.

PERFORMANCE APPRAISAL

The City is committed to ensuring that the best use is made of the funds available for transportation investment. Projects and measures are therefore measured as a matter of routine to check that they are delivering their objectives and to see The input of the public is one of the fundamentals in the development of the Strategic Plan and has been important in understanding issues and priorities for change.

whether any further improvements are needed. For example, traffic calming projects are checked to see if they are reducing speeds and volumes of traffic. The process of checking and monitoring needs to be extended to the Strategic Plan as a whole. We need to know for example whether circumstances are changing in such a way that we need to modify the priorities or emphasis of the Strategic Plan. Importantly we need to know whether we are achieving our objectives.

There are 6 Components to Performance Management

- 1. Identifying Performance Indicators
- 2. Setting Targets
- 3. Assessing Risks
- 4. Data Collection
- 5. Reporting progress
- 6. Project & Program Appraisal

PUBLIC PARTICIPATION AND INPUT

The input of the public is one of the fundamentals in the development of the Strategic Plan and has been important in understanding issues and priorities for change. It is important that the City continues to seek feedback as it progresses and therefore specific performance indicators will relate to public satisfaction of our services and actions.

During the life of the Strategic Plan circumstances and conditions will change and the Strategy must also be able to change.

IDENTIFYING PERFORMANCE INDICATORS AND SETTING TARGETS

The indicators and associated targets will relate to the strategic objectives. Primary and secondary performance indicators have been identified. The primary indicators reflect the core aspirations of the Plan such as increasing transit use or reducing collisions, while the secondary indicators reflect other targets which are useful to track. Where targets have been set, there will be some with interim and ultimate targets and they focus on outcomes and service delivery aims that are at the core of the Plan. Specifying the different targets to be achieved is not always easy. However, by the City making reference to previous achievements, past trends and the future potential for change, the targets will be set at levels that are achievable but sufficiently challenging to make a difference. Through the life of the Strategic Plan there may also be opportunities to stretch ourselves further. The indicators chosen and targets set will be chosen based on:

- The need for co-ordination with other City of Surrey policies including the Sustainability Charter
- Our role in supporting shared priorities with other agencies and organizations
- **b** Local circumstances and priorities identified by the public
- The availability and reliability of existing data and the cost effectiveness and constraints of collecting additional data
- **•** Being ambitious but realistic
- > Potential for "stretching" targets in the future
- **•** Our approach to achieving the target
- Current trends and potential for reversal or slowing of progress
- An assessment of the risks associated with successfully reaching our targets

OUTCOMES AND OUTPUTS

The performance indicators identified allow for two types of target to be set. Firstly, there are measures of outcomes, such as the percentage of people cycling and secondly, measures of outputs, such as the number of corridor studies undertaken or pedestrian crossings introduced each year. In general, it is easier to measure outputs than outcomes as the latter are often less directly controlled by the City. Measures of outcome, however, are particularly important as it is these that measure the success of the Strategic Plan in achieving its objectives. The City has identified indicators that monitor both outcomes and outputs.

PERFORMANCE MANAGEMENT - CHANGE, ADAPTABILITY AND EVOLUTION

During the life of the Strategic Plan, circumstances and conditions will change and it must also be able to change. These may be associated with local issues such as changes in funding or responding to growth, or they may come about as a result of Provincial or Federal policy change. There will be a need to regularly re-evaluate both the performance indicators being applied and the targets being set.

The performance indicators will be developed as a means to evaluate and report on progress in achieving our broad strategic aims. This is the start of the process and our effort will be ongoing. Within the implementation plans such as the walking plan, cycling plan or the traffic signal optimization strategy, new and additional performance indicators can be expected to be developed or existing ones refined. With the introduction of performance being an important part of the Sustainability Charter there will be a need for overlap and the performance indicators identified within the Transportation Strategic Plan will align with the targets identified within the Charter.

DATA COLLECTION AND MONITORING ARRANGEMENTS

It is relatively straightforward to set out intentions for gathering data but it can turn out to be unreliable or difficult to collect. The City will therefore propose a realistic program of monitoring which makes full use of existing data sources or relatively minor changes to existing data collection arrangements. A variety of different approaches to data collection will be used. In some instances comprehensive information will be available but in others a sampling approach will be used.

It is important that the information collected is relevant. For example, it would not be a good use of our resources, and it is unlikely we would obtain valuable information were we to monitor bicycle trips across the entire City. Where we would have an expectation that our policies will effect the most change is where we will target our monitoring. Clearly, it would not be cost effective to measure everything so the performance indicators that have been selected are intended to provide the "best fit" to the previous criteria and which most holistically represent the service delivery objectives and actions for change included within the Plan.

MANAGING RISK

Assessment and management of risk ensures that the delivery of the Strategic Plan is managed within a level of risk that is acceptable and manageable. There are different risks that the City must consider when setting our indicators, the targets and our expectations of meeting them. These are categorized as external risks, such as economic cycles or changing energy costs, risks associated with delivery of our programs such as increasing construction and labour costs or changing staffing levels and partnership risk associated with other agencies including TransLink.

Where we would have an expectation that our policies will effect the most change is where we will target our monitoring.



EXAMPLE: PERFORMANCE INDICATORS

	EXAMPLE: PERFORMANCE INDICATORS			
PRINCIPLE 1		Effective and Efficient Network Management		
LEVEL	INDICATOR	MEASURE		
Primary	Local road condition	% of local road network in need of repaving (Road Pavement Index)		
Primary	Collector Road condition	% of collector road network in need of repaving (Road Pavement Index)		
Primary	Arterial Road condition	% of arterial road network in need of repaving (Road Pavement Index)		
Secondary	Sidewalk condition	% of sidewalk network in need of repaving		
Secondary	User Satisfaction – road condition	Public satisfaction with condition of roads		
PRINCIPLE 2		More Travel Choice		
LEVEL	INDICATOR	MEASURE		
Primary	Transit use	Modal share for transit – key screenline counts		
Primary	Transit priority	Number of transit priority projects introduced each year		
Primary	Bicycle use	Kms of new bicycle/multi use paths		
Secondary	Accessibility	$\%$ of households within walking distance of \ensuremath{FTN}		
Secondary	School Safety Zones	Number of SSZs introduced		
Secondary	External Funding	Amount of external funding for walking and cycling projects obtained		
Secondary	User Satisfaction – Walking, Transit & Cycling	Public satisfaction with walking and cycling environment		
PRINCIPLE 3		Safer, Healthier Communities		
LEVEL	INDICATOR	MEASURE		
Primary	Collisions	Absolute Numbers vs Per vehicle km traveled vs Registered vehicles		
Secondary	Pedestrian crossings	Number of new or improved pedestrian crossings introduced		
Secondary	Speed Limits	Program of speed limit review – 3 years from adoption		
Secondary	User Satisfaction - safety	Public satisfaction with community safety improvements		

PRINCIPLE 4		Successful Local Economies	
LEVEL	INDICATOR	MEASURE	
Primary	Congestion	Annual review of 14 strategic corridors and addition of 1 corridor a year	
Primary	Access to transit	% employees within walking distance of transit	
Secondary	User Satisfaction - congestion	Public satisfaction with congestion improvements	
PRINCIPLE 5		Protection of our Built and Natural Environment	
LEVEL	INDICATOR	MEASURE	
Primary	Water Quality	Number of projects incorporating alternative drainage systems	
Secondary Tree Planting		Number of trees planted with road improvement projects	
PRINCIPLE 6		Transportation Integration	
LEVEL	INDICATOR	MEASURE	
Primary	Density	Density targets on key transit corridors	
Secondary Modal share		Modal share on key transit corridors	
Secondary User Satisfaction - Integration		Public satisfaction with transportation improvements at key redevelopment locations	







PART 4 MOVING FORWARD

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TAKING ACTION

Transportation is front and centre in the City's future as a livable, sustainable and safe place in which to live and work ...

OUR TRANSPORTATION STRATEGIC PLAN – TAKING ACTION

Implementation of the Plan will not happen overnight, rather it will be a progressive improvement and change in our transportation plans and individual service delivery strategies. It will include the following key processes:

- Adoption of the Transportation Strategic Plan objectives and policies that establish key priorities
- Commencing the development of the identified "daughter" implementation plans such as: Transit Plan, Walking Plan, Bicycle Plan, Road Safety Plan, Asset Management Plan, 10-Year Servicing Plan
- Developing cost effective capital works and operating programs based on life cycle costs
- Securing the sustainable funding required to build the planned transportation facilities and to efficiently manage, maintain and operate an expanding and increasingly more complex transportation system
- **Establishing processes for monitoring progress towards objectives**
- Informing and directing strategic investments and service delivery by measuring performance and setting targets
- Setting priorities for change and improvements
- Adjusting, refining and updating the Transportation Strategic Plan to respond to changing circumstances and influences such as development trends, funding availability or emphasis of policy.

CHANGING SERVICE AND DELIVERY SYSTEMS

Transportation is front and centre in the City's future as a livable, sustainable and safe place in which to live and work and to achieve this the Plan identifies the need for change. Change in how the City thinks about transportation and change in how we develop and design our specific plans, policies and programs. The whole way the Strategic Plan is organized reflects this. It is intended to be flexible and provide the framework to respond to different priorities and changing circumstances. Since the last Transportation Plan was produced, the City has changed considerably and over the life of this Strategic Plan, it will continue to change. As Surrey matures, there will be different pressures, priorities and needs. The transportation system will be increasingly complex and the importance of keeping the system in good condition, effectively managed and operated will increase. There will be increasing attention given to maximizing the effectiveness of the infrastructure that is available by means of modern technology, influencing travel patterns and individual travel choices through innovative land use policies and comprehensive public education and information programs.

The transportation system will be increasingly complex and the importance of keeping the system in good condition, effectively managed and operated will increase.

Delivery of transportation services is often described in terms of programs of engineering based capital projects. These will remain a core part of the transportation function of the City. However, this Strategic Plan has sought to highlight that when we look at transportation policy we are looking at land use, social, environmental, community safety and economic policy. As such, delivery of the transportation agenda requires the City to promote integrated service delivery across all departments.

PAYING FOR TRANSPORTATION

Much of what is described within this Transportation Strategic Plan will need to be identified within the 10 Year Servicing Plan. This is the document that establishes the program of works to facilitate the provision of all the engineering services. Securing sustainable funding for these services is critical as many of the initiatives take several years to deliver significant change. Although our sphere of influence is large, a significant proportion of the funding required does not come from the traditional City tax base but rather by others, including TransLink and other levels of government. The projects and programs the City implements each year represent a realistic expenditure judged to deliver our current transportation priorities and objectives based on the capital and revenue funding available. Future Servicing Plans will reflect the structure and priorities identified within this Strategic Plan and will remain the key policy document for project delivery programs and priorities.

In the City's 10 Year Servicing Plan, the program of improvements and projects is presented in terms of "non growth" and "growth" reflecting the difference in the services provided and the funding mechanisms in place. Non growth services include works such as road re-paving and infrastructure replacement. Growth related needs are those works that are required to provide the servicing capacity for the growth that is occurring within the residential, institutional, commercial and industrial areas of the City. As development and growth occurs, traffic volumes will correspondingly increase and the City will construct new sections of the ultimate arterial and major collector road network and improve and upgrade the existing road network with additional street lights, traffic signals, additional travel lanes or turning lanes, new sidewalks and measures to mitigate the impacts of growth on communities such as traffic calming and safety initiatives.

The growth component of the programs is funded predominantly through Development Cost Charges (DCCs). The investment available is directly related to the level of development taking place. In the future, as the City reaches its ultimate size, and the amount of new development reduces, correspondingly, the level of funding will reduce. Although one of the most evident challenges facing the City now is its growth, this will not always be the case. DCCs will not remain the primary source of funding for the City indefinitely. Add to this, aging infrastructure, changing standards and escalating construction costs and the City will have to continue to increase alternative means of funding the transportation system as Surrey moves from a City characterized by predominantly growth to a City in a state of maturity.

This Strategic Plan creates a framework to establish secure additional transportation funding and increase revenue from other sources. The City needs to broaden and diversify its funding sources to help manage future funding risk and to support an increased range of services.



ADDITIONAL RESOURCES TO DELIVER TARGETS

This Strategic Plan identifies many new transportation challenges for the City and these will require new approaches in how we deliver our transportation services. The Plan promotes the need for several new initiatives, changing priorities and responsibilities. It does so in the context of the setting of measurable targets. If the Plan is to successfully meet these targets, additional funding may be needed. Within the context of competing demands for resources, consideration needs to be given to where the extra funding would be spent. The decision needs to be based on a combination of our priority areas and the degree to which we can be sure that the additional funds will provide good value for money. Funding needs and priorities will be assessed in more detail as each of the supporting implementation plans are developed.

OTHER FUNDING OPPORTUNITIES City Generated Income

There is already an established principle that residents of the City who make use of the transportation facilities and infrastructure provided should contribute towards it. The Strategic Plan has sought to show that there is a clear relationship between the contribution the public make to funding transportation and the solutions there are to their issues. We will also examine the contribution that other City activities can make to the funding base including the on-street parking account, permit and fines income, use of road allowance permits, bus shelter and bus bench advertising, cycle parking advertising, the use of City property for communications infrastructure and the application of "Bill 37" legislation allowing collection of cash in lieu of parking for new developments towards a "reserve fund" for investment in other transportation infrastructure.

There is potential for these income-generating sources to make a larger contribution. A specific target of the Transportation Strategic Plan will be to increase the amount of City generated income to reduce demands on other tax based funding sources by seeking increases from our existing income sources and identifying new sources of income.

Partnership Funding

There are opportunities to secure additional funding through Provincial and Federal grants and programs of other agencies. These offer a range of funding opportunities which assist in delivering otherwise expensive or lower priority projects. The City will adjust programs and budgets to make full use of these monies. The City already actively pursues funding from different sources including the Province, Federal Government, TransLink and ICBC and there is potential for these to make a larger contribution. A specific target of the City will be to increase the amount of external grant money so as to reduce demands on other tax based funding sources. In working to secure these alternative grant monies, it is recognized that some significant time and resources are often needed to bid for them.

Provincial and Federal Responsibilities

This is a local, "made in Surrey" Strategy reflecting local demands, priorities and needs. However, the transportation system does not stop at our boundaries and much of what is contained within the Strategic Plan contributes to provincial, national and international policy aspirations. The City is part of an alliance of municipalities and agencies that together are responsible for transportation services in the region. The City will continue to bid for more equitable funding and seek new funding opportunities for itself and also in support of other municipalities and TransLink. Municipalities are seeing increasing downloading of responsibilities from higher levels of government for many services, including transportation. As these responsibilities increase, so does the burden on the local taxpayer. The City will advocate for equitable taxation and responsibilities and more Federal and Provincial funding for our transportation needs and responsibilities.

USER-PAY PRINCIPLES

The City will examine user pay principles in more of the areas of control we have. Examples will include:

Truck Traffic: We know for example that truck traffic contributes to a more rapid deterioration of structures and pavements. The concentration of truck traffic onto the City truck Route Network means that the effects of this wear and tear are sometimes very pronounced. Through the management and enforcement of the

trucks using Surrey's roads, there are opportunities for the City to more effectively recover the real costs to the taxpayer associated with truck traffic.

Temporary Roadworks and Obstructions: Disruption to the traveling public due to temporary obstructions or roadworks associated with development can be significant affecting many thousands of travelers. Within the future policy development to better manage this activity, the costs of permits and approvals will start to reflect the true costs to the City and the impact on system users.

On-street parking: To help ensure parking properly contributes to different transportation, planning and economic objectives it is expected that the level of control and management of on-street parking will increase. Other municipalities benefit from large incomes through parking fees and fines from enforcement as a means of helping to fund transportation services. While the City will not pursue more on-street parking management as a means of increasing income, we must be properly positioned to make full use of the financial opportunities for investment in transportation improvements that it offers.

MAXIMIZING VALUE FOR MONEY Added value of projects

When implementing projects the City will consider and recognize the contribution to the broader aims and objectives of the Transportation Strategic Plan. As part of our future monitoring processes, these will be identified. Examples of added value from projects include:

- **Collision reduction benefits from maintenance**
- Combining preventative maintenance with the repaying program to lower long term costs
- ▶ Traffic Signals pedestrian crossing improvements
- Traffic signal co-ordination air quality improvements, improved transit reliability

Key Contracts

The costs of providing the transportation system and services are often thought about in terms of projects and programs that are introduced each year. However, the significance of operating the transportation system and associated infrastructure should not be underemphasized. Undertaking this function costs significant amounts of money. For example, within some of the contracts managed by the City there are opportunities to examine the amount of energy being consumed by particular parts of our infrastructure. For example, many thousands of dollars are spent each year on energy costs for the traffic signals and street lighting responsibilities of the City. With the background increases in energy costs, it becomes more important for the City to examine strategies to reduce energy consumption. By doing so, we can help ensure both financial and environmental sustainability.

NEXT STEPS Development of Daughter Plans

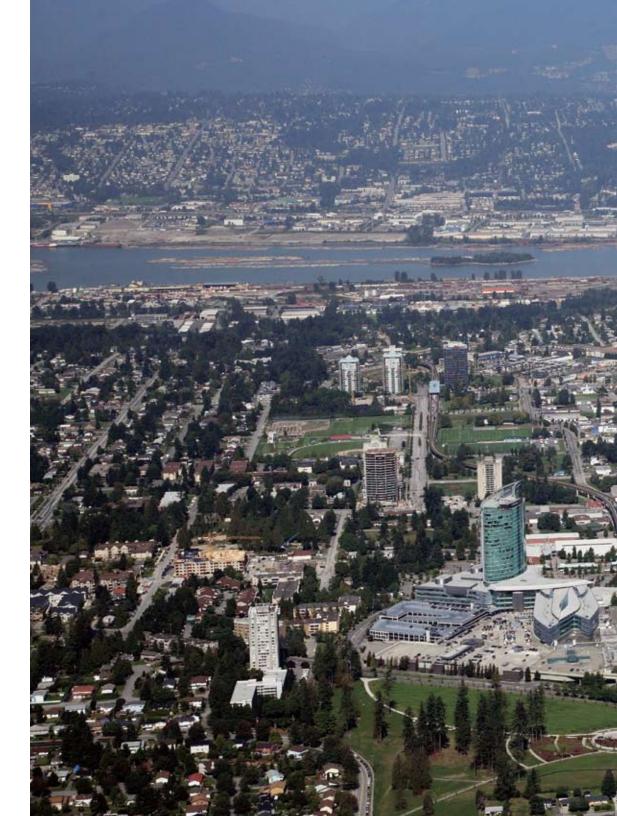
The Transportation Strategic Plan establishes our Vision for providing a modern, sustainable, integrated, safe and accessible transportation system. Work on delivering this is a long term and multi faceted effort. Over the next few years, we will develop, in consultation with the public and stakeholders, a number of daughter implementation plans, such as the Walking Plan and the Transit Plan, which will build upon the direction given by this Strategic Plan.

Early Actions

[92]

The Strategic Plan has identified over 100 Actions for Change. Some represent specific deliverables while others reflect a change in how we provide our services. A number have been identified as early Actions for Change and work will commence right away on moving these forward. These are:

- 1. Improve existing and establish new intergovernmental relationships to promote joint working with key partners including TransLink, ICBC, Surrey RCMP, Ministry of Health and Ministry of Transportation and Infrastructure
- 2. Partner with TransLink to establish the future alignment, technology and timing of the implementation of rapid transit in the City
- 3. Establish an expanded Traffic Control Centre supported by a program of traffic signal improvements and strategic corridor upgrades
- 4. Initiate early updates to major policy documents starting with the Bicycle Blueprint and Pedestrian Master Plan
- 5. Commence a City-wide speed limit review allied with educational and enforcement efforts in collaboration with the Police and ICBC
- 6. Undertake a review of the strategic road network "missing links" and identify priorities for completion of the planned network
- 7. Commence an annual program of school zone improvements
- 8. Undertake service design to undertake all levels of maintenance through an enhanced asset management and monitoring systems to better direct maintenance programs and achieve value for money





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City of Surrey 14245 56 Avenue Surrey, British Columbia V3X 3A2 Canada

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