



# Corporate Report

NO: C005

COUNCIL DATE: April 2, 2007

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## COUNCIL-IN-COMMITTEE

TO: Mayor & Council DATE: March 29, 2007  
FROM: Acting General Manager, Planning and Development FILE: 5480-01  
SUBJECT: Interim Report - Surrey Sustainable Truck Parking Study

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## RECOMMENDATION

It is recommended that Council:

1. Receive this report, as well as the "Interim Report" for the Surrey Sustainable Truck Parking Study, as information;
2. Authorize staff to conduct a public open house to receive feedback on the proposed short term, intermediate and long-term measures and report back to Council with a final Sustainable Truck Parking Strategy, with implementation recommendations; and
3. Direct staff to initiate a number of immediate actions, including:
  - (a) Report back to Council with proposed amendments to Surrey Zoning By-law, 1993, No. 12000 (the "Zoning By-law") and Business License By-law, 1999, No. 13680 to permit a limited number of trucks to park on an IL zoned site without special site preparation and licensing requirements. The number of spaces allowed would be related to the size of the property, its location and the ability to buffer the parking use from adjacent uses;
  - (b) Report back to Council with potential locations for on-street permit truck parking within industrial areas and mechanisms to implement this action. Some of the revenue from the permits could be used to provide for security, additional road maintenance and administration of the street parking program;
  - (c) Report back to Council with regard to an assessment of specific locations where a City-owned site could be used as an interim truck parking facility

renting parking spots at current prices to determine the demand for truck parking facilities, while undertaking a search for an appropriate site for a permanent full-service, market-value truck parking facility, which may be on City or private land; and

- (d) Subject to Council's endorsement of the above, hire on a "term basis", a Truck Parking Coordinator to oversee implementation of the short-term measures, to assist with the exploration of other measures to address truck parking demand, and to match truck operators who are in need of parking spaces with sites that have truck parking spaces available.

## **INTENT**

The purpose of this report is to:

- Summarize truck parking issues and the results of background research prepared for the Sustainable Truck Parking Study;
- Outline the evaluation criteria consistent with City objectives for the development of sustainable truck parking alternatives; and
- Present proposed measures, which could be undertaken immediately and other intermediate and long-term measures for further public review and feedback.

## **BACKGROUND**

Concerns have been raised over the growing number of heavy trucks registered in the City and the limited number of parking spaces that are available for parking these trucks when they are not in use. Concerns have also been expressed regarding the shortage of suitable, secure and well-located facilities available for other services related to truck operations, such as truck washing, service and maintenance. Complaints have been received concerning overweight vehicles parked on residential streets, on residential lots and on sites within the Agricultural Land Reserve (the "ALR").

Policies in Surrey's Official Community Plan ("OCP") support the preservation of business lands to meet future employment and economic needs. Underlying the policy is a recognition that the City and region will be challenged in the coming 20 years to meet demand for industrial and employment lands necessary for economic sustainability. Industrial land will be required for a diversity of economic activities, both for employment purposes and for services that support the local economy.

As of early 2007, there is approximately 1,300 acres of vacant and potentially developable land in the City that is designated for industrial use, including light and heavy industrial uses as well as business park uses. Only the IL (Light Industrial) zoning permits truck parking as an outright use and there is a very limited supply of IL zoned land currently available for sale or lease. Where IL-zoned land is available for lease or purchase, these are generally smaller parcels which are less suitable for truck parking uses due to the large space that trucks require to manoeuvre. The price of industrial land

also makes it very difficult to acquire a site and develop it according to existing zoning requirements at a profit for truck storage and parking.

As a result of these issues, on June 28, 2006, Council received Corporate Report No. R127, which discussed truck parking issues in the City, and directed staff to engage consultants to conduct a sustainable truck parking study.

On October 26, 2006, a public open house was held to identify issues related to truck parking in the City. This open house was attended by approximately 100 persons, representing a wide range of the trucking sector. Feedback from open house attendees indicated that many independent truck operators had concerns related to vehicle security, availability of parking spots in accessible locations, the desire for services, such as repair and washing, to be located with parking and the cost of parking spaces. Most truck operators did not support paying more than the current average parking rental rate at authorized truck parks, which is approximately \$200/month.

The consultants for the study, the IBI Group, have submitted an Interim Report for the Sustainable Truck Parking Study (attached as Appendix I to this report), which outlines key findings and proposes a number of alternative measures for further public review and feedback.

## **DISCUSSION**

### **Background Research**

The main findings of the background research in the Interim Report are summarized below:

- Using modified analysis methods, the number of heavy trucks registered in 2006 in Surrey has been revised upwards by ICBC, from 8,300 stated in the previous report to approximately 12,000 trucks;
- The estimated number of registered "independent" heavy trucks (i.e., those not associated with a company that generally provides parking and, therefore, require a parking spot) is approximately 6,000;
- The annual growth rate in trucks registered in Surrey is between 11% and 12%;
- The City's percentage of the GVRD's growth in registered trucks in recent years is estimated to be over 60%;
- The demand for parking by independent truck operators has resulted, to a large degree, from deregulation of the trucking industry. Deregulation led to many businesses with goods to be shipped or delivered finding it more cost-effective to hire independent operators, as opposed to maintaining their own truck fleets and parking facilities;
- Relatively low initial capital costs have attracted a number of independent operators into the trucking business, which has led to strong competition. While truck parking

costs are only a small proportion of overall truck operating costs, low profit margins in the industry increase the significance of parking costs to an operator's total costs. Rising fuel costs have not been matched by increases in haulage rates, which has negatively affected the balance sheet for independent operators;

- Of the approximately 2,400 tickets issued for truck violations, such as overweight vehicles parked in residential zones, over half were to trucks registered outside of Surrey, indicating that most Surrey truck owners have managed to locate a truck parking spot, whether formal or informal, that does not require illegal on-street parking;
- The estimated number of regular parking spots (i.e., the number of trucks currently parked in authorized truck parking lots) is 700 and most of these lots are currently full and have waiting lists. Many of the current spaces are subject to Temporary Use Permits and some parking lots have converted, or are in the process of converting, to other higher value industrial uses;
- Assuming that all currently registered trucks were to remain in their current parking locations, whether formal or informal and all new trucks were to be accommodated in authorized truck parks, approximately 34 acres per year for truck parking would be required at the current rate of growth. This demand for land would greatly impact the City's goals of encouraging lower impact, higher value, higher employment industrial uses;
- With a moderate increase in monthly parking rates from \$200 to \$265, a truck parking facility constructed to minimum standards could break even financially if IL-zoned parcels were made available at the current low-end land value of \$600,000 per acre and current low interest rates were to continue; and
- The current parking rates for truck parking reflects the fact that many of the currently existing parking lots were purchased at very low prices in the past and are in locations that are marginal for other uses, such as under power lines.

### **Economic Impact Analysis**

A high-level analysis conducted for the study on the economic impact of truck parking alternatives included a number of additional findings:

- From the standpoint of sustaining a diverse regional and municipal economy, some industrial uses, such as truck parking, will necessarily be less intensive users of land than other land uses;
- To avoid the economic disbenefits of having heavy trucks parked in urban areas, it is necessary to facilitate the construction of appropriate parking facilities for trucks. As commercial trucking companies tend to look after their own needs, the main need is to accommodate the large number of independent vehicles;

- A combination of facilitating supply and enforcing non-compliance will be necessary to ensure that space is available and truckers use the space;
- Rather than subsidize the provision of truck parking, operators should expect to pay the market rate for parking. This becomes part of the "floor cost" of business operations, just as the cost of renting space is a cost for most businesses;
- The use of marginal agricultural land for truck parking should be considered as part of a broad industrial land policy, not as an ad hoc measure to address issues for one relatively small industry; and
- The most appropriate long-term solution is to require truck parking facilities to be built on industrially designated lands. The marketplace will determine which lands are the best candidates, balancing location, parcel size and appeal to trucking industry users, with availability and land and operating costs.

The picture painted by the background research and economic analysis is that there is an insufficient supply of truck parking lots to accommodate the rapid growth in independent truck operators who are choosing to locate in the City. If market forces were allowed to prevail, the creation of new truck parking lots could be economically feasible in the short run, but would place significant pressure on the City's limited supply of industrial land. These truck parking facilities would be at risk of redevelopment as land prices for industrial land increased unless parking rates rise to reflect the shortage of industrial land or unless restrictions were placed on the zoning for truck parking facilities to prevent their conversion. This type of regulation could discourage land owners from creating truck parks in the first place.

Long-term growth in truck ownership by independent operators, whose parking is generally not provided by clients or transportation companies, will be difficult to sustain if the region's growth in goods movement, in response to a growing regional economy and efforts by provincial and federal governments to expand foreign trade, continues to be concentrated in Surrey. Unless a major new source of low-cost industrial land is made available for truck parking purposes, attention will need to be placed on the aggressive implementation of a wide range of alternative truck parking measures, such as those proposed below.

### **Evaluation Criteria for Proposed Measures**

Criteria developed for the evaluation of proposed measures include:

- Economic Sustainability;
- Social Sustainability; and
- Environmental Sustainability.

Within these main criteria categories a number of evaluation subcategories were considered:

<b>Economic Sustainability</b>	<b>Social Sustainability</b>	<b>Environmental Sustainability</b>
Impact on Trucking Community	ALR Preservation	Air Quality
Impact on Warehouse and Distribution Sector	Parkland Preservation	Land Quality
Impact on Current Truck Park Operators	Neighbourhood Aesthetics	Water Quality
Impact on City Tax Revenue		
City Direct Costs		
Land Development Potential		

### **Proposed Measures**

Based on these evaluation criteria, the following proposed measures were identified by the project consultants, with staff and public input, for further review and feedback. As noted above, there is not one clear solution to the truck parking issue, but instead there will be a need to actively pursue a wide range of actions and initiatives to alleviate the shortage of secure and sustainable truck parking options:

1. Consult with communities where there is acreage residential zoning (e.g., RA) in close proximity to truck routes that are not designated for future urban development, to explore the consistency of limited truck parking on large residential lots with community standards, such as allowing parking for one or two trucks per large lot in rural areas, subject to certain design criteria;

*Staff comment: Although there are a number of acreage lots in the City, most are not located close to truck routes and many lots are in areas that are designated for future urban and suburban use, which would make them inappropriate for truck parking. It is not anticipated that many owners of appropriate acreage lots, who are not themselves truck operators, would accept trucks on their property. As a result, it is estimated that the yield of this option may be fairly small.*

2. Evaluate the community and road network impacts of relaxing current zoning restrictions on non-agricultural truck parking in agricultural zones in close proximity to truck routes, such as allowing parking for one or two trucks on agriculturally zoned lots;

*Staff comment: Although there are over 2,000 agricultural parcels in the City, approximately half are smaller parcels under 10 acres. Assuming a minimum lot size of 10 acres and up to 25% of the properties taking advantage of this permission, this measure could accommodate 200 to 400 trucks.*

3. Temporarily relax IL-1, IB-1 and IB-2 zoning requirements that place strict minimum site coverage and maximum outside storage limits and restrict truck parking uses on properties in South Westminster and Campbell Heights, until alternative truck parking solutions exist;

*Staff comment: There is a concern that properties in these zones that used relaxations to permit truck parking would be permitted to grandfather reduced site coverage requirements once more appropriate sites became available in the City, at a later date. It is estimated that 200 to 400 trucks could be accommodated using this measure.*

4. Review current zoning regulations for new truck parking lots, with appropriate environmental and community standards criteria, which could modify requirements for a building on the truck parking site and for paving;

*Staff comment: There is potential in some industrial areas, which are not located near residential and commercial areas or gateways to the City and where there is not a significant impact on neighbouring properties, to reduce the Zoning By-law requirements for a building with washrooms and paving on the site. It should be noted that most, if not all, existing truck parking facilities are not constructed to these standards and that the cost difference between a parking lot built to these standards and to reduced standards is relatively small, compared to the value of land. It is difficult to estimate how many parking spots would be created by this cost reduction incentive.*

5. Undertake a strategic assessment of community needs for industrial lands and the available land base to support any potential future application for the exclusion of ALR land, if necessary;

*Staff comment: A comprehensive and rigorous analysis of the City's land base will be needed to support any application for withdrawals of ALR lands for truck parking and this would likely need to be done in conjunction with a comprehensive industrial land strategy.*

*Staff has attended at the City's Agricultural Advisory Committee (the "AAC") to discuss the issue of truck parking and the potential for consideration of lands in the ALR for this purpose. The AAC has advised that it strongly objects to any consideration of the use of ALR land for parking related to non-agricultural uses. AAC members have expressed their concern with the negative impact that such permission could have on agricultural land values.*

6. Analyze the availability of land, which could satisfy the compensation requirements under Policy O-51 (Council Policy for Considering Applications for Exclusion of Land from the ALR) and, if not sufficient, identify potential alterations to the policy to identify requirements that maintain the agricultural land base, while accommodating community needs for other uses;

*Staff comment: Considerable effort and consultation would be required to identify adequate compensation for potentially excluded lands that would maintain the integrity and productive capacity of the ALR. There are limited lands that have higher agricultural capability outside of the ALR available for exchange and the value of most of these lands, due to residential or commercial designations, is too high to make an exchange for truck parking within the ALR economically viable.*

7. Work with provincial government agencies, including the BC Transportation Financing Authority and the Gateway Program to identify and take advantage of opportunities for short and long-term solutions for the shortfall in truck parking capacity. For example, the use of available provincial land along the South Fraser Perimeter Road alignment;

*Staff comment: The Province has informed the City that it expects fair market value for lands that it holds in the City if these were to be made available for truck parking. There may be opportunities for the exchange of City land required for provincial projects, such as the South Fraser Perimeter Road, that could be used for truck parking. Further review of provincial land requirements would be necessary before it would be possible to determine the potential yield of this measure. It should be noted there is a serious concern that these lands would generally be adjacent to roadways and would not necessarily be attractive, due to its highway exposure, if used for truck parking.*

8. Examine the feasibility of requiring on-site parking or implementing a special "DCC-like" charge on new warehouse and distribution facilities to provide funding for purchase of land to be devoted to truck parking. This would mean that users of the goods movement industry would assist with the procurement of truck parking facilities for the independent operators;

*Staff comment: The City does not have the legislative authority to implement this type of DCC. There is also a significant question of equity, given that the end users of truck operations include most commercial operations that receive goods, such as retail stores, as well as residents whose homes were built using materials brought and removed by trucks.*

9. Examine options for promoting the development of truck parking spaces for sale or lease to independent operators by a private developer or trucking cooperative;

*Staff comment: There are currently no formal associations of local independent truck operators. Without the operators working together to create parking opportunities for their vehicles, they are reliant on private parking lot operators to provide parking for them. Facilitating the creation of a cooperative could, therefore, create an additional mechanism for the provision of necessary truck parking and the facilities that operators are seeking. It is possible that, if operators considered the security and other long-term benefits of owning or controlling their parking facilities, this could encourage some to develop their own facilities.*

10. Engage senior governments such as the GVRD, TransLink and the provincial and federal governments in finding solutions for end-user facilities for the transportation industry. A significant amount of the growing local demand for truck parking arises from deregulation of the trucking business and the promotion of the Lower Mainland as the Pacific Gateway for goods movement, through the development of major port facilities and regional, provincial and federal highway and bridge projects;



*Staff comment: The focus of recent senior government initiatives related to goods movement has been on increasing the supply of roads, bridges and capacity at ports and border crossings. There has been no corresponding support provided to local governments for the development of the end-user facilities needed to accommodate the resulting increase in the number of trucks on regional roads. It would seem reasonable to initiate a discussion with senior levels of government to seek their assistance with addressing these local impacts.*

In addition to the alternatives above that were identified by the consultants, staff has identified a number of additional measures:

1. Modify the Zoning By-law to allow up to a specified number of trucks not related to the industry on the property to park on an IL-zoned site of a specified minimum size without special business license or site preparation requirements. It is estimated that this measure could accommodate 200 to 400 trucks;
2. Identify opportunities for providing on-street permit parking for trucks in industrial zones on a trial basis, where this does not conflict with other uses or road safety. These permits, which could be issued and administered by By-law Enforcement & Licensing Services, could be restricted to overnight and weekend use, depending on the area and would cost approximately the same amount as formal truck parking spaces, to avoid introducing competition with existing truck parks. Security could be an issue for some locations, due to the lack of fencing, full-time security patrols and lighting, input on safety would be required from the engineering and police departments and there could be additional costs to maintain the roadways to support truck parking. However, the permit fees charged by the City for these spaces could be used to provide security patrols and shoulder improvements. It is estimated that this measure could accommodate up to 400 trucks; If Council endorses this recommendation, staff will report further on potential locations and means to implement this action;
3. Engage on a "term basis" a City Truck Parking Coordinator to match independent operators seeking truck parking with available parking facilities, oversee the implementation of a trial on-street permit parking program and research options for future truck parking solutions. This may be a part-time position for a certain period, depending on the length of the program. Details of this position in terms of role and responsibility, reporting relationship and funding sources would be determined in conjunction with the other short-term measures to be reported back to Council in due course.
4. In order to gain some experience (both financial and operational) in the area of truck parking, create an interim truck parking facility on City-owned land, of approximately 10 acres, which would accommodate up to 250 trucks and rent at current parking rates; and
5. Based on the experience learned from the operation of an interim facility and the work of the Truck Parking Coordinator, report back to Council on the advisability of implementing additional publicly owned truck parking in the City or privately

owned sites in appropriate industrially zoned areas, develop as full service truck parking facilities and make the parking spots in the facilities available through mechanisms, such as a cooperative, strata titled lots or rental spots at \$250 to \$300 per month. Ideally, these sites would be located along a major truck route.

### **Issues Regarding the Use of ALR Land for Truck Parking**

The Agricultural Land Commission (the "ALC") has, in two recent decisions related to exclusion requests in the Lower Mainland, set a high standard for the definition of "Community Need" for exclusions. In general, these decisions indicate that the proposed use for excluded land must have a high level of importance for the community and it must be clearly demonstrated that no reasonable alternatives exist within the community or area.

In the case of Barnston Island, the ALC stated that it considered farming to be viable on the Island and that there was insufficient evidence provided by the proponent to establish that additional industrial land was required in the region or that there was no other reasonable location for industry. As a result of these decisions, it would appear that the City would need to demonstrate conclusively that there are no other industrial lands available within the City before the ALC would consider an exclusion for truck parking or any other industrial use.

A further major consideration is the concern that an exclusion for a low-value land use, such as truck parking, would result in increasing pressure on the ALR to be used for a variety of land uses, which would increase the value of the land and ultimately its viability for agriculture.

### **Issues Regarding City-Owned Land for Truck Parking Uses**

Staff has undertaken an extensive review of both private and City-owned land in the City to attempt to find suitable, well located sites that could accommodate a City-operated truck parking facility, both on an interim and on a long-term basis. The number of City-owned sites that could be utilized for truck parking purposes are limited for several reasons, including:

- Current lease obligations;
- Current and intended uses, such as gravel extraction or business parks;
- Inclusion in ALR;
- Environmental sensitivity, due to streams and habitat value;
- Access;
- Site preparation requirements and costs; and
- Locations not in proximity to truck operators or truck routes.

After considering these limitations, several City-owned sites have been identified for potential interim and long-term use as truck parking facilities, subject to further analysis. Should Council endorse the recommendations in this report, staff will report back with a detailed analysis and recommendations regarding potential sites.

## CONCLUSION

The Interim Report has confirmed that there is a strong and growing demand for truck parking, resulting from a number of factors, including the deregulation of the trucking industry that has led to more independent truckers, growth in construction activities and an expansion of the west coast transportation industry, significantly through intermodal facilities and container traffic.

A number of proposed measures have been identified, some of which could be acted on in the short-term, while other medium and long-term measures are proposed for further assessment before being presented to Council as part of a comprehensive Sustainable Truck Parking Strategy, with implementation recommendations.

Of the proposed measures identified above, it is considered that several could be implemented relatively quickly, including:

- Amendments to the Zoning By-law and the Business License By-law to permit a limited number of trucks to park on an IL zoned site without special site preparation and licensing requirements. The number of spaces allowed would be related to the size of the property, its location, the ability to buffer the parking use from adjacent uses;
- Identification of potential locations for on-street permit truck parking within industrial areas. Some of the revenue from the permits could be used to provide for security, additional road maintenance and to pay for the administration of such a street parking program;
- Submitting a report with regard to an assessment of specific locations where a City-owned site could be used as an interim truck parking facility, renting parking spots at current prices, to determine the demand for truck parking facilities, while undertaking a search for an appropriate site for a permanent full-service, market-value truck parking facility, which may be on City-owned or private land; and
- Subject to Council's endorsement of the above actions, to hire, on a "term basis", a Truck Parking Coordinator to oversee the short-term measures, to assist with the exploration of other intermediate and long-range measures and to match truck operators with available truck parking spaces.

How Yin Leung  
Acting General Manager  
Planning and Development

MA/kms/saw

Attachment:

Appendix I Interim Report - Development Of A Sustainable Truck Parking Policy And Implementation Recommendations



## DEVELOPMENT OF A SUSTAINABLE TRUCK PARKING POLICY AND IMPLEMENTATION RECOMMENDATIONS

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INTERIM REPORT

***DRAFT***

**December 6, 2006**



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**EXECUTIVE SUMMARY**

This study has been undertaken by IBI Group in association with Michael Rosen and Coriolis Consulting under contract to the City of Surrey to develop a Sustainable Truck Parking Policy and Implementation Recommendations for the City.

**The Problem**

The medium and heavy truck population registered to Surrey addresses has grown rapidly, increasing by almost a third over the last five years. This has put pressure on the supply of truck parking spaces in the City, resulted in increased costs and inconvenience to the trucking industry, and contributed to a high level of non-compliance with parking and zoning bylaws.

There are three major segments of the trucking industry which account for the heavy truck population in Surrey: dump trucks; drayage trucks which transport international and domestic containers between port terminals, rail intermodal yards and warehouses; and long haul freight carriers. Since deregulation of the trucking industry the majority of trucks belong to owner/operators or small fleet operators. These operators do not generally have access to parking at the facilities of the companies which employ them.

Approximately 7000 heavy trucks are currently registered in Surrey. Analysis of the Surrey truck population by fleet size indicates that approximately 15% are registered to large truck fleet operators (over 35 trucks). On the assumption that these operators provide parking for their own fleets, the current demand for heavy truck parking is estimated at approximately 6000 vehicles.

Current “official” parking lots – those with development permits, business licences, and/or Temporary Use Permits or applications – total around 68 acres, and have capacity to accommodate around 29% of the heavy truck population. The additional trucks are currently being parked at “unofficial” parking lots in industrial zones, on agricultural or residential sites in violation of City bylaws or at sites in other municipalities. Demand in at least two out of three segments of the trucking industry, containers and gravel, is expected to remain strong through at least 2010. At a conservative (i.e., high) growth estimate of 4% per year in the heavy truck population for the Lower Mainland and a proportionate increase for Surrey, an additional 11 acres per year of industrial land would be required in Surrey to meet demand. If Surrey was to continue to accommodate the 64% share of the regional growth in registered trucks that it experienced between 2002 and 2006, an additional 23 acres per year will be required.

The current zones which allow truck parking as a principal use are IL (Light Impact Industrial) and IH (Heavy Industrial). The current IL and IH land base in private hands (i.e. after excluding lands associated with Fraserport, CN Rail, BC Hydro and various governments) totals around 2264 acres. Recent rezoning decisions in South Westminster have resulted in a reduction of approximately 20% in the private sector IL land base. Under current policies promoting business park and other higher value industrial development, the industrial land base available for truck parking is likely to continue to decrease.



Accommodation of future truck parking needs would require a continuing expansion of the land base devoted to this purpose. City of Surrey land use policies focus on the priorities of maintaining the agricultural land base, maintaining and expanding the land base for parks, and promoting the existing industrial land base for higher value uses.

The current zoning requirements limit truck parking to industrial zones, and require hard surfacing and construction of a permanent building. None of the existing operations meet these requirements. Two years ago the City instituted Temporary Use Permits which relax the zoning requirements and allow the parking lots to operate on a temporary basis (2 years renewable for another 2 years).

These policies do not allow truck parking to impinge on agricultural, residential or park lands and maintain the availability of industrial land for higher uses in future. They have not resulted in development of sufficient properly zoned and inspected parking facilities to satisfy the industry demand.

If accommodation of truck parking demand is a City priority, a land base for this purpose will have to be found. New industrial land for truck parking would have to come from other lands currently designated for non-industrial purposes or agricultural land, industrial land would have to be specifically zoned for this purpose and the City would have accept lost tax revenue from other potential higher value uses or the City would have to provide land directly through purchase or from its existing land holdings. Alternatively, the City would have to encourage more compact industrial land uses on existing parcels that would have the effect of increasing the industrial land base or encourage more trucks to be parked per acre in potential truck parking sites.

## **Conclusions**

From the standpoint of sustaining a diverse regional and municipal economy, Surrey should accept that some industrial uses will necessarily be less intensive users of land than other land uses. As trucking is an essential part of the regional transportation infrastructure, it is necessary to accommodate trucks within a community with a large volume of construction and a large number of businesses involved in the warehouse and distribution sector, as is the case in Surrey.

To reduce the disbenefits of having heavy trucks parked in urban neighbourhoods, it is necessary to facilitate the construction of appropriate parking facilities for trucks. As commercial trucking companies tend to look after their own needs, the main need is for additional parking to accommodate the large and growing number of independent vehicles.

A combination of facilitating supply and enforcing non-compliance will be necessary to ensure that space is available and truckers use the space.

The breakeven monthly truck parking rate, assuming industrial land at market value, does not appear to be that much higher than what truckers are currently paying. Rather than subsidize the provision of parking for independent trucking, it seems reasonable to expect that truckers will have to pay the market rate for parking. This becomes part of the "floor cost" of business operations, just as the cost of renting space is a cost for most businesses.

Almost every sector of the economy absorbs costs associated with compliance with regulations affecting premises. In the industrial sector, such costs include the cost of providing enclosed storage, fencing/screening, and landscaped areas. Other vital transportation services such as taxis, couriers and commercial movers, function while complying with municipal regulations. Applying a parking subsidy to the independent sector of the trucking industry would in principle be no different than allowing independent taxi drivers to operate under a different set of rules than taxi companies.

Using marginal agricultural land for truck parking should really just be thought of as a means of expanding the industrial land inventory. If Surrey wants to examine ways to increase its total inventory of industrial land by excluding marginal land from the ALR, this should be done as part of a broad industrial land policy, not as an ad hoc measure for one small industry.

The appropriate long-term solution is to require truck parking facilities to be built on industrially designated lands. The market will sort out which lands are likely to be the best candidates, balancing location, parcel size, and appeal to other others. The municipality must provide the enforcement that results in truck operators realizing they must comply with the need for appropriate off-street parking and this will generate the demand that will encourage the creation of facilities. Alternatively, the municipality could consider creating a parking facility, to ensure that there are quick additions to supply, but operate the facility on a market-value basis.

### **Possible Alternatives**

The following options are presented as alternatives to be further developed with input from stakeholders.

1. Undertake consultations with communities with RA zoning in areas that are not designated for future Urban or Suburban areas to explore the consistency of limited truck parking on large residential lots with community standards.

Langley allows parking of heavy vehicles on residential lots in the SR-1 (1 acre residential) and SR-2 (2 acre residential) zones. Surrey has approximately 14,000 acres of land in RA-1 zoning which encompasses residential lots of 1 acre or larger. Relaxing of restrictions prohibiting parking in this zone could help to alleviate the shortage of truck parking spaces. A permit process could be used to enforce appropriate requirements to ensure safety (ingress and egress) requirements, environmental requirements and aesthetic requirements such as minimum setbacks or screening. The change would require no direct financial cost to the City. However additional road costs might be incurred through truck traffic on portions of the network not designated as truck routes.

2. Evaluate the community and road impacts of relaxing current zoning restrictions on non-agricultural truck parking in agricultural zones.

The current Surrey bylaw prohibiting the parking of trucks on agricultural property unless the truck is used for agricultural purposes is more restrictive than any other municipality except for Richmond, which has a similar restriction. The Surrey policy is more restrictive than that of the Agricultural Land Commission which does not require a permit for parking and maintenance of a truck which belongs to the

resident of the property, regardless of its use. Abbotsford has recently changed their zoning bylaw to allow up to 2 non-agricultural trucks as long as one belongs to the property's resident. Adoption of more liberal provisions on truck parking on agricultural sites could increase the availability of spaces in Surrey.

3. Refrain from enforcing the new IL-1 zoning requirements limiting outside storage on properties in South Westminster until alternative truck parking solutions are identified.

The recent rezoning of South Westminster IL (Industrial Light Impact) lands places at risk 23% of the existing "official" truck parking spaces in the City. Given the current and projected shortfall in City-inspected truck parking lots, it is important to maintain existing capacity until alternatives are developed.

4. Undertake an objective evaluation of current zoning requirements for truck parking lots under appropriate environmental and community standards criteria.

Current zoning requirements for truck parking lots require hard surfacing and construction of a building. None of the existing facilities are compliant with the zoning bylaw, which appears to be an indication that the zoning requirements are a barrier to the development of truck parking capacity. The bylaw requirements should be re-examined on the basis of objective environmental criteria and community standards to determine if they could be reduced without imposing excessive costs on the community or the environment.

5. Undertake a strategic assessment of community needs for industrial lands and the available land base to support potential applications for exclusion of agricultural lands from the ALR if necessary.

Recent decisions by the Agricultural Land Commission have clarified requirements for justification of exclusion of agricultural land from the ALR on the basis of community need. The decisions indicate that local governments will require local and regional planning assessments supported by rigorous technical analyses. The City of Surrey would be required to undertake this assessment to justify the conversion of any ALR lands to alternative uses where a community need exists.

6. Analyze the availability of land that could satisfy the compensation requirements under Policy O-51, Policy for Considering Applications for Exclusion of Land from the Agricultural Land Reserve, and, if it is insufficient, alter the policy to identify alternative effective means of maintaining the agricultural land base while accommodating community needs for other uses.

Policy O-51 outlines requirements for City support of exclusion applications for alternative use of ALR land, including a provision requiring compensation in the form of inclusion of twice as much land in the ALR in return. The availability of land suitable for inclusion under the policy's criteria may be so small as to render the policy an obstacle to alternative uses of agricultural land where a community need exists.

7. Examine the potential for transfer of development rights to other sites in exchange for retention of truck parking uses at existing or new industrial sites. This could maintain the existing land base devoted to truck parking at no cost to the City.

Work with Provincial government agencies including the BC Transportation Financing Authority and the Gateway Program team to identify and take advantage of opportunities for short and long term solutions for the shortfall in truck parking capacity.

Discussions with representatives of the BC Transportation Financing Authority highlighted some opportunities for short and long-term provision of truck parking spaces, particularly related to Provincial acquisition of land and construction of the South Fraser Perimeter Road. The City should establish an ongoing relationship with the appropriate Provincial agencies to take advantage of these opportunities.

8. Examine the feasibility of requiring onsite parking or implementing a special levy on new warehouse and distribution facilities to provide funding for purchase of land to be devoted to truck parking.

Ideally increases in the cost of truck parking due to rising land costs could be passed on by the trucking industry in the form of higher rates. The structure of the trucking industry under deregulation makes it difficult for this to occur. Imposition of additional Development Cost Charges on new warehouse or distribution centres could be an alternative method of ensuring costs are passed on to the beneficiaries of the service, i.e., the clients of the transportation sector, because this sector has greater control over its pricing. The impact on the competitiveness of the City for this type of business would require further examination.

9. Examine the options for development of parking spaces by the City or by a private developer to be sold to truck owners on a bare land strata basis.

A cooperative truck parking lot could allow truck owners more control over the facilities they use and provide greater stability in terms of land use. However, the dispersed nature of the industry makes it very hard to organize. The City or a private developer could finance the assembly of land and construction of parking lots and sell individual lots on a strata basis to truck owners. Truck owners would face increased costs but could ensure an increased level of service through their own efforts. The City would face a financial risk in this process.

10. Establish a Truck Parking Authority with a mandate to oversee the creation and management of new truck parking facilities within the City.

This mechanism would only be appropriate if the City was to determine that the facilitation of truck parking was key to the City's long-term economic development and warranted intervention in the industrial land market.

11. Engage senior governments in the solution to the truck parking problem.

The Provincial and Federal governments have a direct interest in resolution of truck parking problems in the Lower Mainland to ensure that their Pacific Gateway objectives are achieved. They should be approached for discussions on potential funding or policy changes which could assist in resolution of current and future truck parking capacity concerns. Consideration should be given by the GVTA to elimination of the parking tax on truck parking facilities.

**Introduction**

This study has been undertaken by IBI Group in association with Coriolis Consulting under contract to the City of Surrey to develop a Sustainable Truck Parking Policy and Implementation Recommendations for the City.

The medium and heavy truck population registered to Surrey addresses has grown rapidly, increasing by almost a third over the last five years. This has put pressure on the supply of truck parking spaces in the City, resulted in increased costs and inconvenience to the trucking industry, and contributed to a high level of non-compliance with parking and zoning bylaws. City of Surrey background documents related to this study are attached as Appendix A.

The scope of this study includes:

- Collection and analysis related to future truck parking supply and demand.
- Identification of issues related to truck parking and associated services within the City of Surrey.
- Analysis of the potential benefits and dis-benefits of expanded truck parking facilities to the City.
- A review of the supply of suitable land for truck parking and related services.
- Definition of evaluation criteria based on City policies and practices.
- Identification of a range of options and innovative solutions for accommodating short and long term demand for truck parking and related services, including the utilization of land from the Agricultural Land Reserve and the potential for creating a Truck Parking Authority.
- Identification of potential changes to the City's Policy O-51 on support for exclusion of land from the Agricultural Land Reserve which may be required to accommodate the utilization of ALR land for truck parking.
- Extensive consultations with stakeholders on truck parking issues.
- Development of an equitable and sustainable Truck Parking Strategy and a practical implementation strategy.
- Recommendations on the appropriate level of truck parking and related services in the City and strategies for accommodating this demand in the short and long terms.

**Background*****BACKGROUND ON LOWER MAINLAND TRUCKING INDUSTRY***

The trucking industry in British Columbia has undergone a transformation over the last twenty years due to the impact of deregulation on the organization of the industry. The changes which have taken place have contributed directly to the current truck parking issues which are the subject of this study.

Prior to deregulation the industry was based primarily on an employer/employee relationship between trucking companies and drivers. The industry was heavily unionized; at one time the Teamsters Union was the fifth largest union in BC. Deregulation began with changes to the federal Motor Vehicle Transport Act dealing with interprovincial trucking in 1987. The B.C. government deregulated most of the intraprovincial trucking industry, with the exception of raw log haulers and aggregate haulers, in 1998 by way of regulatory amendments under the authority of the Motor Carrier Act. Intraprovincial trucking in B.C. was fully deregulated on January 1, 2000.

Prior to deregulation trucking companies owned and maintained truck fleets, and arranged for secure parking on their own terminal sites. Since deregulation the dominant model for all sectors of the industry except for Less Than Truckload (LTL) service is the use of owner/operators in place of employees. The chief advantage of the use of owner/operators for trucking firms is lower costs. The responsibility for purchasing, maintaining, insuring and financing of the truck fleet lies with individual owner/operators whose costs tend to be lower. The change to owner/operators also effectively separated truck fleet operations from terminal operations so there is now no requirement for terminal operators to provide parking space for trucks (though some do).

The owner/operators are often characterized as independent businesses but in practice (at least in the freight hauling sector) a more appropriate description would be that of a dependent contractor. Most contract with a single company for work and derive most of their income from this relationship.

Low capital costs have made entry into the trucking industry possible with limited initial investment. The ease of entry into the industry has also generated a highly-competitive environment in which individual owner/operators are unable to individually negotiate for higher rates with their employers. Adjustment of rates has required collective action by the owner/operators in the form of work stoppages, including withdrawal of services in the container truck sector in 1999 and 2005, and in the dump truck sector in 2005. The structure of the industry makes it difficult for owner/operators to pass on costs in the form of higher rates.

There are three major segments of the trucking industry which account for the heavy truck population in Surrey: dump trucks; drayage trucks which transport international and domestic containers between port terminals, rail intermodal yards and warehouses; and long haul freight carriers. There is no data available to determine the relative share of these segments, but based on our experience the sectors are probably distributed evenly between them or with a slightly higher share of container and dump trucks, as demand has been growing rapidly in both of these sectors.

## **Economic Benefits and Costs of Trucking**

### ***SURREY ECONOMIC IMPACTS***

Trucking is a service that is essential for almost every component of the regional economy, whether for the movement of goods or for the construction industry (for materials delivery and excavation). However, while trucking is a service business and could therefore be compared to other sectors of the economy that provide services (using measures such as total number of jobs, total income, spin-offs), it is also part of basic regional transportation infrastructure similar to the rail system, port facilities, utility corridors, and airports. Trucking accounts for a very small share of total regional employment, but it is an essential service whose contribution to the overall economy must be regarded in terms other than total employment or total payroll.

Trucking (and more specifically truck parking) is a relatively “unintensive” industry in the sense that it does not require the construction of high value improvements and apparently does not support high values for industrial or commercial land, but the same can be said of rail yards and airports. However, by nature of their “fixed” location, rail yards, port facilities, and airports can attract substantial investment and employment, in the form of businesses that need to be near these facilities. The trucking industry is by nature decentralized, such that being the “bedroom” for trucks does not attract a high level of associated investment. Because truck parking facilities occupy lands that could be occupied by more intensive industrial uses, this can be regarded as a disbenefit, but again the same could be said for other industrial land users that could be characterized at least in part as infrastructure as opposed to business uses.

### ***SURREY IN THE REGIONAL CONTEXT***

Surrey – because of its large land area, location in the region, housing costs and social composition – has become home to a large share of the region’s independent trucking fleet. There is a total of about 6,000 heavy trucks (independents) based in Surrey, suggesting total direct employment in this sector of 6,000 jobs. In addition, there will be some spin-offs (e.g. jobs related to the sale of truck parts, maintenance services, and fuel delivery and sales) but it is unlikely that the total spin-off employment in Surrey would be greater than a ratio of 1:1 (i.e. a total of 12,000 jobs). There is also a multiplier effect associated with the disposable income of the direct and spin-off jobs, but again this will be small when compared to the total employment in Surrey. The difficulty with evaluating the economic impact of this sector is that its numerical size understates its role as a major component of the regional transportation system and economy.

There are also some disbenefits associated with being a base of independent trucking operations, particularly if there is a high incidence of infraction of regulations intended to keep trucks out of residential neighbourhoods. The main disbenefits are air pollution, noise, and the visual impact of non-compliant truck parking and truck operations on City streets. When trucks are parked in designated facilities, there is also a disbenefit in the form of a relatively unintensive use of some industrial land.

There is not enough available data to quantify and compare these benefits and costs, but it is reasonable to conclude that any municipality in the region would be better off, in terms of economic base, to have its industrial lands occupied by

intensive, high value improvements with a high density of high paying jobs rather than having its industrial land occupied by truck parking. The whole region benefits from having a robust trucking industry but any municipality with a disproportionate role in accommodating trucks is probably absorbing a disproportionate share of the costs. The same can be said for any municipality with a disproportionate share of rail yard lands or utility corridors.

On the premise that a large share of the region's truck inventory (at least the portion for which overnight truck parking appears to be an issue) is made up of independent owner/operators, and given that this business is apparently very competitive and does not support high income, then municipalities with very high land values will have a small share of the independent fleet. This is due to the high cost of housing (which would presumably not be affordable to many independent truckers), the high cost of truck parking facilities (due to land value), and the likely high emphasis on enforcement (due to pressure from homeowners concerned about the quality of their neighbourhoods).

At the other end of the spectrum, portions of the region with relatively low land values, a relatively low overall density of urban development, and a socio-economic make-up that might be more receptive to the idea of trucks parked on residential lots, are relatively far from the region's core. The additional travel time and cost associated with a remote (albeit possibly truck-friendly) home base may offset some of the advantages. This suggests that at any given time there will be a zone within the region in which, from the perspective of an independent trucker, the costs and benefits of doing business are optimized. As a result, large portions of the GVRD registered fleet are in Surrey (30%) and Langley (14%). While there are large shares in Vancouver and Burnaby, it is likely that these are corporately owned trucks housed in corporate facilities, rather than independent owner/operators.

From a regional perspective, Surrey is probably one of the better locations as a base for independent trucking, so Surrey absorbs a disproportionate share of the disbenefits. If Surrey attempts to "solve" the problem by stricter enforcement and higher fines rather than by addressing the inadequate supply of truck parking facilities, the problem could be deflected to other communities. The fines would have to be high enough that truckers are better off travelling further (by locating in Langley or Abbotsford) than paying the fines. However, this leads to a spiral of greater infractions and greater enforcement costs.

### **Stakeholder Consultations**

A number of stakeholders were identified at the outset of this project. They included Independent Truck Operators, Truck Park Operators, Trucking Companies, Industrial Land Owners, External Agencies (e.g., TransLink), Surrey Agricultural Advisory Committee, Agricultural Land Commission, Teamsters, Canadian Auto Workers, and the British Columbia Trucking Association.

Identification of individual truck owners is problematic because privacy considerations prevent disclosure of individual information from ICBC records. The consulting team did not have direct access to City of Surrey data on parking violations for similar reasons. ICBC and the City of Surrey contributed to this study by providing aggregate data from their confidential databases and this assistance was critical to conducting our analysis.



According to the ICBC registration data, 70% of heavy trucks belong to one-vehicle fleets which we assume indicates that they belong to owner/operators. There is no umbrella organization which represents this segment of the trucking industry. The Lower Mainland Teamsters Local Unions 31, 213 and 155 represent some owner/operators in the container trucking, gravel trucking and movie industry respectively. The Canadian Auto Workers represents some owner/operators in the container trucking business. These organizations were invited to meet with the consulting team or provide comments by other means but none elected to do so.

An Open House was held in Cloverdale on October 26, 2006. The Open House attracted approximately 100 participants who were presented with information on the study and given an opportunity to provide feedback on the issues and potential alternatives.

In the course of this project, meetings were held with truck park operators, telephone interviews were conducted with several trucking companies, TransLink was contacted with respect to particulars of the parking tax, and meetings were held with the Agricultural Land Commission, BC Trucking Association and Fraser River Port Authority.

## **Supply and Demand for Truck Parking in Surrey**

### ***METHODOLOGY FOR ASSESSING DEMAND AND SUPPLY OF TRUCK PARKING***

Extensive research has been done in the U.S. on the subject of truck parking in the context of rest stops for highway traffic<sup>1</sup>. Section 4027 of the 1998 TEA-21 transportation financing bill required state governments to determine if there was a shortage of commercial vehicle parking, and to identify the best means for remedying shortfalls. The primary motivation for Section 4027 was related to safety concerns, including improper parking of heavy trucks on highway shoulders and entry and exit ramps, and the availability of rest stops on major highway corridors to allow commercial drivers to comply with Hours of Service requirements which limit driving time.

The U.S. Federal Highway Administration in conjunction with Science Applications International Corporation (SAIC) developed a model to assess the demand and availability of truck parking. Demand estimates are based on total truck-hours of travel and the time and duration of stops along specific highway segments. Supply is estimated by assessing the total number of parking spaces at public rest stops and private truck plazas. 41 of the State governments used the SAIC model for the assessment of rest stops. Among states undertaking independent research, the methods included surveys of truckers and stakeholders (including commercial truck stop operators) and systematic observation of capacity utilization of existing sites.

Analysis of truck parking supply and demand in Surrey is much more complex than the research undertaken in the U.S.. The U.S. research focuses on the flow of itinerant trucks along major traffic corridors. Demand can be estimated from truck

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<sup>1</sup> Commercial Truck Parking Analysis: Method to the Madness of Madness in the Method? Journal of Urban Planning and Development; Sharon Gaber, John Gaber and Aemal Khattak March 2005. A summary of research is available in Dealing with Truck Parking Demands: A Synthesis of Highway Practice National Cooperative Highway Research Program, Transportation Research Board 2003.

traffic figures and the characteristics of specific highway segments. Supply can be assessed by evaluating public and private facilities accessible from the highway.

The focus of this research is primarily related to the stock of trucks resident in the City of Surrey, not traffic flows. Demand has been estimated based on analysis of the number and distribution of heavy trucks registered in Surrey from ICBC data. Evaluation of truck parking supply is more complicated because the study area encompasses the whole region, not just the major corridors, and because parking options are not limited to commercial truck stops and public rest stops. Supply has been estimated based on City of Surrey records, site visits and interviews with operators of existing truck parking lots.

## 1.1 Demand for Truck Parking in Surrey

### 1.1.1 TRUCK POPULATION IN SURREY AND NEIGHBOURING MUNICIPALITIES

According to Insurance Corporation of BC records, there were 43,787 heavy vehicles (greater than 5,000 kg Gross Vehicle Weight) registered to addresses in major municipalities in the Greater Vancouver Regional District as of September 2006. Of these, 12,034 or almost 28% were registered to addresses in Surrey.

**Exhibit 1 Truck Population**

City	Gvw Group	2002	2003	2004	2005	2006
BURNABY	5,000 to 9,999	1,491	1,580	1,862	2,133	2,150
	10,000 & Over	3,135	3,168	2,807	2,956	3,152
BURNABY Total		4,626	4,748	4,669	5,089	5,302
COQUITLAM	5,000 to 9,999	824	781	842	943	996
	10,000 & Over	1,396	1,418	1,455	1,527	1,260
COQUITLAM Total		2,220	2,199	2,297	2,470	2,256
DELTA	5,000 to 9,999	1,008	1,013	1,189	1,321	1,341
	10,000 & Over	1,825	1,905	2,082	2,143	2,269
DELTA Total		2,833	2,918	3,271	3,464	3,610
LANGLEY	5,000 to 9,999	2,640	2,726	2,991	3,358	3,295
	10,000 & Over	2,525	2,582	2,818	2,957	3,192
LANGLEY Total		5,165	5,308	5,809	6,315	6,487
MAPLE RIDGE	5,000 to 9,999	1,057	1,050	1,118	1,248	1,168
	10,000 & Over	412	457	451	434	461
MAPLE RIDGE Total		1,469	1,507	1,569	1,682	1,629
NEW WESTMINSTER	5,000 to 9,999	305	320	349	399	402
	10,000 & Over	374	358	360	359	357
NEW WESTMINSTER Total		679	678	709	758	759
PORT COQUITLAM	5,000 to 9,999	449	476	468	517	506
	10,000 & Over	458	553	530	584	594
PORT COQUITLAM Total		907	1,029	998	1,101	1,100
PORT MOODY	5,000 to 9,999	164	123	131	125	167
	10,000 & Over	85	92	90	90	107

CITY OF SURREY  
SUSTAINABLE TRUCK PARKING

City	Gvw Group	2002	2003	2004	2005	2006
PORT MOODY Total		249	215	221	215	274
RICHMOND	5,000 to 9,999	1,397	1,450	1,545	1,628	1,789
	10,000 & Over	1,708	1,813	1,854	2,063	2,186
RICHMOND Total		3,105	3,263	3,399	3,691	3,975
<b>SURREY</b>	<b>5,000 to 9,999</b>	<b>4,299</b>	<b>4,189</b>	<b>4,451</b>	<b>4,897</b>	<b>4,983</b>
	<b>10,000 &amp; Over</b>	<b>4,802</b>	<b>5,022</b>	<b>5,719</b>	<b>6,282</b>	<b>7,051</b>
<b>SURREY Total</b>		<b>9,101</b>	<b>9,211</b>	<b>10,170</b>	<b>11,179</b>	<b>12,034</b>
VANCOUVER	5,000 to 9,999	2,892	2,953	3,096	3,299	3,448
	10,000 & Over	3,133	2,878	2,860	2,771	2,758
VANCOUVER Total		6,025	5,831	5,956	6,070	6,206
WHITE ROCK	5,000 to 9,999	91	94	95	113	116
	10,000 & Over	39	35	36	39	39
WHITE ROCK Total		130	129	131	152	155
Grand Total		36,509	37,036	39,199	42,186	43,787

Source: ICBC

The truck population may be further subdivided into two categories: trucks from 5,000 kg GVW to 9,999 kg GVW, and trucks over 10,000 kg GVW. For purposes of convenience, trucks from 5,000 to 9,999 kg GVW will be called medium duty trucks and trucks over 10,000 kg GVW will be called heavy trucks.

Examples are shown below:

**Exhibit 2 Medium Duty Truck 7,300 kg GVW**



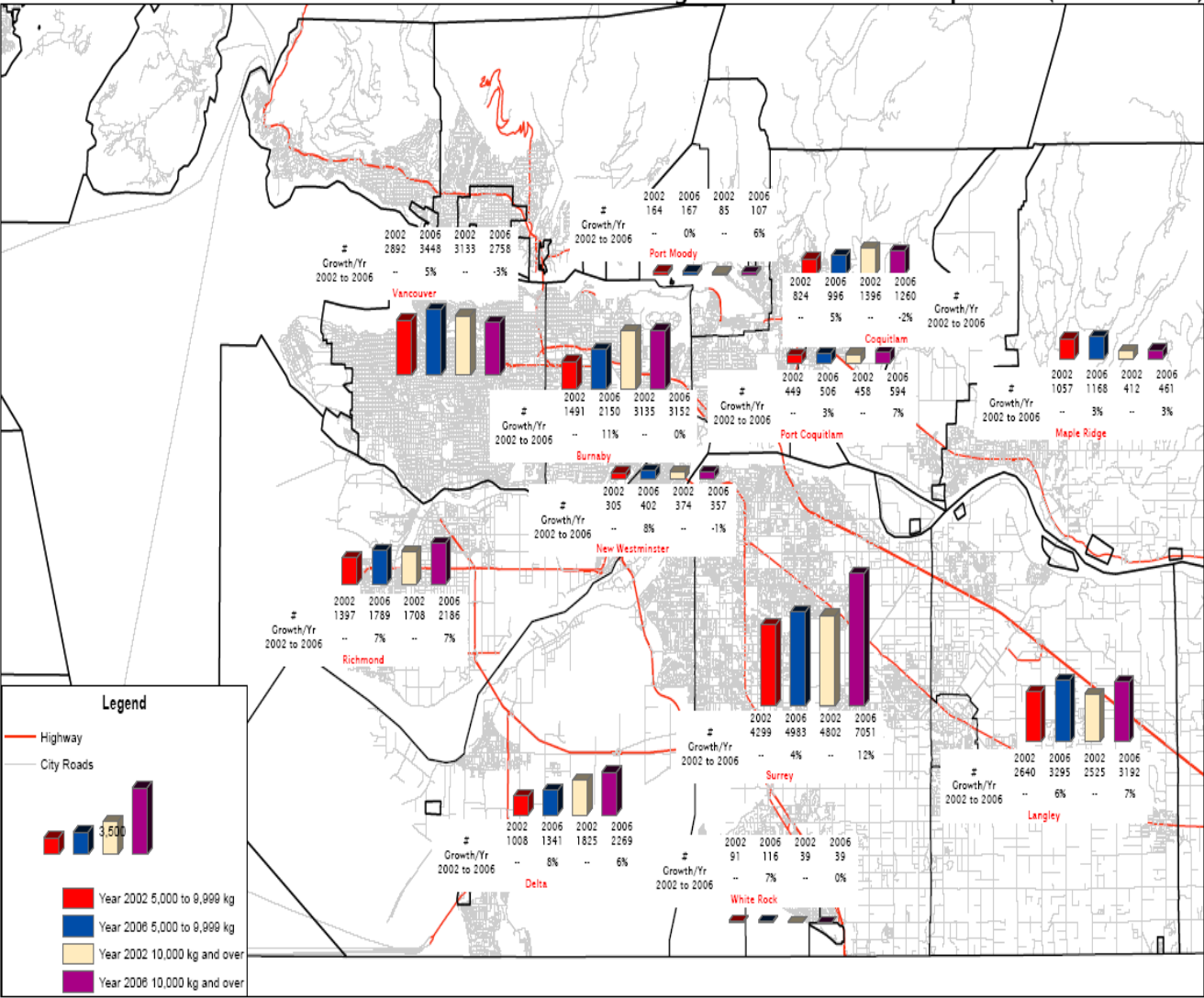
**Exhibit 3 Heavy Truck > 10,000 kg GVW**

Medium duty trucks may be used for local delivery or for a wide variety of service uses. Long haul freight carriers and dump trucks belong to the heavy truck category. Major industry sectors in the Lower Mainland include container trucking associated primarily with port operations, dump trucks hauling fill, sand and gravel, and other freight operations including the Less than Truckload (LTL) and truckload subcategories.

The distribution of registered trucks in Lower Mainland municipalities is shown below. Of the total number of trucks registered in the GVRD, 23,426 or almost 74% belong to the heavy truck category. Of these, 7,051 are registered in Surrey. The population of heavy trucks among major municipalities grew an average of 4% from 2002 to 2006. Major growth drivers have included average annual growth in Lower Mainland container traffic of 11% and in construction activity of 15% between 2002 and 2005.

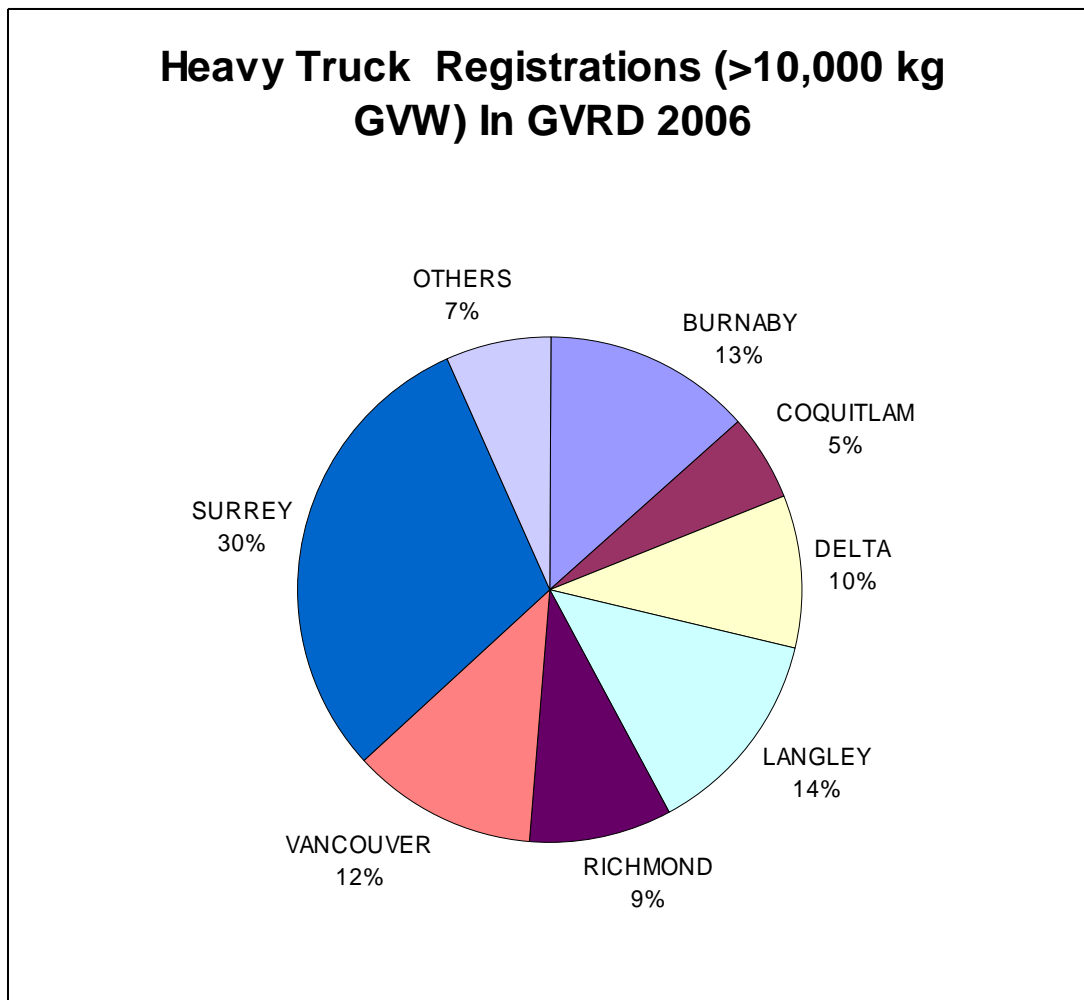
The heavy truck population in Surrey has grown more rapidly than any other municipality, with an average annual growth rate of 12%. The cumulative increase in heavy trucks registered in Surrey was 47% over the last five years. Surrey absorbed 64% of the growth in the heavy truck population among major municipalities in the GVRD.

**Exhibit 4 Truck Registration in BC Municipalities (2002 – 2006)**



The distribution of heavy trucks among GVRD municipalities in 2006 is illustrated below:

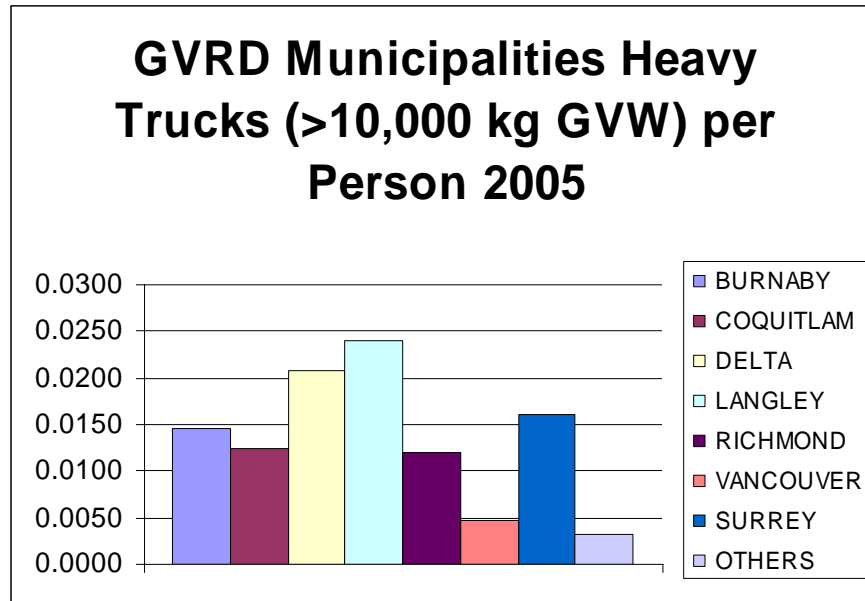
**Exhibit 5 Heavy Truck Registrations in GVRD 2006**



Surrey accounts for the largest share within the GVRD, with 30% of heavy trucks.

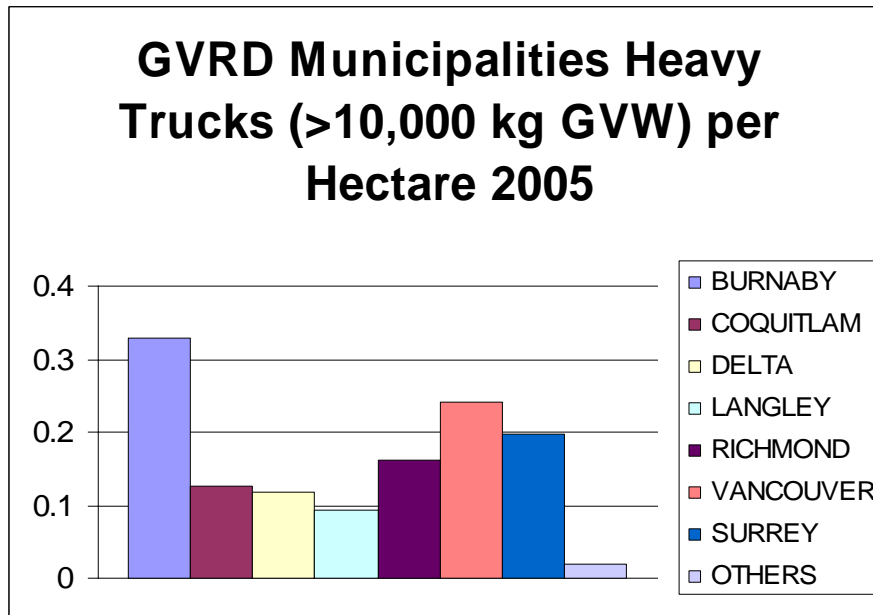
The distribution of heavy trucks relative to population among GVRD municipalities is shown below. Relative to population, Langley and Delta have a higher density of heavy trucks.

Exhibit 6 GVRD Municipalities Heavy Trucks per Person 2005



The ratio of heavy trucks to land area is shown below.

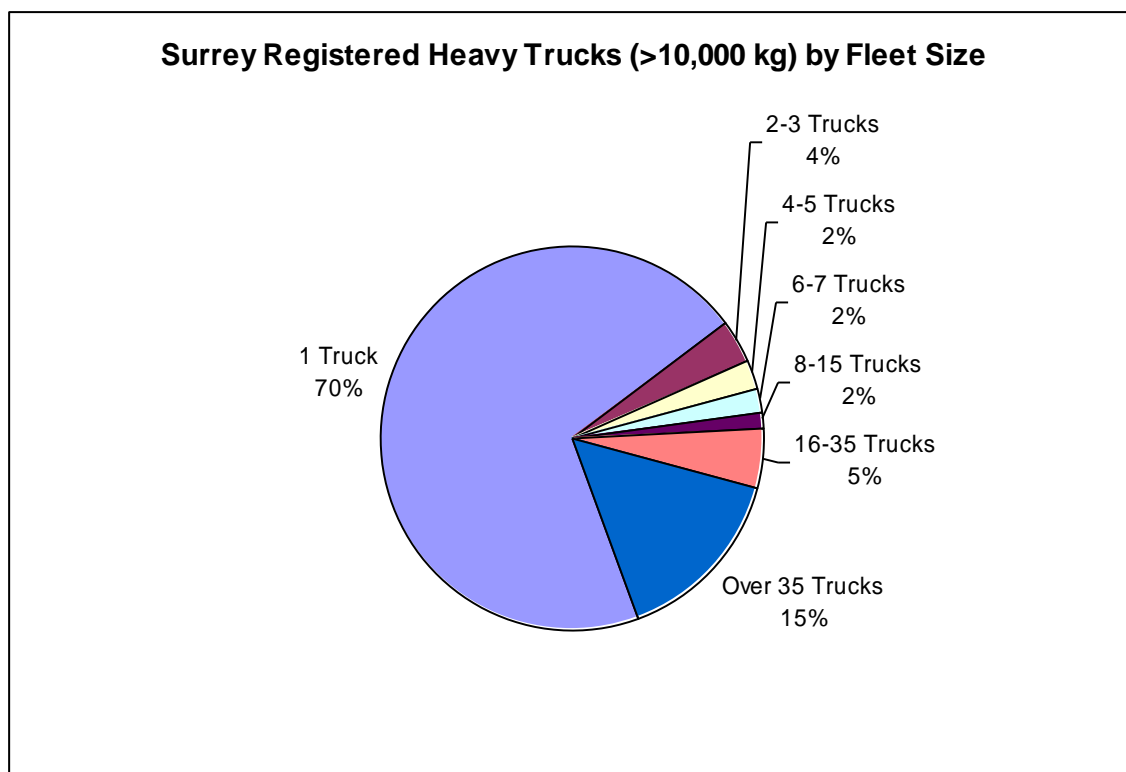
Exhibit 7 GVRD Municipalities Heavy Trucks per Hectare 2005





The profile of Surrey heavy trucks by fleet category is shown below. Single-truck operators account for 70% of trucks. The next largest category is fleets of over 35 trucks, accounting for 15% of the total.

**Exhibit 8 Surrey Registered Heavy Trucks by Fleet Size**



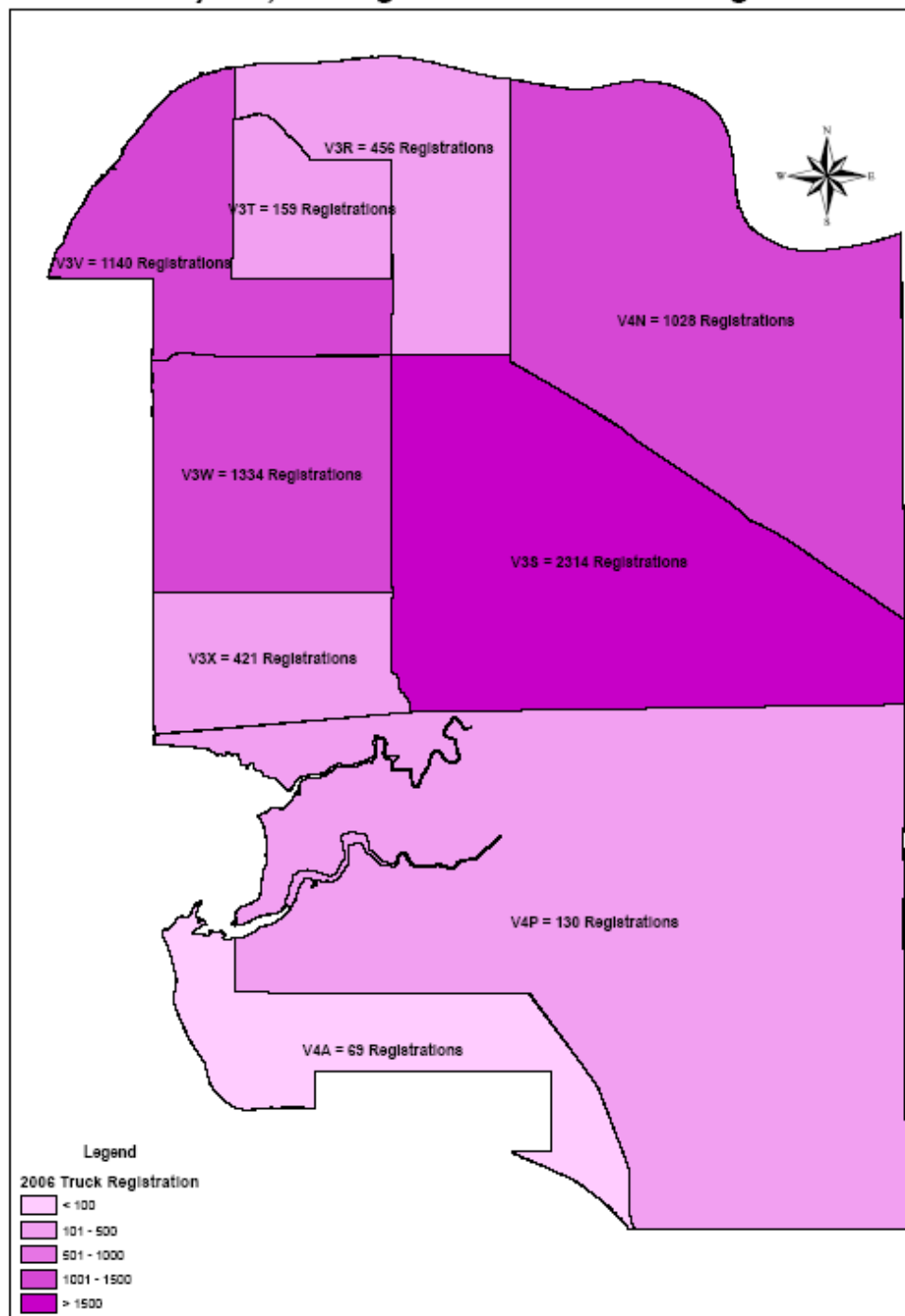
Single truck owner/operators and small fleet operators are unlikely to possess the capital resources to own an industrial site where they can park their truck. Under the assumption that large fleet operators provide parking on their own property, the Removing the large fleet operators from the population results in a parking demand from the local truck population of approximately 6000 heavy trucks.

#### 1.1.2 DISTRIBUTION OF TRUCKS WITHIN SURREY

Data on heavy truck registrations by three digit postal code zone (Forward Sortation Areas or FSA's) within Surrey obtained from ICBC was analyzed to identify the distribution of heavy trucks within the City. The results are shown in the map below. The largest concentrations are in the Newton and Fleetwood areas, followed by Guildford.

Exhibit 9 2006 Surrey 10,000 kg and Over Truck Registrations

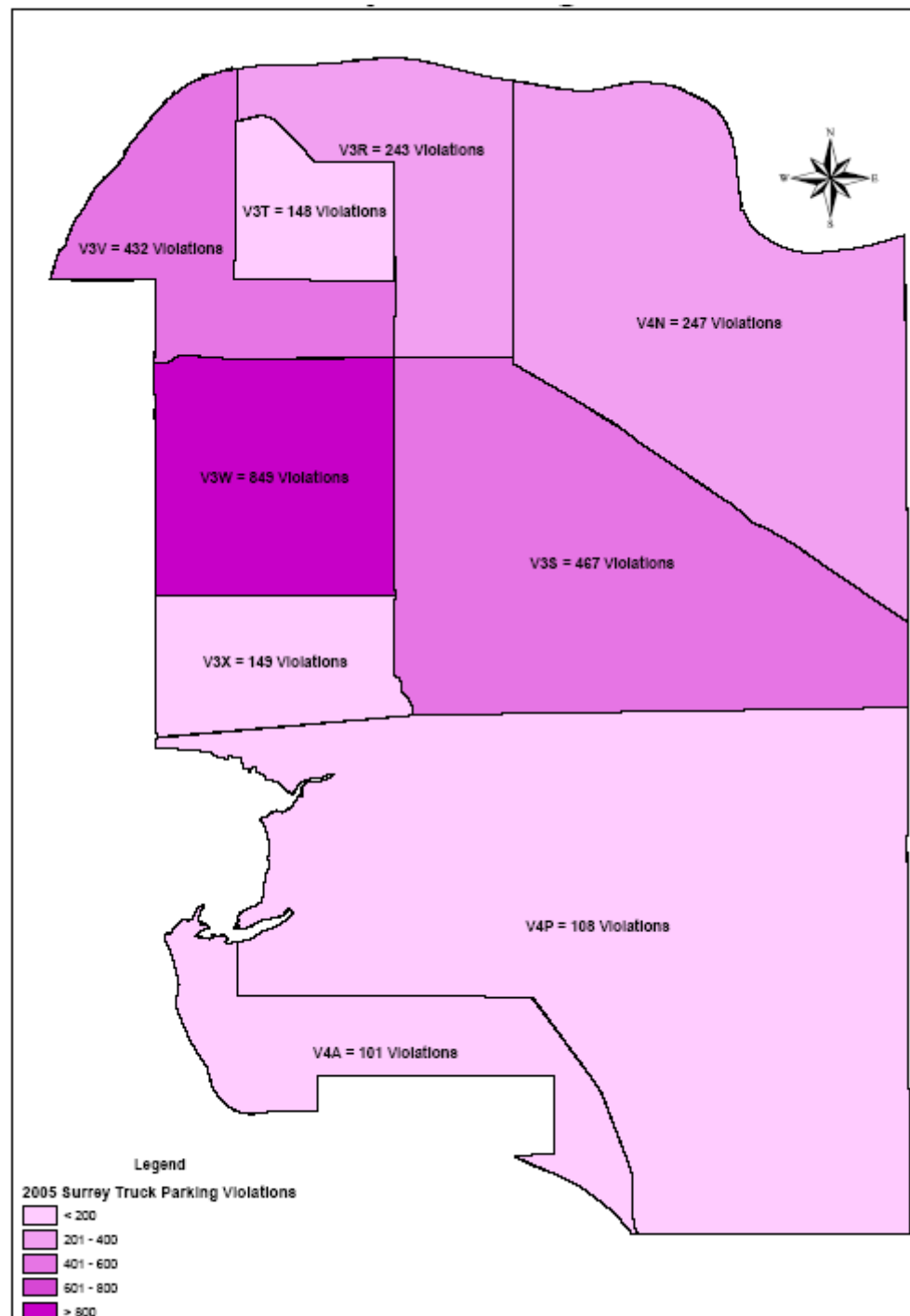
2006 Surrey 10,000 kg and over Truck Registrations



***ANALYSIS OF PARKING VIOLATIONS DATA***

The distribution of parking violations within the City of Surrey in 2005 is shown below:

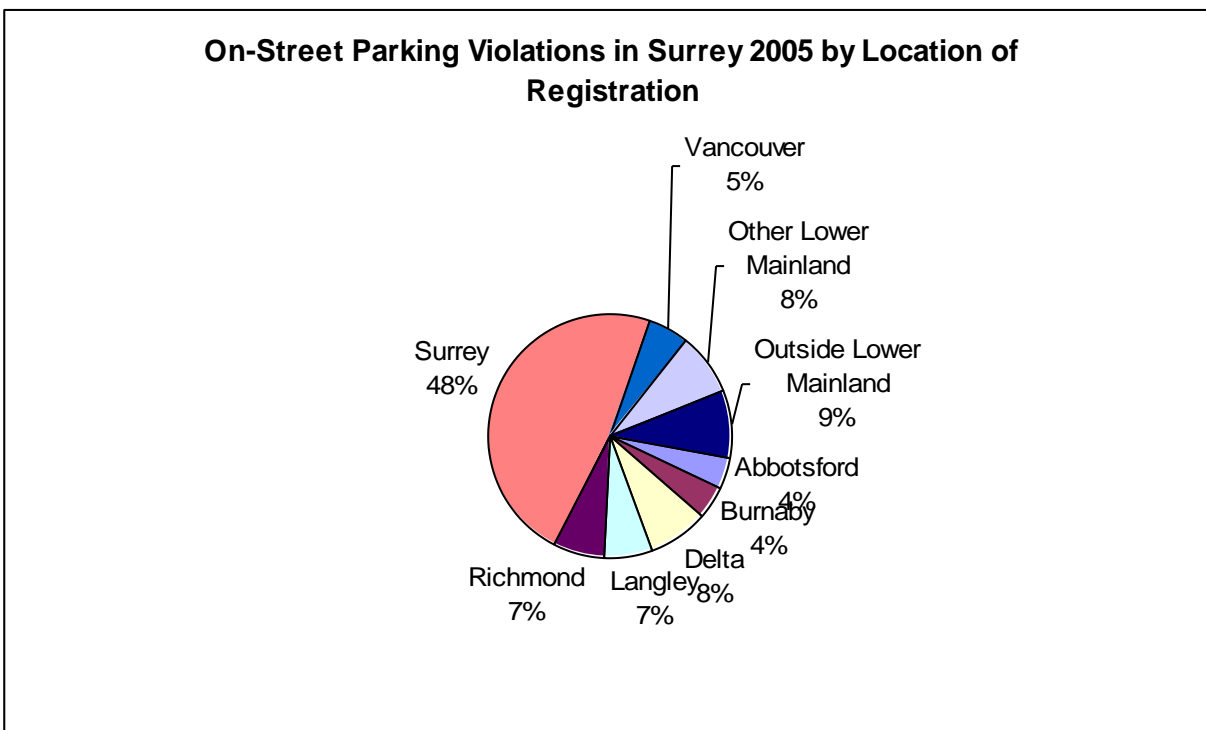
**Exhibit 10 2005 Surrey Parking Violations**



Surrey issued 2544 on-street truck parking tickets in 2005. This is disproportionately higher than other Lower Mainland municipalities relative to Surrey's share of truck registrations. The high level of violations has been interpreted as a sign that the growth in demand for truck parking has outstripped the available supply.

An analysis was undertaken to identify the home base of trucks ticketed for on-street parking violations in 2005. Tickets for which no address of registration could be found and tickets which were cancelled were excluded. The resulting database included 1523 observations. Of these only 48% were issued to trucks registered in Surrey. Other Lower Mainland municipalities accounted for 43% and locations outside the Lower Mainland accounted for 9%. Details are illustrated below:

**Exhibit 11 Distribution of Violation Tickets by Location of Registration**

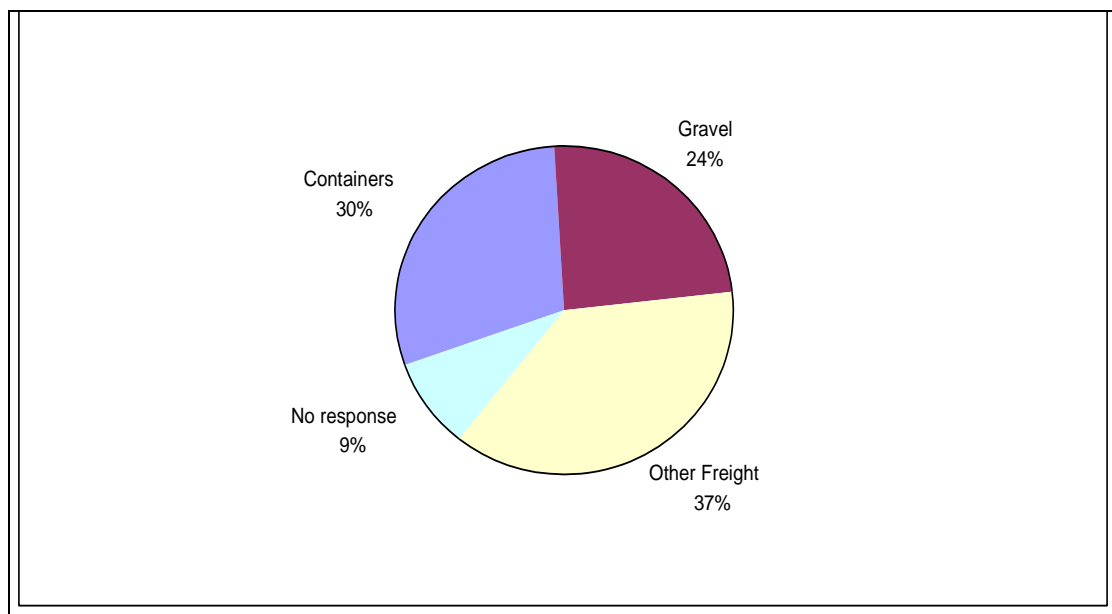


The results indicate that a shortfall of available long term parking supply is not the only factor contributing to the high level of non-compliance with Surrey's parking bylaws. To the extent that parking violations are committed by itinerant rather than resident trucks the solution may require provision of short term parking capacity similar to the need for trucking plazas and rest stops identified in the U.S. studies or local businesses being required to provide more on-site parking for the trucks that service them.

***INTERVIEWS AND SURVEYS OF THE TRUCKING INDUSTRY***

Participants at an Open House on October 26, 2006 in Cloverdale were surveyed on their views with respect to truck parking issues. A copy of the survey form is included in Appendix B. 95 survey forms were filled out and handed in. Of the survey participants, 30% were in the container sector, 24% in gravel, 37% haul other freight, and the remaining 9% either are not engaged in the trucking business or did not indicate the type of freight hauled.

**Exhibit 12 Open House Survey Results – Profile by Industry Segment**



Of the 81 respondents who indicated the type of truck operated, only 5 or 6% operate a 2 axle truck. From the truck descriptions and type of freight handled, it appears that 94% of the participants who responded to this question operate trucks in the heavy category (>10,000 kg GVW).

The monthly price for parking a truck and trailer combination paid among the 62 participants who provided data ranged from \$130 per month to \$275 per month, with an average of approximately \$200. Among the 16 respondents who indicated they pay for a truck alone, prices ranged from \$100 to \$490 per month with an average of approximately \$190.

On issues related to desirable features of truck parking lots, 53% of survey respondents expressed a preference for a paved parking lot, 72% favoured security fencing and lighting, 71% favoured truck washing facilities, 75% favoured bathroom facilities and rest areas, and 75% favoured inclusion of a maintenance area. 53% of respondents indicated that trucks should be required to park in industrial areas. Of the 88 participants who responded to the question, 98% indicated that the City should provide parking areas, and all but one indicated they would use these areas. Given a choice between \$200/month, \$400/month or not paying for parking, of 78 participants who responded regarding their willingness to

pay for this service, 56% indicated a willingness to pay \$200 per month for a tractor/trailer combination, none were willing to pay \$400 per month and 42% indicated they would not be willing to pay a user cost of either \$200 or \$400 per month.

In conversation many open house participants indicated that security is a major concern, and that they have experienced theft of trucks and/or contents. Several noted that in spite of paying monthly rental fees they are not guaranteed a spot or expressed the concern that their situation is temporary.

### ***SUPPLY OF TRUCK PARKING***

#### **Identified Commercial Truck Parking Lots**

Based on their records of development permits, Temporary Use Applications and business licences the City of Surrey has identified 21 existing truck parking lots with a total capacity of around 700 spaces (truck and trailer combination), though capacity for some of the facilities was unavailable and therefore not included in this total. The consensus among truck park operators appears to be that between 20 and 25 trucks per acre can be accommodated in truck parking lots. The total acreage of the identified sites is approximately 68.4 acres which would suggest a capacity of 1368 to 1710 spaces. By this estimate the available “official” commercial truck parking facilities can accommodate around 24% of the total heavy truck fleet registered in Surrey, and around 29% of trucks in fleets less than 35 trucks.

<b>Truck Parking Lot</b>	<b>Area (Acre)</b>
Issued Truck Parking Licenses	28.4
Pending or Proposed Parking Licenses	19.4
TUP Applications & No Business Licenses_region	15.6
Existing TUP_region	5.0
Total	68.4

Information gathered in meetings with licensed truck park operators indicate that their facilities, which charge for parking on a monthly basis, are essentially fully utilized. They report that they typically receive several calls per day from owner/operators seeking parking, a demand which they cannot accommodate.

Site visits in the Bridgeview and South Westminster neighbourhoods turned up evidence of a significant amount of additional capacity on existing industrial sites that do not appear on the City's records. Compliance with the City's zoning bylaws for truck parking lots does not appear to be a priority for the operators, and information from City staff indicates that typically operators apply for Temporary Use Permits after they have been cited for a zoning bylaw offence, which are generally complaint-driven. From these observations it appears that a significant portion of truck parking needs are being met through “unofficial” facilities which

have not been inspected for compliance. It is likely that the operators of these facilities would be reluctant to divulge the nature of their operations to the City.

#### ***OTHER EXISTING PARKING OPTIONS***

It appears that the large fleet operators tend to provide parking at their own facilities. There are two large truck terminals located on Grace Road in South Westminster, Van Kam Freightways and Vitran.

Van Kam Freightways has a fleet of 600 trucks and trailers providing scheduled service throughout BC, including LTL, Truckload, and refrigerated service. Van Kam moved to their new terminal in Surrey from Burnaby in 2004. Van Kam also uses owner/operators; parking is provided on site at their terminal.

#### ***ASSESSMENT OF CURRENT AND FUTURE SUPPLY/DEMAND BALANCE***

For a number of reasons, the consulting team has been unable to definitively determine the current supply and demand for truck parking in Surrey. These reasons include:

- Our inability to obtain comprehensive lists of names and addresses of truck owners, which prevented development of a comprehensive survey.
- The lack of any organization broadly representative of the truck owner/operators from which we could acquire the required information.
- Potential reluctance of stakeholders to divulge information, particularly where their current activities may be in violation of zoning and/or parking bylaws. This applies on both the demand (truck owner/operators) and supply (unlicensed truck parking lot operators) sides.

Our research has focused on the heavy truck category (>10,000 kg) because this is the most identifiable sector and because it accounts for the largest requirement for parking, based on vehicle size and its share of truck registrations. On the assumption that large truck fleet operators (over 35 trucks) provide parking for their own fleets, we have estimated the current demand for heavy truck parking at approximately 6000 vehicles.

Commercial truck parking lot supply identified by the City of Surrey research is around 700 spaces. Based on average lot occupancy of 20 to 25 trucks per acre, the combined capacity of all of the facilities identified by the City – lots with business licenses or pending licence applications, and with Temporary Use Permits or pending applications – is between 1368 and 1710 spaces. From observation there is a significant level of capacity in use on existing industrial sites in Bridgeview and South Westminster, and there are indications of illegal long term parking in agricultural zones (as evidenced by complaints from the Agricultural Advisory Committee and others) and at residences with tolerant neighbours.

However, the observations of truck owner/operators and parking lot operators alike indicates there is a significant level of demand which is not being met by legally sanctioned truck parking capacity in the City of Surrey. The high level of non-compliance with zoning and parking bylaws is also indicative of a shortfall, though it appears that over half of on-street parking violations are related to parking of



non-resident trucks. The shortfall between the demand for truck parking and the availability of legally compliant truck parking spaces indicates a need for alternative solutions for accommodating truck parking in Surrey.

### ***FUTURE DEMAND AND SUPPLY FOR TRUCK PARKING IN SURREY***

While the current difference between demand and supply for truck parking in Surrey cannot be fully quantified, it is clear that the current situation is not sustainable in the face of continuing growth in the truck population.

For two major industries served by the trucking industry, containers and gravel, growth is expected to continue at a rapid pace.

In the construction sector, demand for new housing continues to be strong in spite of a slight decline in housing starts over the last year. Non-residential construction is being spurred by massive investments in infrastructure. There are now 769 major projects in excess of \$15 million on the books in BC, according to the Business Council of BC<sup>2</sup>. Robust non-residential construction is expected to be a key economic driver in the next two years, and major infrastructure projects such as the Provincial Gateway Program projects and Olympics preparations are likely to maintain a high level of activity at least through 2010.

Container trade is expected to grow rapidly as well. Vancouver Port Authority forecasts call for growth of almost 10% per year to 2011. The Business Council expects that the non-residential construction and transportation and logistics sectors will post above average growth over the next few years.

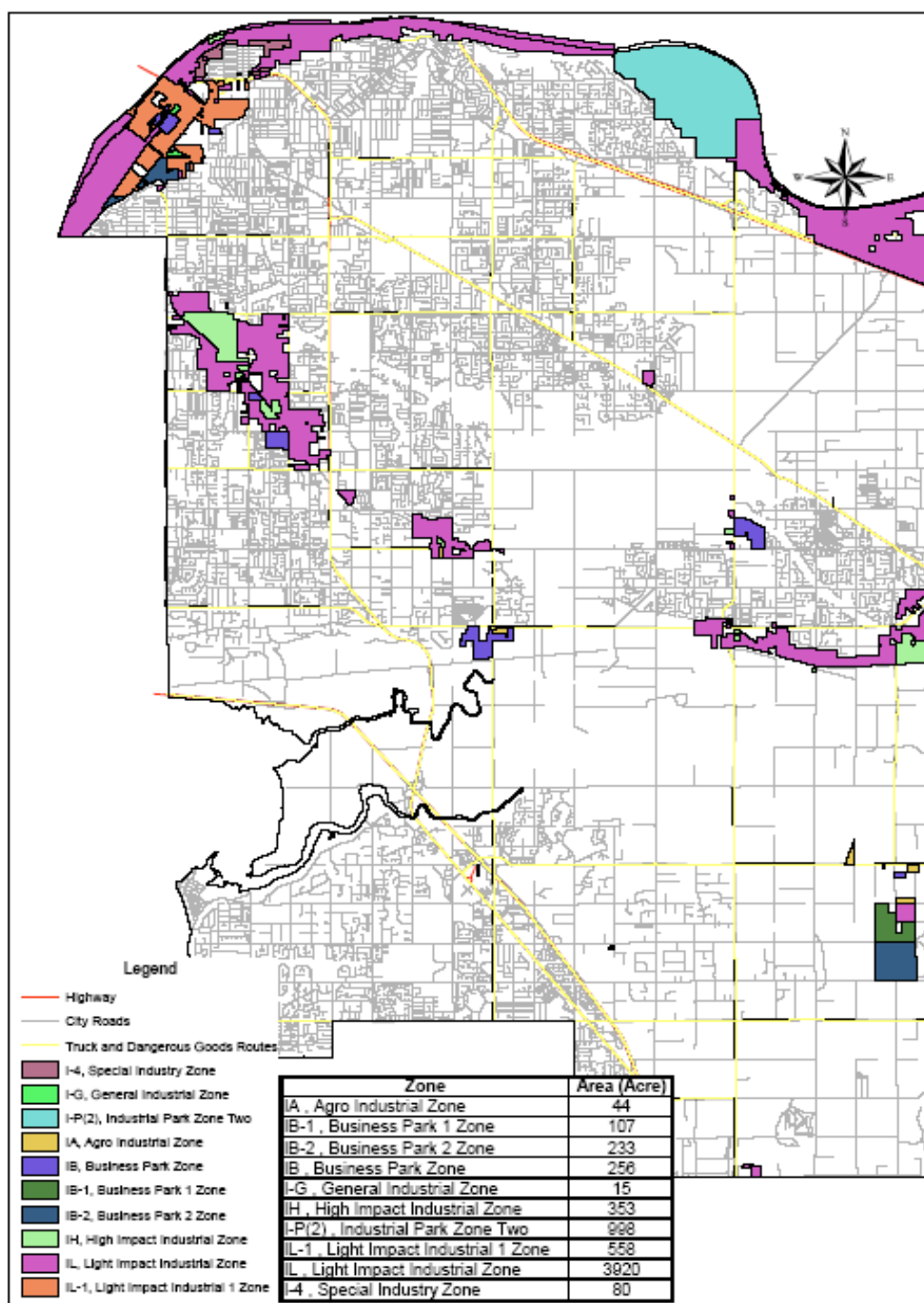
At the average annual growth rate in heavy truck registrations experienced between 2002 and 2006, the number of trucks in the region will increase at 4% or roughly 900 trucks per year. At 25 trucks per acre, this implies that the land base required to support additional truck parking will be 36 acres per year. If Surrey's heavy truck population expands at the same level as the region's, an additional 11 acres will be required to accommodate growth each year. If Surrey has to accommodate the 64% share of growth it experienced between 2002 and 2006, an additional 23 acres per year will be required.

In the face of increasing demand, the land base available to accommodate demand seems likely to shrink. Under current zoning regulations, truck parking as a principal use is allowed only in IL (Light Industrial) and IH (Heavy Industrial), zones. The distribution of Industrial zones in Surrey is shown in the following exhibit.

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<sup>2</sup> British Columbia Economic Review and Outlook, presented to RBC Financial Group Clients  
Vancouver, BC October 18, 2006; Jock Finlayson, Executive Vice President – Policy, Business Council of British Columbia  
[http://www.bcbc.com/Documents/EC\\_20061018\\_Presentation\\_RoyalBankVancouver.pdf](http://www.bcbc.com/Documents/EC_20061018_Presentation_RoyalBankVancouver.pdf)

Exhibit 13 Surrey Industrial Zones



Light Industrial is the largest category with a land base of 3391 acres. The distribution of this land by owner is shown below:

**Exhibit 14 IL Zone Land Ownership**

**IL Zone by Land Owner**

<b>Owner Type</b>	<b>Area (acre)</b>	<b>% Total</b>
BC Hydro	157	5%
BC Rail	2	0%
City Land	124	4%
CN Rail	301	9%
Federal	186	5%
Harbour Board	233	7%
Park - City	53	2%
Park - Regional	101	3%
Private	2151	63%
Provincial	72	2%
School	8	0%
Transit	3	0%
Total	3391	100%

BC Hydro, CN Rail, and federal and Harbour Commission (i.e. Fraser River Port Authority) lands account for 26% of the total. The land available for industrial use in private sector hands is only 63% of the total or 2151 acres.

The distribution of Heavy Industrial lands by ownership is shown below:

**Exhibit 15 IH Zone Owner Land Ownership**

**IH Zone Owner Land Ownership**

<b>Owner Type</b>	<b>Area (acre)</b>	<b>% Total</b>
BC Hydro	214	63%
Federal	8	2%
Park - City	1	0%
Private	113	33%
Road - City	2	1%
Total	337	100%

BC Hydro owns 63% of Heavy Industrial lands. Of the 337 acres of remaining Heavy Industrial lands in Surrey, only 33% or 113 acres is in private hands.

According to these figures, there is only 2264 acres of Light and Heavy industrial land in private hands for which truck parking is permitted as a principal use.

Existing truck parking facilities known to the City currently occupy 68 acres. However, a significant share of this capacity is in the South Westminster neighbourhood which has been rezoned from the Light Industrial zone (IL) to a new IL-1 category. The new IL-1 zone was developed to implement the Neighbourhood Community Plan NCP for South Westminster. The IL-1 zoning is specifically intended to restrict outdoor storage:

“the recommendations... will implement the intent of the South Westminster NCP and are necessary so that new developments involving truck parking, outdoor storage and stacking of containers, as a principal use, will no longer occur in South Westminster”<sup>3</sup>

The new zoning accommodates concerns of hillside residents over existing industrial operations in the area.

The IL-1 zoning restricts outside storage to an area up to 1.5 times the area of the footprint of buildings, to a maximum of 40% of the site area, and limits the height of outdoor storage to 3.5 metres (two international marine containers) in height. It also includes a newly defined land use for “Distribution Centres” to accommodate “higher-end logistics hubs” that engage in the distribution of goods and which takes place within enclosed buildings”. While truck parking is allowed in conjunction with these uses, the IL-1 Zoning does not provide for truck parking as a sole use on a lot.<sup>4</sup>

Current facilities compliant with IL zoning requirements will be “legal non-conforming” which means that existing operations can continue but expansion would not be permitted. Enforcement of the new zoning requirements would result in a 23% reduction in existing “official” commercial truck parking capacity and a further reduction in the “unofficial” capacity currently accommodating truck parking demand in Surrey. The rezoning of 558 acres to IL-1 has resulted in a reduction of approximately 20% in the available land base (in private hands) for which truck parking lots are permitted as a principal use.

Similar issues to those that exist in South Westminster and for IL-1 zoning apply to industrial lands in the Campbell Heights area and with respect to IB zones within the City.

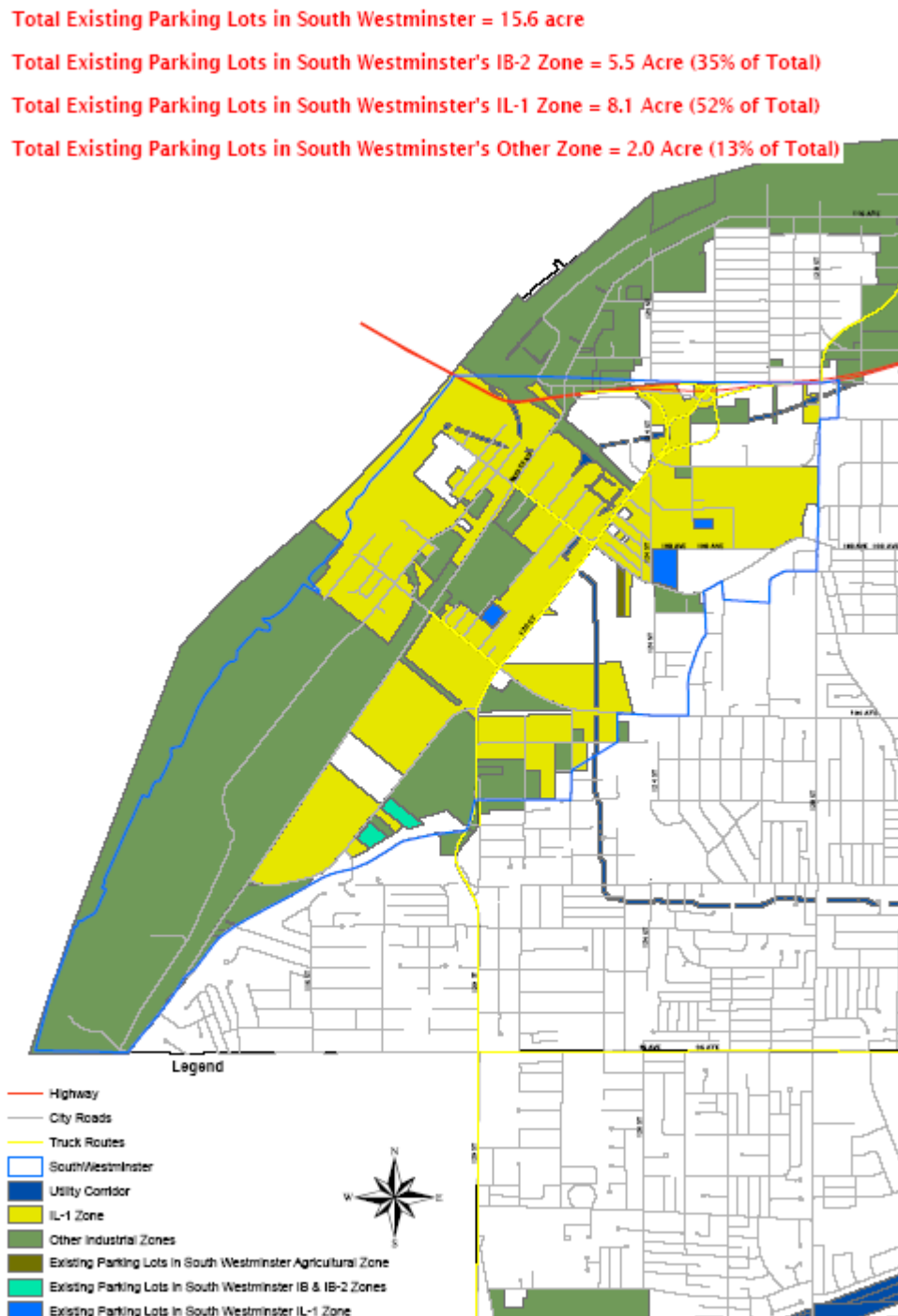
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<sup>3</sup> Corporate Report 6520-20 Industrial Zoning in South Westminster February 1, 2005, p. 4.

<sup>4</sup> Industrial Zoning in South Westminster, p. 7.

Exhibit 16 Impact of Rezoning on “Official” Truck Parking Lots in South Westminster

## South Westminster Existing Parking Lots



***CONCLUSIONS***

The current demand for parking of heavy trucks in Surrey is estimated at 6000 vehicles, under the assumption that large fleet owners provide parking for their own fleets. Current “official” parking lots – those with development permits, business licenses, and/or Temporary Use Permits or applications – have a capacity to accommodate around 29% of this total. The additional trucks are currently being parked at “unofficial” parking lots in industrial zones, or on agricultural or residential sites in violation of City bylaws.

Demand in at least two out of three segments of the trucking industry, containers and gravel, is expected to remain strong through at least 2010. At a conservative growth estimate of 4% per year in the heavy truck population for the Lower Mainland and a proportionate increase for Surrey, an additional 11 acres per year of industrial land will be required in Surrey to meet demand. If Surrey has to accommodate the 64% share of growth it experienced between 2002 and 2006, an additional 23 acres per year will be required.

The industrial land base available for truck parking is likely to continue to shrink. The current zones which allow truck parking as a principal use are IL (Light Impact Industrial) and IH (Heavy Industrial). The current IL and IH land base in private hands (i.e. after excluding lands associated with Fraserport, CN Rail, BC Hydro and various governments) totals around 2264 acres. The recent rezoning of land in the South Westminster zone to IL-1 which restricts outdoor storage resulted in a reduction of approximately 20% in the private sector IL land base. New industrial areas zoned for IB uses do not provide for truck parking as a sole or independant use of land. Enforcement of the new zoning requirements would result in the loss of approximately 23% of the capacity of existing “official” truck parking lots in Surrey.

***SURVEY OF POLICIES IN NEIGHBORING MUNICIPALITIES***

Policies relating to truck parking on streets and on private property are summarized below.

**Exhibit 17 Truck Parking Policies**

	Surrey	Abbotsford	Burnaby	Delta	Langley Township	Richmond	Vancouver
<b>Parking bylaws</b>							
Residential zones	No parking on street in residential areas	No parking on street in residential areas	No parking on street in residential areas	No parking allowed in Delta Civic Centre	Trucks >5600 kg GVW not permitted between 9 p.m. and 7 a.m.	No daytime parking adjacent to parks, schools, church or residence	No daytime parking adjacent to parks, schools, church or residence
Industrial zones	No parking 7 p.m. to 7 a.m.	Street parking allowed up to 72 hours in industrial zones.	No overnight parking on streets for trucks >3600 kg GVW	On-street truck parking unregulated in some Industrial zones (Annacis)	Parking permitted.	Parking limited to 3 hours during day except in front of own business	Parking limited to 3 hours during day except in front of own business
Agricultural zones	No parking 7 p.m. to 7 a.m.	Street parking allowed up to 72 hours in agricultural zones.	No overnight parking	No regulation	Parking permitted.		
Overnight parking	No parking 7 p.m. to 7 a.m.		No overnight parking	No regulation		No street parking between 7 p.m. and 7 a.m.	No street parking between 10 p.m. and 6 a.m.
Other	Trucks parked off of truck route may be ticketed under truck route bylaw		Trucks parked off of truck routes ticketed	Unattached trailers may not be parked on streets.	No specific areas and roads designated for truck parking		
<b>Zoning bylaws</b>							
Residential zones	Parking not allowed	Trucks >5500 kg GVW permitted on residential lots if enclosed in a building	Parking not allowed	Parking not allowed	One truck permitted on residential lots in SR-1 (1 acre residential) and SR-2 (2 acre residential)	Parking not allowed	Parking not allowed
Industrial zones	Parking allowed in IL (Light Impact Industrial), IH (Heavy Impact Industrial) and IS (Salvage Industrial) zones	Parking allowed in I2 and I3 industrial zones	Parking allowed under "storage yards" land use in Heavy Industrial districts M-3, M-3a, M3-r, M-3I and M3-k; Special Industrial zoning category M6 for truck terminals - requires onsite parking for trucks used in operations		Parking allowed in Service Industrial zones (M1-A and M1-B), General Industrial zones (M-2, M2-A, M2-B), Heavy Industrial Zones (M-3, M-4, M-5) and in the Industrial Transition zone (M-8)	Special zoning category I5 Industrial Storage District Parking; Parking allowed in C4-C7 Districts	Parking allowed in Industrial zones M-1, M1-A, under the Storage Yard use category
Agricultural zones	Only if truck is related to agricultural use	Up to 2 non-agricultural trucks allowed as long as one belongs to the resident		One non-agricultural truck allowed on agriculturally zoned lot	One non-agricultural truck allowed on sites <3 acres; up to 3 non-agricultural trucks allowed on sites >3 acres	Parking not allowed	
Other							
<b>Compliance</b>							
Violations	2544 in 2005 (1031 overnight parking; 1119 residential area; 394 unattached trailer); plus 982 off truck route violations		257 Tickets under Truck Route bylaw in 2005	145 tickets YTD 2006 (14 overweight vehicles, 23 off truck route, 108 unattached trailer)	200-300 tickets issued annually		500 tickets 2005; 655 YTD 2006

***TRUCK PARKING BYLAWS***

Surrey, Abbotsford, Delta and Burnaby do not permit on-street parking of large trucks in residential areas. Langley Township does not prohibit parking in residential areas but does not permit overnight parking (between 9 pm and 7 am) for trucks greater than 5600kg GVW. Delta has the same 5,000 GVW restriction in their residential zones as Surrey does and truck parking is not allowed in the Civic Centre. Richmond and Vancouver do not allow daytime parking adjacent to parks, schools, churches or residences, and parking is limited to 3 hours in front of commercial businesses except in front of your own business.

Surrey and Burnaby do not allow overnight parking on streets in industrial or agricultural zones. Abbotsford allows on street parking for up to 72 hours in industrial and agricultural zones. Parking is permitted in industrial and agricultural zones in Langley Township and in designated on-street parking areas in industrial zones in Delta. Parking is allowed in industrial zones in Richmond and Vancouver. Overnight parking on the street is not permitted in Surrey, Burnaby, Richmond and Vancouver. It is permitted in Abbotsford, Langley Township and Delta.

All municipalities have bylaws restricting trucks to approved truck routes, so even in municipalities where parking is permitted in specific zones offenders may be ticketed under the truck route bylaws if they are parked off of truck routes.

***ZONING BYLAWS***

Parking is not allowed on private property in residential zones in Surrey, Burnaby, Delta, Richmond and Vancouver. Langley Township allows one heavy truck to be parked on residential lots in the 1 acre and 2 acre residential zones. Abbotsford allows parking of trucks over 5500 kg GVW on residential lots if they are enclosed in a building.

***COMPLIANCE STATISTICS***

The number of violation tickets issued for truck parking offences is significantly higher in Surrey than in neighbouring Lower Mainland municipalities. In 2005 2544 tickets were issued for on-street parking violations, 200 for zoning offences, and an additional 982 for deviation from approved truck routes, which may include parking offences. The next greatest number of tickets was issued in Vancouver, which issued 500 tickets in 2005.

***CONCLUSIONS***

Surrey's parking and zoning bylaws dealing with truck parking are consistently among the strictest in each category. The requirements for parking of trucks on agricultural properties exceed those required by the Agricultural Land Commission for trucks belonging to residents. The number of violation tickets issued in 2005 is more than 5 times the level reported in other municipalities for which data was obtained for this study.



**Survey of best practices in other jurisdictions.****1.2 Riverside County, California (South-Eastern California) - Good Neighbour Guidelines**

In 2003 the Riverside County Board of Supervisors ordered the establishment of a Regional Air Quality Task Force (RAQTF) to study air quality issues in western Riverside County. Recent studies highlighting potential health impacts from local concentrations of diesel Particulate Matter (PM) emissions have made strategies to reduce the population's exposure to diesel exhaust a high priority. The RAQTF developed "Good Neighbour Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities," (referred to as "Good Neighbour Guidelines") to promote and assist planning departments, developers, property owners, elected officials, community organizations, and the general public to help address some of the complicated choices associated with permitting warehouse/distribution facilities and understanding the options available for minimizing the impacts of diesel particulate matter (PM) from on-road trucks associated with warehouses and distribution centers on existing communities and sensitive receptors located in the sub region. "Sensitive receptors" include residential communities, schools, parks, playgrounds, day care centers, nursing homes, hospitals, and other public places where residents are most likely to spend time.

The following strategies are among those adopted in the "Good Neighbour Guidelines":

- Create a buffer zone of at least 300 meters consisting of office space, employee parking, or greenbelt between warehouse/distribution centers and sensitive receptors.
- Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points
- Design warehouse/distribution centers so that interior vehicular circulation shall be located away from residential uses or any other sensitive receptors.
- Require warehouse/distribution centers to establish specific truck routes and post signage between the warehouse/distribution center and the freeway and/or primary access arterial that achieves the objective. The jurisdiction may not have an established truck route, but may take the opportunity to consider the development of one;
- Provide food options, fuelling, truck repair and or convenience store on-site or within the warehouse/distribution center complex;
- Allow homeowners in the trucking business to acquire permits to park vehicles on property, residential areas or streets;
- Establish overnight parking within the warehouse/distribution center;

- Allow warehouse/distribution facilities to establish an area within the facility for repairs.

### 1.3 City of Abbotsford - Limited Parking in Agricultural Zones

The City of Abbotsford began enforcement on truck parking bylaw violators in the fall of 2005, taking several to court and forcing more than 24 sites to remove commercial trucks. These violations related to the parking of trucks on agricultural land. This activity generated considerable controversy and City staff was directed to undertake a study on the truck parking issue. The City also issued an RFP requesting proponents to build a truck parking lot, but had no responses.

In June 2006 a new bylaw was passed which permits parking of up to two commercial vehicles, not associated with the farm operation, on all lots zoned agriculture, subject to one of the trucks being owned by the resident of the property. Truck parking must comply with all other applicable City bylaws, such as the prohibition against discharge of lubricants into a water source.

The bylaw was not opposed by AAC representatives from the Agriculture Land Commission and the Ministry of Agriculture and Lands. The parking of not more than two commercial trucks is viewed as accessory to the principle use of the property for farming. Limiting the truck parking to two tractor-trailer units will typically allow them to be accommodated on existing parking areas or driveways thus minimizing any loss of land to farming.

### 1.4 Rapho Township, Pennsylvania - Standards-based Regulation of Residential Truck Parking

Rapho Township is a rural township in Lancaster County, Pennsylvania. Approximately 95% of the township is zoned agricultural and 90% is in active agricultural production.

Rapho Township allows the parking of one commercial truck on farms and residences on a permit basis, subject to the following requirements:

- The parking of a commercial truck upon a residence is limited to a vehicle operated by the occupant of the residence.
- Any driveway used for commercial truck access shall have a minimum inside turning radius of fifty (50) feet.
- The driveway upon which a commercial vehicle is parked must have sufficient area for a truck turnaround, so that the vehicle can enter and exit the site in a forward direction.

- The commercial truck must be parked behind the front building setback line, or at least one hundred (100) feet from the street right-of-way, whichever is the lesser distance.
- Any driveway used for commercial truck access shall have a minimum seventy-five (75) foot paved apron as measured from the street right-of-way.

The applications for a permit must include a site plan depicting property lines, driveway, parking area, paved apron (including dimensions), and any other structures located on property.

## 1.5 Port of Rotterdam - Truck Park Fruitport

The Port of Rotterdam in cooperation with the District of Delfshaven and private companies developed a truck parking facility to reduce noise pollution in residential neighbourhoods close to the port district, and to improve neighbourhood access and safety.

The Truck Park Fruitport is located in a port area with fruit companies and is close to the residential areas of the Delfshaven district. The Truck park offers secured parking with 24 hour surveillance for trucks and other lighter distribution vehicles. The Truck park is already in use with 60 parking spaces for long term parking (up to a maximum of one week). In 2004 around 10.000 trucks parked at the facility. The trucks using the facility are both national and international. Almost all trucks had one of the Fruitport companies as their destination.

Truckers that live in the surrounding residential neighbourhoods are allowed to park at the Truck Park for free in the evening and on weekends. Residents of local neighbourhoods report lower levels of noise pollution and traffic congestion, and fewer safety concerns.

### **CONCLUSIONS**

Many jurisdictions are focusing on the mitigation of health impacts from concentrations of diesel particulate matter (PM) due to trucks as the major consideration in the location and design of truck-related facilities. In rural and semi-rural areas, truck parking has been accommodated by allowing parking at residences subject to appropriate safety or appearance standards. Where the concentration of trucks is due to a single large traffic generator such as a seaport, the Port Authority may be involved in projects to deal with truck parking needs.

### **Policy Evaluation Criteria**

Development of a Sustainable Truck Parking Policy requires that all three elements of sustainability – economic, social and environmental – be addressed. To this end, the criteria for evaluation of alternatives have been organized on the basis of these three categories.

## 1.6 Economic Sustainability

Economic sustainability requires that policies enable the continuation of the economic benefits that the citizens of Surrey derive from participation in the trucking industry, and the economic development potential from growth in the rapidly expanding transportation and logistics sector. It must also take into account the opportunity costs of devoting the required land base to truck parking rather to alternative uses.

Sustainable truck parking policies which rely on the private sector for solutions must take into account the requirements of financial viability for commercial enterprises. Solutions relying on the public sector must be consistent with requirements for prudent financial practices by public agencies and take into account the impact of public services on private commercial undertakings.

## 1.7 Social Sustainability

Social sustainability requires that community values be respected. This includes values on the need for preservation of agricultural land and parkland, and community standards on the nuisance and aesthetic impacts of truck parking and operations. The provision of reasonable access to convenient and secure parking facilities for independent truck operators is also a social consideration in that the reduction of commuting time provides drivers with additional leisure time.

## 1.8 Environmental Sustainability

Environmental sustainability requires the efficient and effective use of energy and resources and the elimination of waste and pollution.

Efficiency in the use of energy and resources can be enhanced through the elimination of unnecessary truck travel. This can be achieved by locating truck parking lots in reasonable proximity to drivers' communities, and by promoting "compact" logistics hubs that reduce the distance that goods must travel between processing centres.

The elimination of waste and pollution must be the objective, but in the short term mitigation of its effects may have to be the focus. The major emerging concern over diesel truck emissions is the issue of the health impact of particulate matter (PM) emissions. A recent U.S. Review of studies on the effects of PM emissions came to the conclusion that both long term and acute exposure to fine particles can lead to serious health impacts including premature death.<sup>5</sup>

This threat from diesel emissions is qualitatively different from previous concerns over oxides of sulphur (SOX) and nitrogen (NOX) because the threat is related to local rather than regional concentrations of trucking activity. The risk of concentrated PM emissions is deemed significant enough to warrant the investment of hundreds of millions of dollars under a Clean Air Action Plan to reduce the environmental impacts of port operation at the Southern California Ports

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<sup>5</sup> Provisional Assessment of Recent Studies on Health Effects of Particulate Matter Exposure National Center for Environmental Assessment, Office of Research and Development, U.S. Environmental Protection Agency Research Triangle Park, NC 27711, July 2006.

of Los Angeles and Long Beach, the largest port complex on the west Coast of North America.

The GVRD has recognized this issue through adoption of its Greater Vancouver Diesel Emission Reduction Program, which could include, but retrofit of onroad and nonroad diesel engines with add-on control equipment (e.g., diesel oxidation catalysts), use of cleaner fuels, and replacing old high-emitting engines with cleaner engines. However, it is recognized that reduction of diesel emissions is not likely in the short term:

“In 2007, heavy-duty diesel trucks will have to comply with some of the most stringent emission standards ever. Similarly, the latest low emission standards for non-road diesel engines would be phased in from 2011 to 2014. However, these standards are only applicable to newly manufactured diesel engines, and as such, the full emission benefits of these standards will not be realized until 20 to 30 years later because of the durability and the slow turn over rate of existing diesel engines.”<sup>6</sup>

This makes it imperative to take into account the impacts of local PM emissions when evaluating the locational and buffering requirements for large scale truck parking lots.

Other environmental concerns include the impact of oil or fuel spills on land and water quality and noise, dust and vibration impacts on communities.

## 1.9 The Need for Policy Direction

The evaluation criteria identified above are summarized in the table below:

Economic Sustainability	Social Sustainability	Environment Sustainability
Impact on Trucking Community	ALR Preservation	Air Quality
Impact on Warehouse and Distribution Sector	Parkland Preservation	Land Quality
Impact on Current Truck Park Operators	Neighbourhood Aesthetics	Water Quality
Impact on City Tax Revenue		
City Direct Costs		
Land Development Potential		

From our analysis, it appears that that the City has a number of mutually exclusive objectives which can't be fully satisfied simultaneously, particularly in the conflict

<sup>6</sup> Greater Vancouver Diesel Emission Reduction Program [http://www.gvrd.bc.ca/air/emission\\_reduction.htm](http://www.gvrd.bc.ca/air/emission_reduction.htm)

between truck parking and existing land use policies. The City has a finite land base, and the policy priorities have been to:

- Maintain the agricultural land base. This is reflected in the policy on criteria for exclusions from the ALR which makes it very difficult to get City support. The policy states that Council will only support an application to exclude land from the ALR if it can be documented that the proposed use cannot be accommodated on an alternative site outside of the ALR. The 2 for 1 compensation rule is followed the policy calls for a net increase in the protected agricultural land base.
- Maintain and expand the land base for business parks. Rezone the existing industrial land base for higher value uses. An example includes adoption of the IB business park zoning for Campbell Heights and the creation of the new IL-1 zoning which restricts outside storage (including truck parking) in South Westminster.

The objective of the study is finding a means of accommodating the current and forecast requirements for parking of trucks. The current policy on land uses in industrial zones sets capital requirements for truck parking lots which would make them uneconomic. None of the existing operations meet the requirements - those that are properly zoned have been developed under permanent development variances. Two years ago the City instituted Temporary Use Permits which relax the zoning requirements for a paved surface, the construction on site of a building of a minimum size, etc. and allow the parking lots to operate on a temporary basis (2 years renewable for another 2 years).

This approach doesn't allow truck parking to impinge on agricultural, residential or park lands and maintains the availability of industrial land for higher uses in future. It has not resulted in development of sufficient properly zoned and inspected truck parking facilities to satisfy industry demand.

If accommodation of truck parking demand is a City priority, a land base for this purpose will have to be found. The land will have to either come from agricultural land or parkland, or the City will have to specifically zone industrial land for this purpose (and forego the tax revenue from higher value uses) or provide it directly through purchase or from its existing land holdings.

If there was sufficient unused land in the current the industrial land base to accommodate current and future parking needs through more intensive use, the existing industrial land base might be sufficient to accommodate short term requirements. Our research suggests that this is not realistic, and that in fact there is considerable land currently being used for truck parking which is not reflected in the City's inventory of parking lots, because the operators have not applied for development permits, Temporary Use Permits, or business licences.

In the scope of the study we were asked to specifically look at various categories of marginal land - particularly utility corridors, where parking could be accommodated on land which is permanently encumbered by the Hydro lines. This would also allow accommodation of truck parking without compromising any of the existing land use policies. However, the utility corridors are already being used for truck parking in the industrial zones and many sites that we have examined exhibit obvious conflicts with existing land uses.

Some of the options which have been identified - such as limited parking of trucks on agricultural lands or on large residential lots - get around the issues concerning the availability of land by spreading the industrial use (truck parking) onto the agricultural or residential land base in a low impact way. Whether or not this would be acceptable to residents in specific neighbourhoods or to the truck operators who may have to travel considerable distances to these sites will be explored through community consultations.

Our detailed analysis of specific alternatives is presented in the next section. The following chart summarizes our evaluation:

## Exhibit 18 Evaluation Summary – Alternative Truck Parking Solutions

	Economic Sustainability											
	Trucking Community	Warehouse and Distribution Sector	Current Truck Park Operators	City Tax Revenue	City Direct Costs	Land Development Potential	Social Sustainability	Parkland Preservation	Neighbourhood Esthetics	Air quality	Land Quality	Water Quality
<b>SMALL SCALE SOLUTIONS</b>												
A1 Current policy - Zoning Requirements and Temporary Use Permits	Temporary solution to parking needs	Limited outside storage for containers and trucks (L-1 zoning)	Uncertainty over future land use	Current situation	Enforcement costs due to high rate of non-compliance	Maintains long term development potential of industrial lands	Maintains ALR land base.	Maintains parkland land base.	Potential safety, nuisance costs due to continuing high level of non-compliance	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Existing sites non-compliant with zoning regulations - potential pollution risk	Existing sites non-compliant with zoning regulations - potential pollution risk
A 2 Limited parking on large lots (RA 1) on truck routes	Increased options for truck parking, large land base (14,000 acres)	No impact	Potential reduction in demand for commercial lots.	No impact unless land value is affected.	Potentially lower enforcement costs due to reduced rate of non-compliance	Maintains long term development potential of industrial lands	Maintains ALR land base.	Maintains parkland land base.	Potential neighbourhood noise and safety concerns from trucks in residential areas.	Reduced potential for large concentrations of diesel PM emissions at parking sites.	Potential small scale risk of land pollution due to oil and fuel spills.	Potential small scale risk of water pollution due to oil and fuel spills.
A 3 Limited parking on large lots (RA 1) throughout the City.	Increased options for truck parking, large land base (14,000 acres) Large quantity of non-compliant parking sites in use so reduction in requirements unlikely to induce significant additional supply, enhanced enforcement might reduce supply.	No impact	Potential reduction in demand for commercial lots.	No impact unless land value is affected.	Potentially lower enforcement costs due to reduced rate of non-compliance, potentially increased road maintenance costs due to heavy trucks off truck routes.	Maintains long term development potential of industrial lands	Maintains ALR land base.	Maintains parkland land base.	Higher potential neighbourhood noise and safety concerns from trucks in residential areas.	Reduced potential for large concentrations of diesel PM emissions at parking sites.	Potential small scale risk of land pollution due to oil and fuel spills.	Potential small scale risk of water pollution due to oil and fuel spills.
A 4 More intensive use of existing industrial areas - reduce zoning requirements for small number of trucks		No impact	Potential for increase in competition among parking lot operators.	No impact	No impact Potentially lower enforcement costs due to reduced rate of non-compliance, potentially increased road maintenance costs due to heavy trucks off truck routes.	Maintains long term development potential of industrial lands	Maintains ALR land base.	Maintains parkland land base.	Potential safety, nuisance costs due to continuing high level of non-compliance	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Existing sites non-compliant with zoning regulations - potential pollution risk	Existing sites non-compliant with zoning regulations - potential pollution risk
A 5 Limited parking on agricultural sites	Increased options for truck parking, large land base	No impact	Potential reduction in demand for commercial lots.	No impact		Maintains long term development potential of industrial lands	Reduces ALR land base.	Maintains parkland land base.	Potential neighbourhood noise and safety concerns from trucks in agricultural areas; reduced level of non-compliance may benefit other neighbourhoods.	Reduced potential for large concentrations of diesel PM emissions at parking sites.	Potential small scale risk of land pollution due to oil and fuel spills.	Potential small scale risk of water pollution due to oil and fuel spills.
<b>LARGE SCALE SOLUTIONS</b>												
B 1 Relax Truck Parking Lot Infrastructure Standards	Limited impact on supply; compliance already waived under TUP; does not solve problems of high land costs	No impact	Potential reduction in costs of developing parking lots	No impact	No impact	Maintains long term development potential of industrial lands	Maintains ALR land base.	Maintains parkland land base.	Potential safety, nuisance costs due to continuing high level of non-compliance	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 2 Alternative land use - Industrial land on Hydro corridors	Limited impact on supply; portion of land base already utilized for truck parking, some sites show land use conflicts	No impact	Already implemented by a number of operators.	No impact	No impact	Maintains long term development potential of industrial lands	Maintains ALR land base.	Maintains parkland land base.	Potential safety, nuisance costs due to continuing high level of non-compliance	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 3 Alternative Land Use - Lower Productivity Agricultural Land outside ALR	Limited impact on supply; most sites show land use conflicts	No impact	Potential reduction in demand for commercial lots.	No impact	Potentially lower enforcement costs due to reduced rate of non-compliance.	Maintains long term development potential of industrial lands	Maintains ALR land base.	Maintains parkland land base.	Potential safety, nuisance costs due to continuing high level of non-compliance	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 4 Alternative Land Use - Lower Productivity Agricultural Land outside ALR under current policy O-51	Increased options for truck parking	No impact	Potential reduction in demand for commercial lots.	Potential increase in tax revenue due to higher land assessment	Potentially lower enforcement costs due to reduced rate of non-compliance.	Maintains long term development potential of industrial lands	Low potential for increased parking capacity (2 for 1 compensation requirement limits potential)	Maintains parkland land base.	Potential safety, nuisance costs due to continuing high level of non-compliance	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 5 Alternative Land Use - Lower Productivity Agricultural Land inside ALR under current policy O-51	Increased options for truck parking, large land base	No impact	Potential reduction in demand for commercial lots.	Potential increase in tax revenue due to higher land assessment	Potentially lower enforcement costs due to reduced rate of non-compliance.	Maintains long term development potential of industrial lands	Loss of ALR land base	Maintains parkland land base.	Potential safety, nuisance costs due to continuing high level of non-compliance	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 6 Alternative Land Use - Provincial or City Lands - Short term	Potential short term use for sites acquired in advance of SFRR construction	No impact	Potential reduction in demand for commercial lots.	Subject to negotiations with Province	Potentially lower enforcement costs due to reduced rate of non-compliance	Maintains long term development potential of industrial lands	Maintains ALR land base	Maintains parkland land base.	Reduced level of non-compliance may benefit other neighbourhoods.	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 7 Alternative Land use - Provincial or City Lands (Long term) Integration of public-supplied parking sites with SFRR	Increased options for truck parking	No impact	Potential reduction in demand for commercial lots.	Subject to negotiations with Province	Potentially lower enforcement costs due to reduced rate of non-compliance	Maintains long term development potential of industrial lands	Maintains ALR land base.	Potential reduction on parkland land base (Port Mann site)	Reduced level of non-compliance may benefit neighbourhoods.	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 8 Transfer development potential from IL lands	Could result in large sustainable land supply	No impact	Potential reduction in demand for commercial lots.	Potential increase in tax revenue due to higher land assessment on on-industrial lands	Potentially lower enforcement costs due to reduced rate of non-compliance	May reduce availability of industrial lands for higher value uses.	Maintains ALR land base.	Maintains parkland land base.	Reduced level of non-compliance may benefit neighbourhoods.	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 9 Facilitate formation of trucking cooperatives	Capital requirements, organizational challenges limit potential for success	No impact	Potential reduction in demand for commercial lots.	No impact City would incur monthly deficit of around \$16,500 per month for 10 acre site (at land cost \$600,000 per acre)	Potentially lower enforcement costs due to reduced rate of non-compliance	May reduce availability of industrial lands for higher value uses.	Maintains ALR land base.	Maintains parkland land base.	Reduced level of non-compliance may benefit neighbourhoods.	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 10 City developed and operated truck parking lots	Increase in available parking capacity	No impact	Potential reduction in demand for commercial lots.	Potential increase in tax revenue due to higher land assessment on on-industrial lands	Potentially lower enforcement costs due to reduced rate of non-compliance	May reduce availability of industrial lands for higher value uses.	Maintains ALR land base.	Maintains parkland land base.	Reduced level of non-compliance may benefit neighbourhoods.	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 11 City developed and operated truck parking lots funded by Development Cost Charges on Warehouses and DC's	Increase in available parking capacity	Increased costs; potential to drive activity to other municipalities or cities.	Potential reduction in demand for commercial lots.	Reduced monthly deficit for City-provided parking	Potentially lower enforcement costs due to reduced rate of non-compliance	May reduce availability of industrial lands for higher value uses.	Maintains ALR land base.	Maintains parkland land base.	Reduced level of non-compliance may benefit neighbourhoods.	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk
B 12 City developed and operated truck parking lots funded by QVTA Parking Tax revenues	Increase in available parking capacity	No impact (already paying)	Potential reduction in demand for commercial lots.	Reduced monthly deficit for City-provided parking	Potentially lower enforcement costs due to reduced rate of non-compliance	May reduce availability of industrial lands for higher value uses.	Maintains ALR land base.	Maintains parkland land base.	Reduced level of non-compliance may benefit neighbourhoods.	Potentially unhealthy concentrations of diesel PM if parking sites close to residential area	Potential pollution risk	Potential pollution risk



## 1.10 Alternative Solutions – Small Scale

One approach to accommodating the needs for truck parking is to spread them out in small quantities over a large area, a “small scale” solution which can avoid the costs of constructing large scale facilities and mitigate local environmental impacts.

### **1. *LIMITED PARKING ON LARGE RESIDENTIAL LOTS***

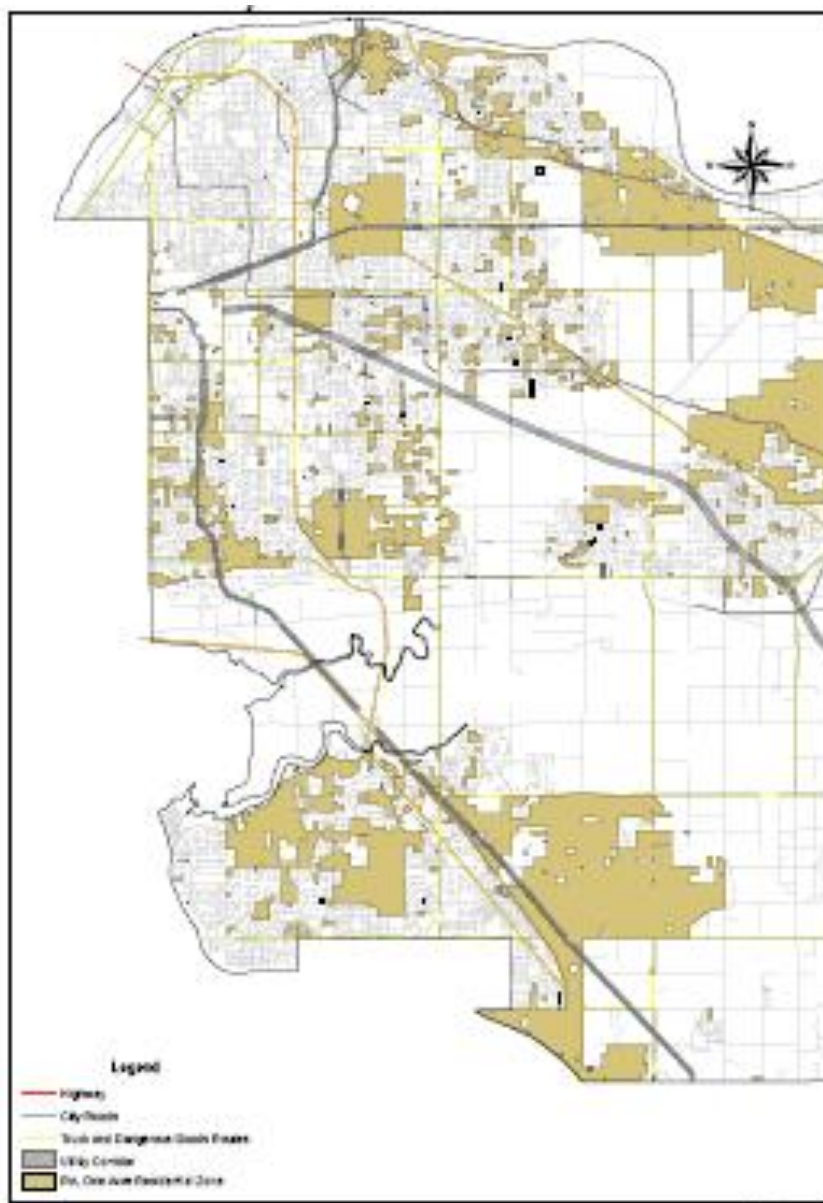
This solution has been adopted by Langley through its bylaw allowing parking of heavy vehicles on residential lots in the SR-1 (1 acre residential) and SR-2 (2 acre residential) zones. The comparable zoning category in Surrey is RA-1 which encompasses residential lots of 1 acre or larger. The total area of RA-1 zoning is approximately 14,000 acres. It is difficult to estimate the potential truck parking capacity which would be made available through this bylaw change though the impact is potentially large. Practically the increase in capacity would depend on restrictions which might be placed on the use of these residential lots for truck parking. Restricting the use of the site for parking for a truck owned by the resident would reduce the potential increase in capacity. A permit process could be used to enforce appropriate requirements to ensure safety (ingress and egress) requirements, environmental requirements and aesthetic requirements such as minimum setbacks or screening. The change would require no direct financial cost to the City. However unless parking was restricted to residential lots on truck routes, it may make it impossible to effectively enforce truck route restrictions. The existing truck route bylaw contains a clause which permits deviation from a truck route to access an authorized parking area<sup>7</sup>. If parking was authorized across the entire RA-1 zoned areas of Surrey it could open up large parts of the road network currently not on truck routes to heavy truck traffic. This could have impacts on road safety and on the integrity of pavement on secondary roads, and it would be prudent to conduct an engineering analysis on the road network to identify roads capable of bearing the heavy axle loads of large trucks before designating residential zones as acceptable for truck parking.

If this option was to be considered, locations would have to be in Suburban designated areas, since Urban designated areas could become higher density in the future. Surrounding land uses and proximity to truck routes would also need to be a consideration.

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<sup>7</sup> Section 87 (6) of the Surrey truck Route bylaw states: “If any heavy truck is permitted to be stored or parked in accordance with “Surrey Zoning By-law, 1993, No. 12000” or any other applicable by-law at a location off a truck route, and the truck conforms with all other highway use regulations, but is not engaged in the transport of materials or any other things to or from the premises, a person may drive the truck to and from the place where it is stored or parked, and in doing so, shall drive it on the highway or highways forming the most direct accessible connection between the location where the truck is housed and the nearest truck route”.

**Exhibit 19 Surrey One-Acre Residential Zone**



## **2. *ON-STREET PARKING IN INDUSTRIAL AREAS***

Several Lower Mainland municipalities allow on-street parking overnight in industrial areas. Many existing industrial areas in Surrey do not have a road infrastructure which can accommodate parking due to the lack of shoulder lanes, curbs, etc. An inventory would be required to identify areas where overnight parking could be accommodated without compromising available road capacity. For areas like South Westminster where upgrading of access roads to Fraserport might be contemplated, additional lanes could accommodate port traffic during the day and provide a limited amount of parking capacity in the evening.

## **3. *MORE INTENSIVE USE OF EXISTING INDUSTRIAL AREAS***

There may be opportunities for more intensive use of existing industrial sites for truck parking. The proliferation of "unofficial" truck parking lots seems to indicate that this approach has been adopted by property owners in Bridgeview and South Westminster. There may be additional sites that have available space that could potentially be used for truck parking. The City could play a role in by facilitating the exchange of information between potential suppliers and truck owner/operators.

## **4. *LIMITED PARKING ON AGRICULTURAL SITES***

The current Surrey bylaw prohibiting the parking of trucks on agricultural property unless the truck is used for agricultural purposes is more restrictive than any other municipality except for Richmond, which has a similar restriction. The Surrey policy is more restrictive than that of the Agricultural Land Commission, which does not require a permit for parking and maintenance of a truck which belongs to the resident of the property, regardless of its use. Abbotsford allows up to 2 non-agricultural trucks as long as one belongs to the property's resident, Delta allows one non-agricultural truck, and Langley allows one non-agricultural truck on sites up to 3 acres and up to 3 trucks on agricultural sites larger than 3 acres.

# **1.11 Alternative Solutions – Large Scale**

Large scale solutions require the development of extensive facilities which can accommodate large numbers of trucks. The concentration of vehicles at a single location raises risks of high PM exposure in the vicinity, and a substantial level of noise and aesthetic impacts. For this reason it is critical that truck parking lots be separated from residential areas by an adequate buffer.

## **1. *RELAX PARKING LOT STANDARDS***

Current zoning regulations for truck parking lots require hard surfacing and drainage improvements, and construction of a building of at least 1075 square feet with washroom facilities. Few if any of the currently operating "official" truck parking lots comply with these requirements, nor provide manned security round the clock. The following table highlights the impact of the zoning requirements (paving and building) and additional operating costs for security on the financial performance of a truck parking lot.

CITY OF SURREY  
SUSTAINABLE TRUCK PARKING

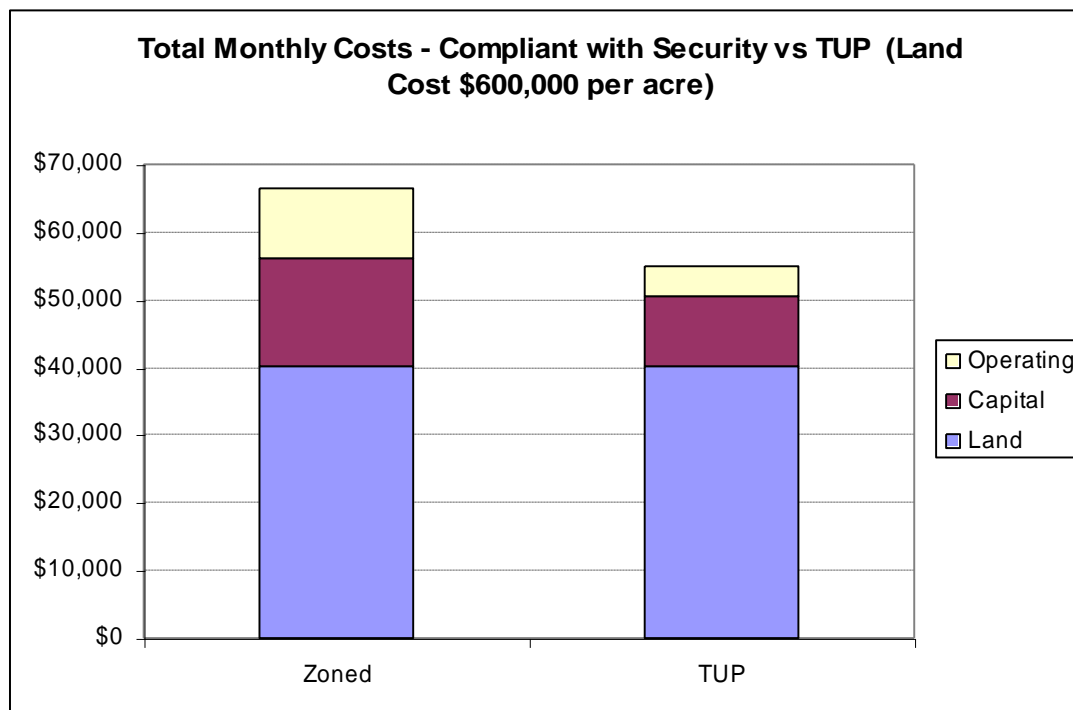
	Industrial Land - Compliant with Zoning (Paved, Building, Security)	Industrial Land - Temporary Use Permit (Gravel, No Building, No security)
APR	5%	5%
Amortization period	20	20
Land (acres)	10	10
Cost per acre	\$600,000	\$600,000
Total Land Cost	\$6,000,000	\$6,000,000
Annual Land Carrying Cost	\$481,456	\$481,456
Monthly Land Cost	\$40,121	\$40,121
Site Preparation		
APR	5%	5%
Depreciation Period	20	20
Development Cost		
Charge	\$630,920	\$630,920
Site preparation	\$186,690	\$103,096
Surfacing/drainage	\$1,306,800	\$650,000
Fencing and lighting	\$160,000	\$160,000
Landscaping	\$0	\$0
Site Preparation Capital Cost	\$2,284,410	\$1,544,016
Minimum building size (sq.ft.)	1,075	
Building cost/sq.ft.	\$80	
Building cost total	\$86,000	
Total Capital Cost (excl. Land)	\$2,370,410	\$1,544,016
Annual Capital Cost	\$190,207.83	\$123,895.81
Monthly Capital Cost	\$15,850.65	\$10,324.65
Operating Costs		
Office Rental Total	\$9,600	\$9,600
Utilities/phone Total	\$1,000	\$1,000
Security Total	\$72,000	\$0
Parking tax @\$350 per acre	\$3,500	\$3,500

**CITY OF SURREY  
SUSTAINABLE TRUCK PARKING**

Insurance/acre	\$1,000		\$1,000
Property Tax/acre	\$5,000		\$5,000
Wages and Salaries/acre	\$35,000		\$35,000
Total Operating Cost/year	\$127,100		\$55,100
Total Operating Cost/month	\$10,592		\$4,592
Total Costs per month	\$66,564		\$55,038
Revenue Trucks/acre	25		25
Rent/truck (current)*	\$ 200	\$	200
Total Revenue/month	\$ 50,000	\$	50,000
Monthly profit (loss)	(\$16,564)		(\$5,038)
* Net of GST and Provincial (TransLink) sales tax			

The analysis is based on a current value of industrial land of \$600,000 per acre. The relative magnitude of cost components is illustrated below:

**Exhibit 20 Total Monthly Costs – Compliant with Security vs. TUP**

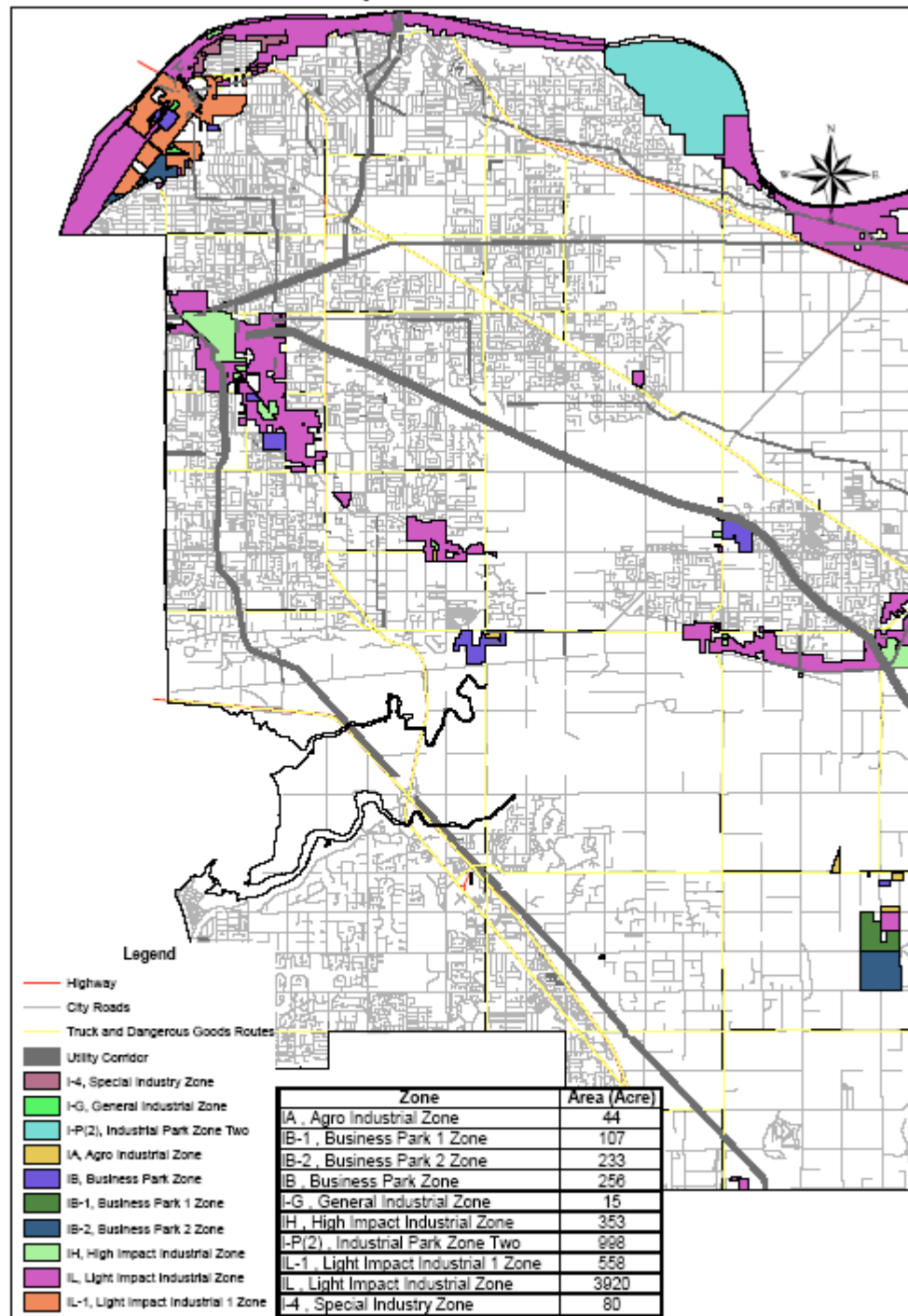


On the basis of the estimated unit costs, the enhancements required by the zoning bylaw add around \$5525 per month in additional capital costs, and provision of security adds an additional \$6000 per month to operating costs. The parking lot capital and operating costs are dwarfed by the land costs at current market value. However, owners of currently undeveloped land which was purchased for a lower price may still find it attractive to offer parking on their sites, and there have been recent land sales in South Westminster for less than \$200,000 an acre. The imposition of the additional capital costs for the zoning requirements may be significant enough to influence their decision. The existing zoning requirements should be re-examined to determine if they are objectively necessary or helpful in achieving the City's economic, social and environmental objectives, particularly since the existing stock of official and "unofficial" truck parking lots is not compliant.

## ***2. ALTERNATIVE LAND USE – UTILITY CORRIDORS***

Utility (hydro) corridors would seem to be an attractive option for truck parking locations since restrictions on the building of structures in the corridor keep land values low. BC Hydro permits the use of Hydro corridors for parking as long as safety requirements are met, including horizontal and vertical clearances and the positioning of roads and parking spaces on the property. The positions of Hydro corridors in Surrey relative to existing zones are illustrated below:

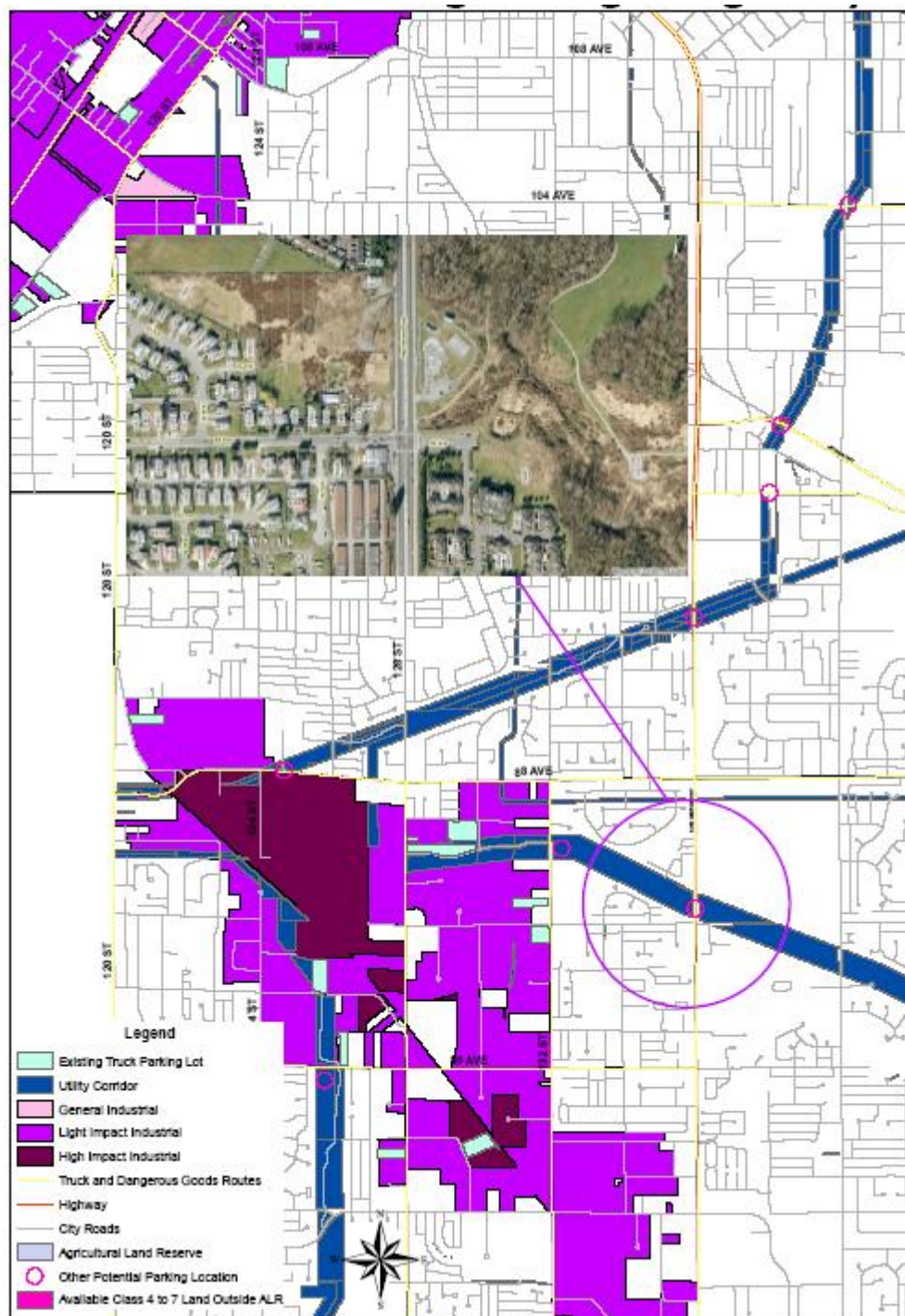
Exhibit 21 Surrey Industrial Zones





The Hydro corridors traverse industrial zones in Fleetwood, particularly in the vicinity of BC Hydro's extensive industrial lands in the area, and in Cloverdale. A detail of the Fleetwood area is shown below. The land in the Hydro corridor is already being used for truck parking lots, as indicated by the existing truck parking lots depicted on the map. The inset aerial photo shows a potential location at the intersection of the hydro corridor and a City truck route. However, this location is adjacent to a residential neighbourhood and across the street from a skate park. Most sites which we examined in our analysis exhibit similar land use conflicts.

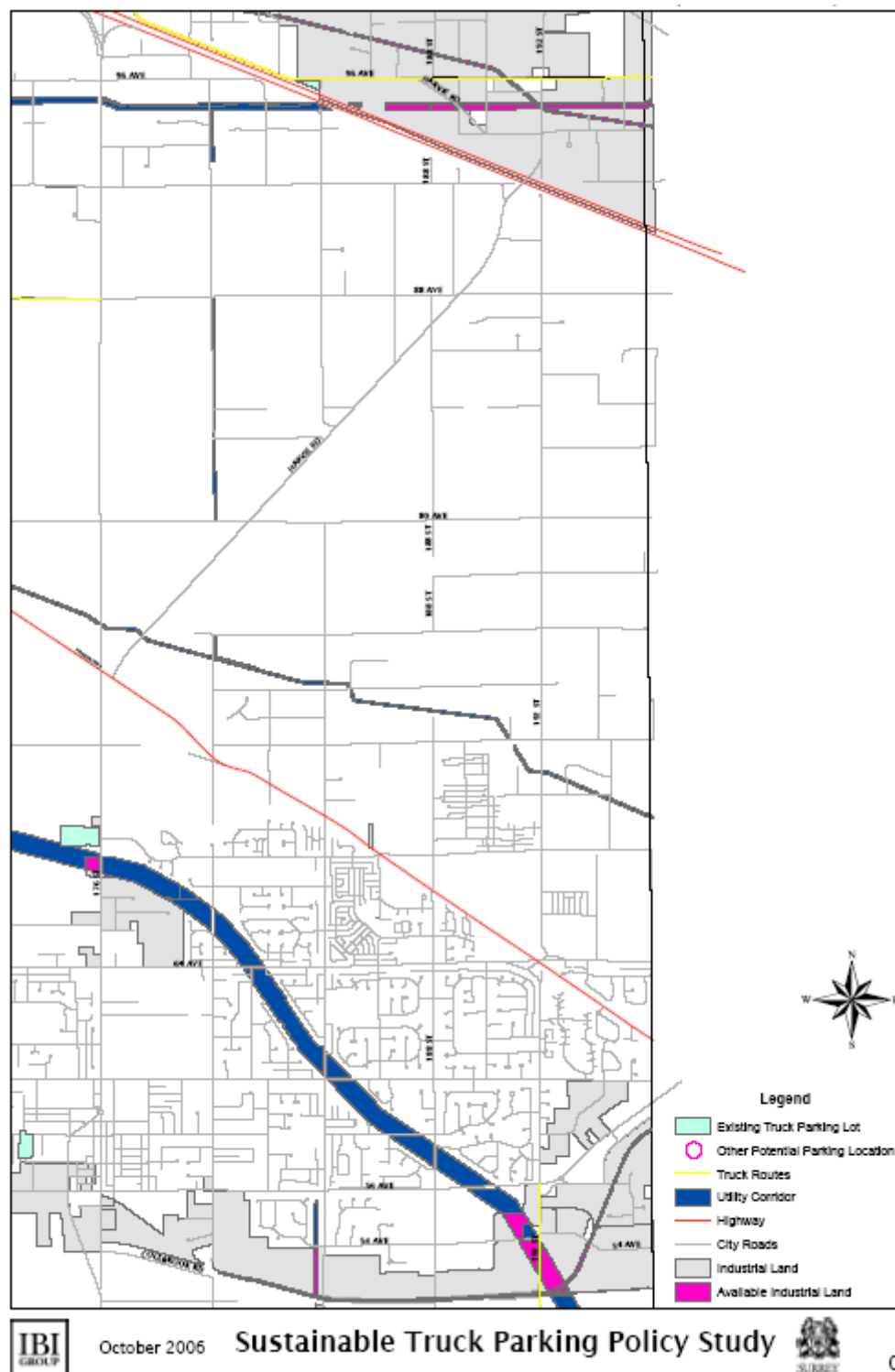
**Exhibit 22 84<sup>th</sup> Ave and King George Highway**





The Cloverdale area is shown below.

### Exhibit 23 Potential Industrial Land (Area 2)



Note that one of the two locations at the intersection of industrial zones and Hydro corridors already contains a truck parking lot (Ar-Way Enterprises).

These areas at the intersection of Hydro corridors and industrial zones do provide opportunities for development of truck parking lots, and developers have exploited them in a number of locations. However while there may be short term opportunities the size of the land base is not adequate to accommodate anticipated growth in the truck population.

**Exhibit 24 Truck Park Entrance – Hydro Corridor**

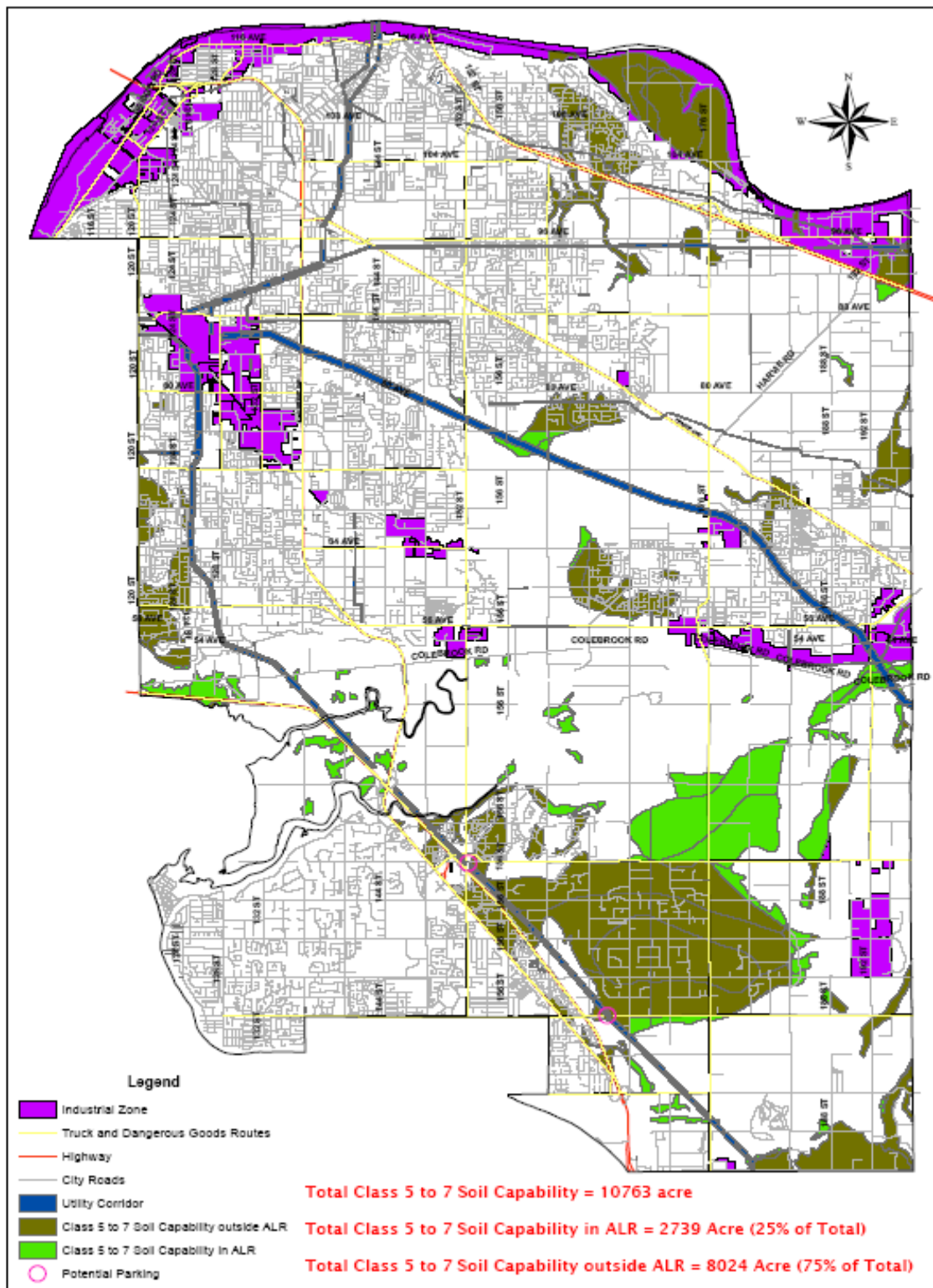


### Low Productivity Agricultural Land and Hydro Corridors

The circles on the map below indicate the locations of intersections between Hydro corridors, low soil capability (Class 5 to 7) Agricultural land outside of the Agricultural Land Reserve and truck routes. However opportunities may be somewhat limited because the agricultural productivity of a large portion of these lands is due to slope or drainage problems, which also make them less than ideal

for truck parking.<sup>8</sup> Also with the exception of the Hazelmere Valley in the southeast corner of Surrey the soils are organic soils and require extensive site preparation.

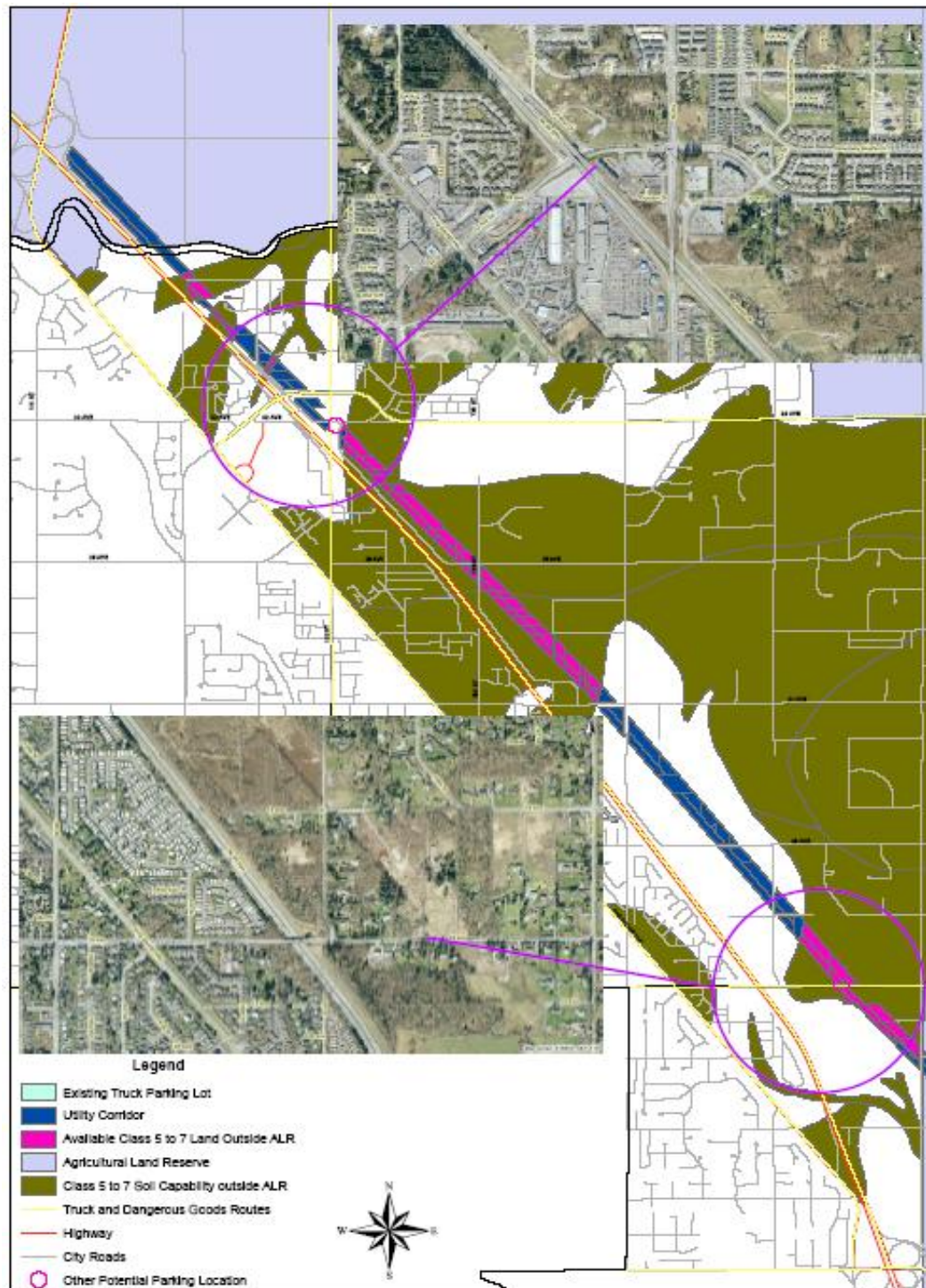
**Exhibit 25 Class 5 to 7 Agricultural Land Outside the ALR**





A close up view of the two sites identified on the Highway 99 corridor is shown below. While the southern site appears to be reasonably well buffered from the residential area to the east of the highway, the northern site is sandwiched between commercial and residential developments which may make it unsuitable for truck parking.

**Exhibit 26 Class 5 to 7 Utility Land Outside of ALR**



***Alternative Land Use – Marginal Agricultural Lands in the ALR***

The majority of the agricultural land base is in the Agricultural Land Reserve. Zoning and Agricultural Land Commission restrictions on the conversion of ALR land to alternative uses have resulted in a substantial gap developing between the price of ALR land and all other categories. As the price of industrial land in the Lower Mainland has more than tripled in the last five years, the attraction of transferring low value industrial uses to ALR land is attractive from an economic perspective.

The City of Surrey strongly supports maintenance of the existing agricultural land base. This is reflected in the stringent requirements of the City's Operational Policy O-51 for supporting exclusion of land from the Agricultural Land Reserve.

Three large exclusion applications have been dealt with by the Agricultural Land Commission recently.

Abbotsford applied to exclude 372 ha (920 acres) of agricultural land from the ALR for industrial use on the basis of community need. The overall intent of the application was to allow the City to plan for a portion of the industrial expansion identified in accordance with its submissions to the Regional Growth Strategy of the Fraser Valley Regional District. In July 2005 the Commission agreed to the exclusion of 178.5 ha for industrial and business park development purposes, refused to exclude 121.5 ha and deferred the decision regarding a 72 ha area in the vicinity of Abbotsford International Airport.

The City of Abbotsford will require a net benefit contribution to agriculture for each acre of land removed. This payment has been structured as a contribution of \$20,000 per acre removed to an agricultural trust at the time of rezoning, and is made by the person applying for the rezoning. These funds are directed to investments in agriculture. The ALC acknowledged unique opportunities in Abbotsford for the creation of additional Class 1 agricultural land through reclamation of gravel pits.

The Barnston Island Majority Landowners and Residents Committee, on behalf of approximately 23 landowners holding approximately 37 legal lots, applied to the Agricultural Land Commission to remove these lands from the ALR. The total acreage of these lands is approximately 1,100 acres or a total of 85% of all lands on Barnston Island outside of the Katzie Indian Reserve. The Agricultural Land Commission rejected the application, on the grounds that the land is suitable for agricultural use and that the proponents' argument that there was a "community need" for land for industrial development was invalid because such arguments "must originate from the local government ... and are to be based on local and regional planning assessments and supported by rigorous technical analysis before being considered by the Commission." <sup>9</sup> In the Barnston Case, the local government (the Greater Vancouver Regional District) opposed the application.

The Canada Lands Corporation applied for the exclusion of 55.2 hectares (the "Garden City" lands) to facilitate development of a trade and exhibition centre, urban residential and mixed-use development, and major City of Richmond park

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<sup>9</sup> Minutes of Resolution #380/2006, Agricultural Land Commission, July 24, 2006.

facilities. The proposal was also supported by the Musqueam First Nation which wanted the land to develop housing for its members. The ALC rejected the application, finding that the land is suitable for agricultural production in spite of being surrounded by four lane arterial streets, and rejecting the claim for exclusion on the basis of “community need” because the City of Richmond did not provide adequate information to substantiate the case for exclusion. The Commission noted:

“... community need arguments from local governments are to be based on local and regional planning assessments and to be supported by rigorous technical analyses that clearly:

- identify the need for and expected community benefits or values to be achieved.
- identify and assess the impacts and risks to the community if the proposal does not proceed or is delayed.
- determine whether there are reasonable alternative means of meeting the community need.
- identify and assess the impacts of meeting community need on agricultural and non-agricultural uses of the lands, and the avoidance, mitigation and management of these impacts.”<sup>10</sup>

The Greater Vancouver Regional District has noted that the ALC is developing criteria for the evaluation of Agricultural Land Reserve exclusion applications based on community need. The GVRD Agricultural Committee received a report from staff at its November 9, 2006 meeting which recommended that the Committee request that the Agricultural Land Commission refer all applications based on community need to the GVRD Board for comment in relation to regional policies and services. The report suggested that this alternative would provide the GVRD Board with a consistent role in ensuring the regional perspective is considered in the evaluation of Agricultural Land Reserve exclusion applications based on community need.<sup>11</sup>

The recent decisions of the ALC have clarified the conditions under which they will consider exclusions from the ALR based on community need. The applications must be supported by the local government, and based on local and regional planning studies and rigorous technical analysis.

In the case of the City of Surrey, the conditions for support of exclusion applications are defined under Operational Policy O-51. They include a clear demonstration of necessity, provision of buffers along the proposed ALR boundary, and compensation in the form of inclusion of an area twice as large as that to be excluded. These lands must be within the City of Surrey, be designated Agricultural or Suburban in the Official Community Plan, abut the existing ALR boundary, provide a logical extension to the ALR, be zoned or supportable to be rezoned to an appropriate Agricultural Zone as specified in the Surrey Zoning By-law, either

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<sup>10</sup> Minutes of Resolution #431/2006 Agricultural Land Commission September 8, 2006.

<sup>11</sup> A Regional Approach to Assessing Community Need in Agricultural Land Reserve Exclusion Applications Report to GVRD Agricultural Committee November 9, 2006 Dianna Colnett, Senior Environmental Planner, Policy & Planning Department.

be consolidated with existing lots in the ALR or form new lots within the ALR, provided that the new or consolidated lots have a minimum area of 5 hectares, and be rated with a Soil Capability Rating equal to or exceeding that of the improvable soil capability rating of the site proposed for exclusion.

Where a 2 to 1 ratio is not achievable, the inclusion of non-ALR land in the ALR may be reduced to as low as a 1 to 1 ratio if the land included in the ALR is supplemented by other means to mitigate the impact of the exclusion and to increase the agricultural capability of land remaining within the ALR. These means may include infrastructure works to improve drainage and irrigation, consolidation of parcels and the creation of more rationally sized and configured farm parcels or units, increased utilization of land through cancellation of rights-of-way, utility corridors or home sites, improvements to utilities such as potable water supply, etc.; and improvements to farm access.

According to ALC staff, the inventory of lands in Surrey which could satisfy the conditions for inclusion as compensation is very limited. An analysis of the available lands which would qualify should be undertaken, and if it is determined that the effect of the "2 for 1" inclusion requirement is to make it impractical to exclude land for any purpose, the City should re-examine its policy and make a decision either to maintain the policy with a clear understanding of its impacts, or to explore alternative means of mitigation.

In any case, the ALC will only consider exclusions on the basis of community with strong support from local governments, based on local and regional planning processes and rigorous technical analysis. This would require an effort on the part of the City of Surrey to develop a land use plan through a rigorous analysis of community needs and the available land base. Abbotsford undertook such an analysis (the "City in the Country Plan") in their successful application for exclusion of parcels for business park and industrial uses. In future support for "community need" applications for exclusions may require cooperation with the GVRD.

### ***Alternative Land Use – Provincial or City Lands***

The consulting team was asked to evaluate the potential of a specific parcel of land belonging to the provincial government in the Campbell Heights area for conversion to truck parking purposes. The parcel in question is currently a gravel pit outside the ALR owned by the BC Transportation Financing Authority. Discussions were held between City staff and provincial representatives to discuss this option.

An additional site in close proximity was also examined but found unsuitable due to heavy forest cover, slopes, and the presence of fish bearing streams and environmentally sensitive areas.

The Provincial government's policy is that the price of provincial lands is based on market value as reflected in assessment values. The parcel in question is likely to have a high market value following reclamation of the gravel pit price due to its inclusion in the Campbell Heights business park area. However, there are some possibilities for short term relief of truck parking supply shortfalls on lands to be acquired by the Province in preparation for construction of the South Fraser Perimeter Road (SFPR). The Province will take possession of a number of parcels from the City in advance of construction of the SFPR and these could potentially be





arking if suitable arrangements can be made between the City and the Province.

The City of Surrey's policy on the sale of lands is similar to that of the Province i.e. lands are sold at market value. Under this policy the sale of City lands would not resolve the financial issues associated with subsidizing a low value use on expensive higher-valued land.

One potential opportunity which was identified is the use of the City-owned Port Mann landfill site. The Port Mann landfill operated from 1969 until 1997. In the latter years of its operation, a portion of the tipping fees related to waste hauled to the site were set aside for decommissioning of the landfill, restoration of the land and redevelopment of the site as a park, the Port Mann Park. The site has an area of 65 hectares. Road access is currently through the local neighbourhood but the location could be served by on- and off-ramps from the SFPR. Some of the land was formally used as part of the landfill operation. Currently, the area where the landfill operated is covered with grass and is subject to surface undulations as the waste buried in the landfill consolidates. This area will be closed to the public for a number of years.



Planning for development of this site as a park has been initiated. Other parts of the park site include wooded slopes, steep ravines, creeks and riparian areas. The property contains some noteworthy geological formations and some important ecological features, including large Douglas fir trees, rich wetlands and streams and a variety of wildlife species. City staff have developed a recommended Park Master Plan and Concept Plan for Phase 1 of the Port Mann Park. It would therefore be difficult to convert this site for industrial use.

### ***Transfer Development Potential From IL Lands***

This option is for a transfer of development rights to other sites in exchange for retention of truck parking uses at existing or new industrial sites. It is analogous to the density transfer and bonus system used for the protection of heritage sites or for the provision of affordable housing. In Vancouver, the owners of heritage sites to sell their development rights to developers who have projects in the eligible area in exchange for maintaining the integrity of their heritage properties.

### ***City Developed And Operated Truck Parking Lots***

The financial analysis in the previous section indicated that at current land prices and truck parking rates, a truck parking operations compliant with zoning requirements and offering secure parking would incur ongoing financial losses.

Truckers are apparently willing/able to pay \$200 per month per truck. The financial analysis presented earlier suggests that the breakeven rate, for a new fully-compliant facility paying market value for industrial land, would be \$265 per month per truck. The additional cost per operator per year would be about \$780. The concern about the impact of this additional cost has led to the suggestion that the City should provide truck parking facilities at the rate that truckers are currently willing to pay. This would in effect mean that the City would provide land at below market value, a form of subsidy. However, it is important to note that for this additional cost the operators would have access to a facility with security (reducing the annual cost of theft and vandalism) and would allow operators to avoid the cost of tickets for non-compliance. The net additional cost per year is likely to be less than the “gross” additional cost of \$780 per vehicle.

Generally speaking, local governments are not in the practice of compromising broader economic objectives in order to address the concerns of one. The cost of providing an adequate and appropriate place of business is, simply, one of the costs of doing business. This cost is part of what creates the cost floor for any operator.

By agreeing to subsidize this sector, Surrey would in effect be saying:

- There is a unique economic benefit to the community that warrants providing a subsidy.
- It is appropriate to subsidize the part of this industry that is comprised of independent operators, even though no subsidy is provided to commercial trucking companies or companies that use trucks (and must park them in an appropriate location) as part of their business operations.

- The industry does not have the ability to absorb the marginal extra annual cost of \$780 that is needed to make a truck parking facility available.
- There is a way to ensure that the subsidization does not attract more truckers, allowing other municipalities to “export” their problem to Surrey.

As the municipality does not make a habit of subsidizing sectors of the economy by providing below-market places of business, it seems unlikely that a strong case can be made for making an exception in the case of independent trucking particularly as no such subsidy is available or contemplated to commercial trucking companies. Providing a subsidized parking facility will almost certainly tend to draw other users, exacerbating the imbalance between supply and demand.

As well, the marginal extra cost per operator works out to about \$3 per day assuming 250 working days per year. It seems unlikely that this cost is enough to make the difference between a business being viable or non-viable; arguably, if the business is this close to the edge financially there are other factors more likely to push it into non-viability.

The City could impose special Development Cost Charges on new warehouse and distribution centres to finance the land costs of truck parking lots; the warehouse operators could pass the costs along to their customers. The City could use the proceeds to subsidize a land base for truck parking, and tender the management of the facility to the private sector.

Alternatively the zoning requirement for new distribution and warehouse facilities could require the provision of onsite parking. This would require a change in policy since the current zoning policy for distribution centres discourages outside storage. This would increase the land costs for new logistics developments.

The risk to this strategy is that the City of Surrey might be uncompetitive with other municipalities for these businesses, and the Lower Mainland could become uncompetitive with other West Coast gateways for the increasing Asia-Pacific trade. TransLink has already implemented a parking tax based on the size of parking sites located on non-residential properties throughout the region. Revenue from the new tax is estimated at \$20 million for 2006. The parking tax has increased local taxes paid by truck parking lot operators considerably. There is a possibility under the recent governance review of TransLink that the parking tax may be rescinded.

### ***Facilitate Formation of Cooperative Parking Lots***

Cooperatives have been used by groups with common interests to undertake collective action to solve their problems. Prominent examples include the development of producers' co-ops by farmers and fishermen. However, there are characteristics of the current trucking industry which would make it difficult to organize for collective action.

The first obstacle is the high land and capital costs of developing truck parking lots. 70% of heavy trucks in Surrey are “one-truck fleets”, suggesting that the owners have limited capital resources. It should be noted that the capital cost of a tractor trailer or dump truck and trailer combination is generally over \$150,000, while the estimated cost of land in a strata titled parking lot would be approximately \$33,000.

The second is the atomistic nature of the industry. Owner/operators have not developed a cohesive organization to represent their interests, and for itinerant drivers engaged in long-haul transport organization is inherently difficult. As fewer than 500 operators have acquired a Surrey business license, outreach through normal mechanisms is very difficult.

One option would be the assembly of land by the City for development of a bare land strata-type facility based on ownership of individual lots. Construction could be facilitated by City financing and management of construction prior to sale. With an industrial land price of \$600,000 per acre and capacity of 25 trucks per acre, the purchase price for each parking spot (including land and capital costs) would be approximately \$33,500. Each owner's monthly cost would be around \$265 per month but the increased costs might be made more palatable by the growth of equity in their investment. Common ownership of the property could be a strong enough connection to develop a community of interest. The City would incur a financial risk by financing land purchase and construction costs prior to sale of the parking spaces.

### ***The Role of Senior Governments***

The Federal and Provincial governments have a major interest in developing a solution to the problems related to truck parking in Surrey and elsewhere in the Lower Mainland. While a substantial share of the trucking industry is resident in the City, the trucking sector provides services throughout the region and in long haul transport of freight both nationally and internationally.

The trucking industry is critical to the movement of international and interprovincial trade through the Lower Mainland. Approximately 35% of inbound containers carrying cargo unloaded at Lower Mainland ports are transported by truck from the container terminals. Large quantities of lumber and other forest products are transported to the Lower Mainland for reloading to rail cars or export containers. The distribution of consumer goods within the province is almost entirely dependent on the trucking industry.

Transportation of marine containers is a critical element in the Lower Mainland's role as Canada's Pacific Gateway. Trucks are used to carry containers from port terminals to local warehouses where containers are unloaded and the cargo distributed locally or trucked to the CN and CP intermodal terminals in Surrey and Pitt Meadows respectively. Empty containers are delivered by truck to export transload warehouses where Canadian exports – primarily forest products from BC and specialty grains from the Prairies – are loaded and the loaded containers are returned by truck to the port terminals. This aspect of port-related activity has a larger regional value-added component than direct transfer of containers to rail for shipment to Eastern markets.

Vancouver Port Authority's most recent Economic Impact Study estimates that the container sector at the Port of Vancouver directly generated almost 8000 person years of employment and \$587 million in direct contributions to Gross Domestic Product (GDP) in 2004. If multiplier effects are considered, employment rises to 18,506 person years and the GDP impact rises to as high as \$1.3 billion.

The federal government has announced Canada's Asia-Pacific Gateway and Corridor Initiative to boost Canada's commerce with the Asia-Pacific region, increase the Gateway's share of North America bound container imports from Asia

and improve the efficiency and reliability of the Gateway for Canadian and North American exports. To date the federal commitment of funding for Pacific Gateway projects is almost \$600 million. Facilitating growth in international trade is a key goal of the BC government's \$3 billion Gateway Program of infrastructure investments, and the BC Ports Strategy has set a goal to increase the province's share of West Coast container traffic from 9% to 17% by 2020. Both federal and provincial government have made expansion of Lower Mainland container trade a priority in recognition of its potential economic contribution.

The June 2006 Fraser River Port Economic Impact Study estimated the direct employment generated by a single container vessel call at Fraser Surrey Docks. Trucking was second only to longshore labour in the hours of employment generated. Details are shown below:

**Exhibit 27 Labour Hours for a Benchmark Container Ship Arrival at Fraser Port**

Function	Export Hours per Ship	Import Hours per Ship	Total Hours per Ship
Canada Customs and Other Gov't Agencies	37	258	295
Chandlery	15	15	30
Customs Brokers	37	148	184
Freight Forwarders	443	443	885
Terminal, Longshoremen & Foremen	1,498	1,498	2,996
Harbour Pilots	14	14	28
Rail	563	563	1,125
Shipping Agents	100	100	200
Transport Canada Inspections	1	1	1
Trucking	1,394	1,394	2,788
Tugs	16	16	32
Warehouses/ CFSs	664	664	1,328
<b>Totals</b>	<b>4,780</b>	<b>5,112</b>	<b>9,892 Hours 5.4 PYs</b>

OGA – other government agencies

CFS – container freight station.

Key container related assumptions: Truckers make a local container movement in 2 hours. Stuffing or de-stuffing a container requires 1.5 hours on average, including receiving goods, sorting them, labelling, building pallets or breaking them down, completing paperwork, etc. Customs requires an average of 35 minutes to process an inbound container-related customs release.

Trucking is clearly critical to achieving Federal and Provincial Pacific Gateway goals.

The Province has a key role due to their plans for infrastructure development, and their responsibility for policies for the preservation of agricultural land. Facilities to accommodate truck parking needs should be integrated into the Gateway Program infrastructure plans, and ALR policies should be examined to determine options which can provide more flexibility for creation of compact industrial clusters which can efficiently serve the Ports.

The federal government's role is less direct. However the federal role in international trade and ports policy implies a responsibility to cooperate with local, regional and provincial governments to develop efficient Gateway infrastructure, and to ensure that resources are available to ensure success.

Both Federal and Provincial governments need to recognize the need for an adequate industrial land base if the Lower Mainland is to remain competitive with other West Coast port cities. The competitive challenge can be illustrated by referring to a recent investment made by Ikea for a new distribution centre in Tacoma. The Port of Tacoma sold 65 acres in an industrial park in Tacoma to Ikea for US\$8.6 million, or approximately US\$132,000 per acre. This is less than a quarter of the current cost of industrial land in Surrey. The distribution centre will serve markets in BC and Alberta as well as in the Western U.S.

"The Swedish home furnishings retailer will build an 834,000 square foot distribution center (DC) at the Port of Tacoma. The new Northwestern DC will serve IKEA stores in Alberta, British Columbia, Utah, Oregon and Washington as well as supplying other stores across the country as required. The facility will be located on 70 acres of land in the Frederickson Industrial Area, close to the Port of Tacoma. It adds long-term capacity and infrastructure that complements IKEA's total North American distribution network."<sup>12</sup>

In this competitive environment, the availability of reasonably-priced industrial land is a key economic advantage.

The senior governments should become engaged, both financially and from a policy perspective, in the truck parking issues in Surrey and the Lower Mainland.

### **Possible Alternatives**

The following options are presented as alternatives to be further developed with input from stakeholders.

1. Undertake consultations with communities in the RA-1 zoning category to explore the consistency of limited truck parking on large residential lots with community standards.

Langley allows parking of heavy vehicles on residential lots in the SR-1 (1 acre residential) and SR-2 (2 acre residential) zones. Surrey has approximately 14,000 acres of land in RA-1 zoning which encompasses residential lots of 1 acre or larger. Relaxing of restrictions prohibiting parking in this zone could help to alleviate the shortage of truck parking spaces. A permit process could be used to enforce appropriate requirements to ensure safety (ingress and egress) requirements, environmental requirements and aesthetic requirements such as minimum setbacks or screening. The change would require no direct financial cost to the City. However additional road costs might be incurred through truck traffic on portions of the network not designated as truck routes.

2. Evaluate the community and road impacts of relaxing current zoning restrictions on non-agricultural truck parking in agricultural zones.

The current Surrey bylaw prohibiting the parking of trucks on agricultural property unless the truck is used for agricultural purposes is more restrictive than any other municipality except for Richmond, which has a similar restriction. The Surrey policy is more restrictive than that of the Agricultural Land Commission which does not require a permit for parking and maintenance of a truck which belongs to the resident of the property, regardless of its use. Abbotsford has recently changed

<sup>12</sup> Logistics Today November 15, 2006 <http://www.logisticstoday.com/displayStory.asp?sNO=8309>

their zoning bylaw to allow up to 2 non-agricultural trucks as long as one belongs to the property's resident. Adoption of more liberal provisions on truck parking on agricultural sites could increase the availability of spaces in Surrey.

3. Refrain from enforcing the new IL-1 zoning requirements limiting outside storage on properties in South Westminster until alternative truck parking solutions are identified.

The recent rezoning of South Westminster IL (Industrial Light Impact) lands places in jeopardy 23% of the existing "official" truck parking spaces in the City. Given the current and projected shortfall in City-inspected truck parking lots it is important to maintain existing capacity until alternatives are developed.

4. Undertake an objective evaluation of current zoning requirements for truck parking lots under appropriate environmental and community standards criteria.

Current zoning requirements for truck parking lots require hard surfacing and construction of a building. None of the existing facilities are compliant with the zoning bylaw, which appears to be an indication that the zoning requirements are a barrier to the development of truck parking capacity. The bylaw requirements should be re-examined on the basis of objective environmental criteria and community standards to determine if they could be reduced without imposing excessive costs on the community.

5. Undertake a strategic assessment of community needs for industrial lands and the available land base to support potential applications for exclusion of agricultural lands if necessary.

Recent decisions by the Agricultural Land Commission have clarified requirements for justification of exclusion of agricultural land from the ALR on the basis of community need. The decisions indicate that local governments will require local and regional planning assessments supported by rigorous technical analyses. The City of Surrey should undertake this assessment to ensure that ALR lands can be converted to alternative uses where a community need exists.

6. Analyze the availability of land which could satisfy the compensation requirements under Policy O-51, and if it is insufficient alter the policy to identify alternative policy measures that maintain the agricultural land base while accommodating community needs for other uses.

Policy O-51 imposes requirements for City support of exclusion applications for alternative use of ALR land, particularly in the provision requiring compensation in the form of inclusion of twice as much land in the ALR in return. The availability of land suitable for inclusion under the policy's criteria may be so small as to render the policy an obstacle to alternative uses of agricultural land where a community need exists.

7. Examine the potential for transfer of development rights to other sites in exchange for retention of truck parking uses at existing or new industrial sites. This could maintain the existing land base devoted to truck parking at no cost to the City.
8. Work with Provincial government agencies including the BC Transportation Financing Authority and the Gateway Program team to identify and take

advantage of opportunities for short and long term solutions for the shortfall in truck parking capacity.

Discussions with representatives of the BC Transportation Financing Authority highlighted some opportunities for short and long-term provision of truck parking spaces, particularly related to Provincial acquisition of land and construction of the South Fraser Perimeter Road. The City should establish an ongoing relationship with the appropriate Provincial agencies to take advantage of these opportunities.

9. Examine the feasibility of requiring onsite parking or implementing a special Development Cost Charge on new warehouse and distribution facilities to provide funding for purchase of land to be devoted to truck parking.

Ideally increases in the cost of truck parking due to rising land costs could be passed on by the trucking industry in the form of higher rates. The structure of the trucking industry under deregulation makes it difficult for this to occur. Imposition of additional Development Cost Charges on new warehouse or distribution centres could be an alternative method of ensuring costs are passed on to the beneficiaries of the service i.e. the clients of the transportation sector, because this sector has greater control over its pricing. The impact on the competitiveness of the City for this business would require examination.

10. Examine the options for development of parking spaces by the City to be sold to truck owners on a bare land strata basis.

A cooperative truck parking lot could allow truck owners more control over the facilities they use and provide greater stability in terms of land use. However, the dispersed nature of the industry makes it very hard to organize. The City could finance the assembly of land and construction of parking lots and sell individual lots on a strata basis to truck owners. Truck owners would face increased costs but could ensure an increased level of service through their own efforts. The City would face a financial risk in this process.

11. Engage senior governments in the solution to the truck parking problem.

The Provincial and Federal governments have a direct interest in resolution of truck parking problems in the Lower Mainland to ensure that their Pacific Gateway objectives are achieved. They should be approached for discussions on potential funding or policy changes which could assist in resolution of current and future truck parking capacity concerns. Consideration should be given by the GVTA to elimination of the parking tax on truck parking facilities.





# **Corporate Report**

**NO: R127**

**COUNCIL DATE: June 26, 2006**

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## **REGULAR COUNCIL**

**TO: Mayor & Council** **DATE: June 21, 2006**

**FROM: Acting General Manager, Planning and Development** **FILE: 5480-01**

**SUBJECT: Truck Parking Issues**

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## **RECOMMENDATION**

It is recommended that Council:

1. Receive this report as information;
2. Direct staff to proceed with retaining an appropriately qualified consultant to undertake a detailed study of the current circumstances with respect to truck parking in the City and to investigate alternatives to address the shortfall in parking spaces, including appropriate consultation with stakeholders and to make recommendations with respect to an equitable and sustainable truck parking strategy for the City and with respect to, among other things, the merits of the City establishing a Truck Parking Authority and the potential commercial opportunities associated and community impacts with truck parking; and
3. Direct staff to prepare a further report to Council on the matter when the above-referenced study is complete.

## **INTENT**

The purpose of this report is to:

1. Document information that has been gathered with respect to trucks and truck parking in the City; and

2. Propose a process for investigating and developing an appropriate strategy to address the current shortfall in legal truck parking spaces in the City.

## **BACKGROUND**

On February 13, 2006 Council received a memorandum from Councilor Gill, which discussed a number of truck parking issues. A copy of that memorandum is attached as Appendix I to this report. Council considered the memorandum and, subsequently, directed staff:

*"to expediently develop an adequate truck parking strategy and truck parking plan with the goal of finding a permanent solution".*

Councilor Gills' memorandum highlighted the concern that there are an increasing number of large trucks that require access to safe and secure parking facilities and that sites that are subject to Temporary Use Permits cannot be relied upon to supply truck parking in the long term, since they are often held by the owners pending higher order development. There is a large and increasing gap between the supply of truck parking spaces in the City and the related demand. Councilor Gill's memorandum proposed possible solutions, including:

- The creation of a Truck Parking Authority to explore the exclusion of suitably located marginal Agricultural Land Reserve ("ALR") lands for use as a full-service truck parking facility and using profits from the Truck Parking Authority to improve other ALR lands in the City;
- The facilitation of a working group with truck operators and/or their associations to review other alternative sites suitable for truck parking; and
- Any other additional solutions.

## **DISCUSSION**

### **Current Zoning Provisions Related to Truck Parking**

The General Provisions of the Surrey Zoning By-law 1993, No. 12000 (the "Zoning By-law") state that vehicles exceeding 5,000 kilograms (11,023 pounds) licensed G.V.W. are not permitted to be parked or stored, inside or outside, in any residential zone.

Truck parking is currently allowed as a principal use only in the Light Impact Industrial (IL) Zone under the "Transportation Industry" use. The transportation industry use is an

industrial use relating to the transporting, distributing and storing of goods or materials and the storage and service of transportation equipment, and includes warehouses, distribution centres, port and railway facilities, bus terminals and truck refueling facilities and sales and service of vehicles over 5,000 kilograms G.V.W. The Zoning By-law further requires that there be a building that has a minimum area of 100 square metres (1,076 square feet) and which contains washroom facilities on any lot accommodating the parking of vehicles over 5,000 kilograms G.V.W.

Other industrial and business park zones allow truck parking only if it is directly related to uses such as shipping and warehousing or other uses that take place on the same lot.

In June of 2004, Council considered Corporate Report No. R136 regarding temporary truck parking facilities in the City and endorsed the use of Temporary Use Permits ("TUPs") to vary the requirements of an industrial or commercial zone to allow temporary truck parking for up to two years. Legislation provides that the term of a TUP can be extended by Council for an additional two years after the expiry of the first two year term. These provisions allow Council to consider applications on a case-by-case basis, and provides for the waiving of the IL Zone requirements, such as the construction of a building, drainage improvements and hard surfacing to allow the establishment of temporary truck parking facilities on lots in the IL Zone. This initiative was focused on increasing the supply of truck parking spaces in the City and to discourage the parking of heavy trucks in residential areas throughout the City.

The majority of licensed truck parks and locations seeking TUPs for truck parking are located in the Newton industrial area and along the Fraser River. The location of each of these facilities is illustrated on the map attached as Appendix II to this report.

### **Issues related to Truck Parking Facilities**

As the value of industrial land in the region increases, there has been a trend towards the conversion of lower value industrial activities, such as outdoor storage of goods, equipment and vehicles, to higher value uses, such as manufacturing, warehousing and distribution. In recent months, the owners of two local truck parking facilities in the City have initiated the conversion of some or all of their land from parking to other industrial uses.

Truck parking is an activity that is generally not viewed as being compatible with non-industrial uses. Given the relatively low rates currently charged for truck parking, as well as the temporary nature of many of the parking lots, most truck parking lots in the City provide minimal landscaping and screening and provide only basic parking services for users. There has not been the same attention to property maintenance and installation of amenities as for other industrial and commercial uses. Truck parking lots can be visually intrusive and can create noise and dust nuisance.

Through discussions with truck owners and operators, truck parking lot business operators, the RCMP and staff in Planning and Development, Engineering and By-laws and Licensing Services, a number of issues with respect to truck parking have been identified, as follows:

### **Insufficient Parking Spaces to Accommodate Trucks in the City**

Independent truckers have indicated that they are seeking not only locations to park their trucks on nights and weekends, but also suitable locations for truck maintenance, repair and washing. This demand for facilities has led to trucks being parked in unauthorized locations, including residential neighbourhoods.

Staff has conducted a site survey at each currently licensed truck parking facility in the City and each location for which a temporary use permit application for truck parking has been received by the City. The owner of each licensed facility was interviewed. Through these surveys and discussions, it has been established that licensed truck parking facilities are operating at greater than 75% of their capacity and most are near capacity. It was further determined that some sites for which TUP applications are in process are already being used for truck parking and are occupied at between 50% and 75% of capacity. It was further determined that two of the seven licensed truck parking facilities the City are in the process of converting some or all of their truck parking stalls to other uses.

Currently, the seven licensed truck parking lots contain a total of 496 spaces for trucks to park. On average, approximately 20 to 25 trucks can be parked per acre in a truck parking lot. There are eight other sites where TUPs have been issued or are in progress, with approximately 190 spaces.

### **Truck Parking Stall Charges**

The fees charged for truck parking in the City has increased over time with the current rate being approximately \$200/month/tractor-trailer. Slightly lower rates are charged for detached trailers or dump trucks without trailers. Independent truck operators have indicated that these parking rates, combined with rising fuel prices, modest freight charge increases and strong competition, are causing financial difficulties.

### **Number of Trucks Operating in City**

According to ICBC statistics, there are currently approximately 8,300 trucks (i.e., with a G.V.W. greater than 5,500 kilograms) registered to addresses in the City of Surrey. This number has been growing at a rate of approximately 11% per year for the last four years. The most significant growth in truck ownership has been in the central and northern parts of the City, with no net growth in truck ownership in the southern part. This may be expected to change with the developments in the Campbell Heights area. Appendix III shows the growth in truck ownership in different areas of the City from 2001 to 2005.

## **Difference Between Trucks and Parking Spaces in the City**

At first glance, it would appear that there is a significant shortfall truck parking spaces in the City. However, it should be noted that many of the trucks associated with warehousing, manufacturing and distribution businesses are parked on the lots which contain their related business use when the truck is not on the road. As such, in addition to the commercial truck parking lots discussed previously in this report, there are many truck parking stalls located on private property, as part of industrial business operations. Despite these unreported private parking spaces, staff estimates that there is a deficiency in legal truck parking spaces in the City that could range to as high as 1,000 spaces. For example, independent gravel truck operators typically do not have a home industrial address at which to park their trucks and many independent long haul freight truckers do not have an industrial site as a home base.

## **Access to Truck Parking and Truck Routes**

The truck parking facilities in the City are located in only a few areas, which presents a challenge for those truck operators who wish to access residences and personal services during the working day. Truck parking facilities which are located a significant distance from the homes of truck operators means that the trucks have to be dropped off and the operator needs to then drive home. This leads to increased truck and vehicle traffic on roads. The distance between the truck parking facilities and homes of the operators also makes it less convenient when truck operators wish to repair, clean and/or maintain their vehicles on evenings and weekends. City by-laws require truck operators to use designated truck routes within the City, including accessing truck parking facilities.

## **Representation for Independent Truck Operators**

There is no official association of independent truck operators. Many local truck operators do not have a Surrey business license, which presents significant coordination and communication difficulties. According to the BC Trucking Association, approximately 85% of commercial trucks are operated by independent operators and are not affiliated with a major trucking company. Based on the City's business license records, the City has issued approximately 405 business licenses to truck operators with a single truck and approximately 255 business licenses to operators with multiple trucks in Surrey. As was noted earlier in this report, there are approximately 8,300 trucks registered with ICBC to addresses in the City.

## **Overweight Vehicle Parking Infractions**

There are regular complaints about heavy trucks being parking in residential areas. Over 2,400 tickets were issued by Bylaw Enforcement Officers last year, related to overweight vehicle parking. The majority of these were for locations in the Newton and Fleetwood

areas of the City. This gives some indication of the serious nature of the shortfall in legal parking spaces in the City.

### **Temporary Use Permits**

The City has issued TUPs to assist in addressing the demand for parking facilities. The TUPs have typically allowed relief from some of the more onerous zoning requirements, particularly the need for a building on the parking lot site, drainage improvements and hard surfacing of the parking lot. A TUP is issued for an initial period of two years with a possible extension for an additional two years, subject to Council approval. Clearly TUPs do not provide a permanent truck parking solution. In addition, TUPs have not typically provided for vehicle washing or maintenance facilities on the same lot, which is a need expressed by many operators.

Due to the waiving of certain requirements under the TUP approach, including the need for hard surfacing of parking areas, there have been concerns with regard to the environmental implications of temporary facilities. According to the current TUP policy, restrictive covenants are registered on the title of the property to limit uses that may have environmental impacts, such as truck washing, maintenance and the storage of fuel or waste products. Other environmental legislation would still apply to the truck parking lots such as the *Environmental Management Act*, the *Fish Protection Act* and associated Riparian Area Regulations.

### **Vehicle Security**

Truck operators have expressed concern about the minimal level of security in some truck parking lots. Surrey RCMP has researched crime statistics for the most recent five year period for truck parking facilities that have a business license and found 32 cases of theft from a vehicle and 10 vehicle thefts. Although this number is likely under-reported, as with most crime, RCMP Community Services does not consider this rate of theft to be unusual for the City. Regardless, it is important that truck parking facilities be as safe and secure as possible to encourage their use and discourage parking in unauthorized locations.

### **Identified Areas of Need for Truck Parking Facilities**

Although the South Fraser Perimeter Road is expected to be a major goods movement corridor, there are currently limited opportunities for future truck parking facilities along the corridor in the City. Similarly, although there is significant trucking activity associated with the international border crossing and major truck routes in South Surrey, there currently are no truck parking facilities in southerly part of City.

### **Costs for Constructing and Operating a Truck Parking Lot**

The attached Appendix IV provides a "pro forma" analysis of the costs and revenues associated with a truck parking lot in Surrey under current market conditions. Under current real estate conditions, the cost of industrial land in non-prime locations is in the order of \$600,000 per acre. It is evident from this analysis that the use of industrial land for a truck parking lot does not make economic sense on a permanent basis. Based on this preliminary analysis, assuming truck parking rates are \$250 per month, a parking lot cannot be established to break even if the land value exceeds \$178,000 per acre. This value is well below market value in any industrial area of the City, except where the land is significantly encumbered, such as under power lines where a hydro right-of-way exists. If Development Cost Charges were payable, this amount would reduce the amount that an operator could pay for land and still break even.

### **Trends in Truck Activity in Surrey**

The increase in the number of trucks in Surrey has been dramatic, increasing 44% in registrations since 2001, which is well above the regional average. This includes large increases in trucks in both the 5,500 to 10,000 kilogram G.V.W. and the over 10,000 kilogram G.V.W. categories.

According to the BC Trucking Association, the growth in the number of truck drivers provincially is increasing by approximately 2.5% per year, which translates into approximately a 1% annual increase in the number of trucks expected to be on the road. It is expected that construction activities for the Golden Ears Bridge, the South Fraser Perimeter Road and other elements of the proposed provincial Gateway Program, may lead to greater trucking activity within the City.

According to TransLink, the regional growth in truck miles driven is approximately 4% per year, which significantly exceeds the provincial growth rate and the growth in population or automobile ownership. TransLink's estimate does not account for all future increases anticipated, due to growth in container traffic and major construction projects, such as the Gateway Program. As well, it is unable to predict future variations due to the level of residential construction, which is currently at record high levels.

TransLink's predicted future increase in travel for the morning peak hour (expressed in Vehicle Kilometres Traveled, VkmT) by light trucks (two axles) and heavy trucks (three or more axles) compared to the growth in total traffic in the City is:

VkmT	2004	2021	Growth
Light Trucks	24,300 km	48,300 km	99%
Heavy Trucks	28,100 km	54,600 km	94%
All Vehicles	703,200 km	950,800 km	35%

The strong local growth rates in truck ownership and truck travel indicates that the availability of truck parking facilities will become even more critical in the future.

## **Potential Options to Address the Truck Parking Issue**

Given:

- the shortfall between the supply of truck parking spaces within the City and the potential demand for truck parking spaces;
- the negative ramifications to the community and the City of trucks being parked in unauthorized locations; and
- the lack of a solid business case for the construction of permanent truck parking lots on developable land in the City;

additional work needs to be undertaken to develop a sustainable truck parking strategy for the City.

## **Retain a Consultant to Conduct Further Analysis and Make Recommendations**

Given current workload and the need to address the truck parking inequity in a reasonable timeframe, it is proposed that the City retain an appropriately qualified consultant to undertake a detailed study of the current circumstances with respect to truck parking in the City and to investigate alternatives to address the shortfall in parking spaces, including appropriate consultation with stakeholders and to make recommendations with respect to an equitable and sustainable truck parking strategy for the City, including the merits of the City establishing a Truck Parking Authority and the potential for commercial opportunities associated with truck parking that would offset some of the costs.

## **Consideration of the Use of Land in the ALR for Truck Parking**

An argument could be made to the Agricultural Land Commission ("ALC") that there is no suitable land available for truck parking outside of the ALR and that an application for truck parking as a non-farm use on ALR land, based on economic necessity, may be supportable. ALC policies indicate that exclusion or non-farm use application based on economic necessity may be supported. The above-referenced consultant would be requested to study the establishment of a truck parking lot on ALR land and to analyze whether the net revenues from the parking facility could be used to enhance other ALR lands, such that there is no net loss to agriculture.

ALC policy currently supports truck parking in the ALR for farm uses only and requires that these vehicles be operated by farm staff.



City Policy No. O-51 – Policy for Considering Applications for Exclusion of Land From the Agricultural Land Reserve, indicates that support for applications for non-farm uses in the ALR would be considered, based on the following criteria:

- It is clearly demonstrated that locating such new or expanded facility on land currently in the ALR is the only feasible location for such a development and that such facility cannot be located on other lands;
- Uses, buildings and structures are located on the land in such a manner as to minimize the impact on the abutting ALR lands;
- Landscaping and buffering is provided along the proposed ALR boundary within the land being excluded from the ALR, with sufficient dimensions to clearly separate and minimize the impacts between the adjacent agricultural and non-agricultural uses, and
- Compensation is provided that supports agriculture.

Under the policy, compensation for ALR land exclusion takes the form of other land being included in the ALR with equal or greater agricultural capability and implementation of means to mitigate the impact of the exclusion by increasing the capability of the other land remaining in the ALR, such as drainage or irrigation improvements.

The Engineering Department has identified opportunities for irrigation projects that could significantly increase agricultural capability of land in the ALR in Surrey if sufficient funds were available.

The City of Abbotsford, which recently was successful in gaining the approval for an exclusion of 450 acres from the ALR to create industrial land, made a one time contribution of \$20,000 per acre toward the implementation of other enhancements to land in the ALR to offset the loss of agricultural capability brought about by the exclusion. The compensation funds were placed in a trust for use on agricultural enhancement programs in the City of Abbotsford.

As the City does not, as a policy, become involved in supporting particular sectors of the economy, it is recommended that the option of involving the private sector in this solution should first be explored. The City could undertake a pilot exercise to identify one suitable site, through the issuance of a proposal to the private sector, to monitor this process as a model for future action. A pilot project would involve making the private sector aware that the City of Surrey will consider supporting an application to exclude a site of approximately 4 hectares (10 acres) in size from the ALR for the purposes of a truck parking facility, subject to the locational policies of City Policy No. O-51 – Policy for Considering Applications for Exclusion of Land from the Agricultural Land Reserve.

This would be subject to suitable monetary compensation of at least \$20,000 per acre for improvements to other ALR land, as discussed in this report, and subject to a suitable agreement with the City regarding the development and management of this facility;

It is noted that these options have not been presented to or reviewed by the City's Agricultural Advisory Committee ("AAC"). The AAC will have a strong interest in this matter. Should Council decide to proceed with the exploration of these options, it is recommended that the AAC be involved directly with the determination of the process, the evaluation of sites and the compensation program.

### **Consultation Process**

The consultant will be directed to undertake an adequate consultation process in relation to the truck parking study. Such a process could include:

- Conducting meetings with and potentially a formal survey of, truck operators and business stakeholders, including truck parking facility owners, the Chamber of Commerce, TransLink and the BC Trucking Association;
- Conducting public meeting(s) involving truck parking lot owners and truck operators at which potential alternatives would be reviewed and feedback encouraged;
- Meetings with the AAC and the staff of the ALC; and
- Meetings with the owners of underutilized IL-zoned land and appropriate lands in utility corridors to determine if interest exists in providing additional truck parking lots on such sites.

### **CONCLUSION**

Based on the above discussion, it is recommended that Council direct staff to proceed with retaining an appropriately qualified consultant to undertake a detailed study of the current circumstances with respect to truck parking in the City and to investigate alternatives to address the shortfall in parking spaces, including appropriate consultation with stakeholders and to make recommendations with respect to an equitable and sustainable truck parking strategy for the City and with respect to, among other things, the merits of the City establishing a Truck Parking Authority and the potential commercial opportunities and community impact associated with truck parking. It is further recommended that staff prepare a further report to Council on the matter when the above-referenced study is complete and, if necessary, at appropriate milestones in the process.

How Yin Leung  
Acting General Manager  
Planning and Development

MA:saw

Attachments:

Appendix I                      Memorandum from Councilor Gill considered by Council on February 20,  
2006.

Appendix II                      Map of Truck Parking Locations in the City of Surrey

Appendix III                      Map of Distribution of Truck Ownership in Surrey

Appendix IV                      Pro Forma of Truck Parking Scenarios

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# INTER-OFFICE MEMO

TO: Mayor & Council

FROM: Councilor Gill

DATE: February 10, 2006

FILE:

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RE: Truck Parks Issue

## RECOMMENDATIONS

- Council receive this “draft discussion paper” on Truck Park Issues
- Council direct staff to expediently develop an adequate truck parking strategy and truck parking plan with the goal of finding a permanent solution.

## BACKGROUND

Under City by-laws, it is illegal to park a vehicle over 5,000 kg (GVW) on a City road. This by-law was intended to avoid the impact of large commercial vehicles being parked on City roads, especially those in residential areas. This by-law is enforced by City by-law officers and the parking commissioners, **with approximately 2,450 by-law infraction tickets issued in 2005**. The average ticket fine is \$100.00. This by-law, together with the growth in the number of trucks, has led to the establishment of a number of private truck parking lots. Currently, there are seven (7) licensed truck parks, one (1) temporary use permit truck park, and seven (7) pending temporary use permit applications.

## NUMBERS OF TRUCKS AND TRUCK PARKING LOTS

Exact data on the number of trucks registered in Surrey is only available from ICBC for which we understand an FOI request is required plus a few weeks of processing time. The best data the City has is the number of Municipal commercial vehicle decals which amounts to 4,760

truck/commercial vehicles; however, this includes all commercial vehicles, some of which would be less than 5,000 kg.

The data on the number of truck parks and truck stalls is approximately as follows:

Existing truck parks	7
Approximate number of stalls	400 <sub>±</sub>
Existing TUP truck parks	1
Approximate number of stalls	23
Proposed TUP truck parks	7
Approximate number of stalls	170 <sub>±</sub>
Approximate total number of stalls	600

Please note that the estimate number is very approximate, as most of the truck parks do not have marked out stalls. It represents a potential number if the trucks are parked in an orderly manner.

TUP or Temporary Use Permit for truck parks last for 2 years with a maximum number of one 2-year extension. They are also seen as more of an interim use until a more economic use for the land arises. Consequently, TUP truck parks cannot necessarily be relied on to continue long-term as truck parks. In fact, this same comment could be made about all truck parks, except those under a transmission line.

## **ANTICIPATED GROWTH IN TRUCKS**

With the anticipated growth in the economy, there will be an associated growth in the number of trucks requiring parking areas. This is likely to be even more accentuated in Surrey due to the construction of the Golden Ears Bridge and the recently announced Provincial Gateway Program which includes South Fraser Perimeter Road. All of these new roads and bridges will improve mobility for trucks in, and adjacent to, Surrey.

In addition, significant number of owner operators residing in Delta and Langley are likely using the truck parks in Surrey.

**The above analysis, although approximate, points out to a very large gap between truck parks needs in our City.**

## **OTHER ISSUES**

Even where parking is permitted, truckers are experiencing significant and frequent security issues such as thefts, break-ins and damages to their trucks resulting in significant downtime and loss of income. Given these trucks are used for making their living, these issues impact their ability to earn a living as well as causes them to utilize Sundays for repairs etc. thus impacting their family life.

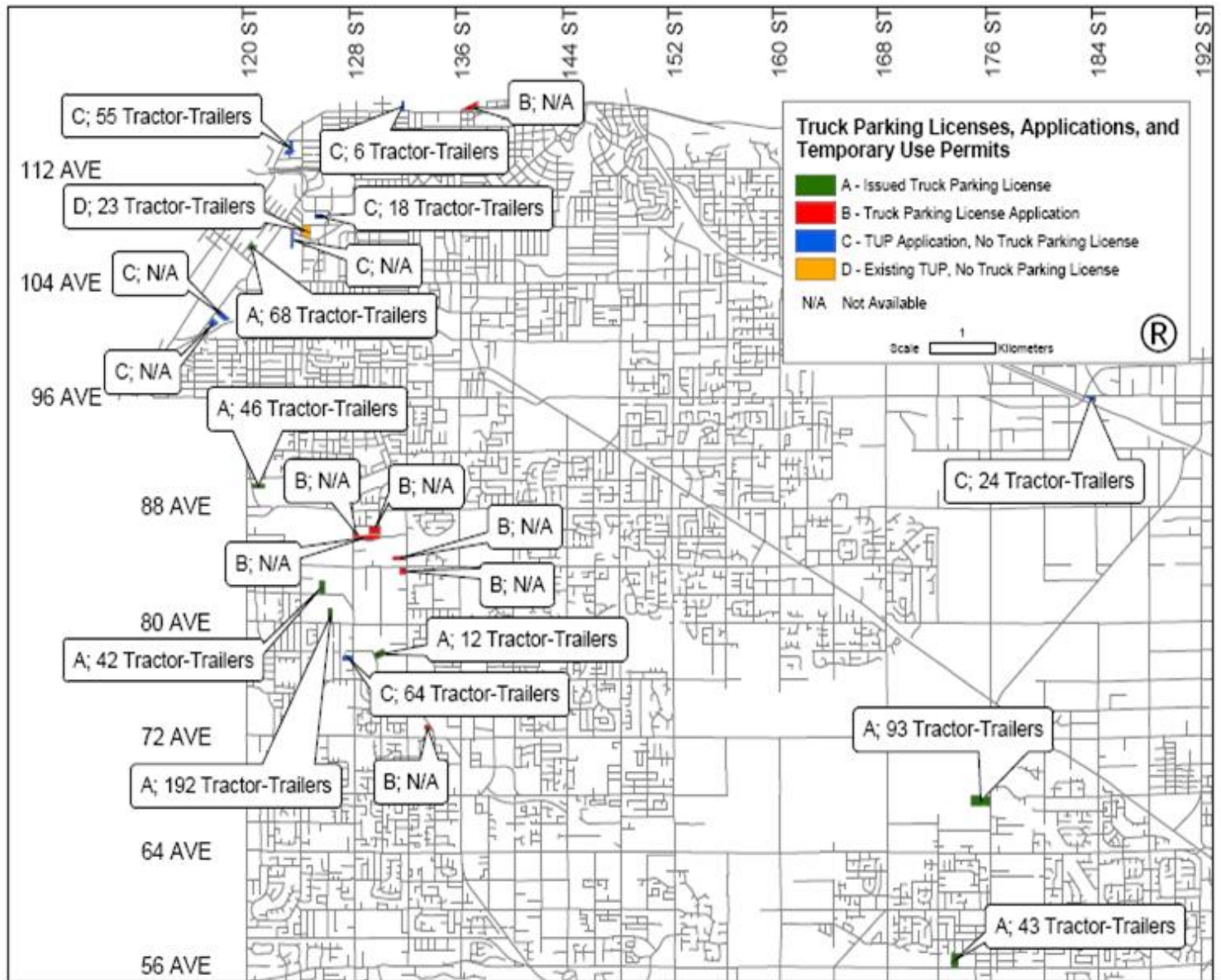
## **POSSIBLE SOLUTIONS**

1. As a conceptual solution, City to consider establishing a Truck Park Authority. This authority could explore a suitably located, but very low value ALR lands. This U.S. style Truck Park should be a full service truck park including provisions for fuelling, repairs, truck wash etc, as well as security provisions. This will result in efficiencies with benefits such as reduced trucks on City roads, fuel savings etc. The return from this operation should be entirely dedicated for improving other ALR lands in the City thus potentially making a win-win situation.
2. City could facilitate working with truckers and/or their associations to review other alternate sites (e.g. Bridgeview area) suitable for truck parking.
3. Any other additional solution(s).

*Original signed by*

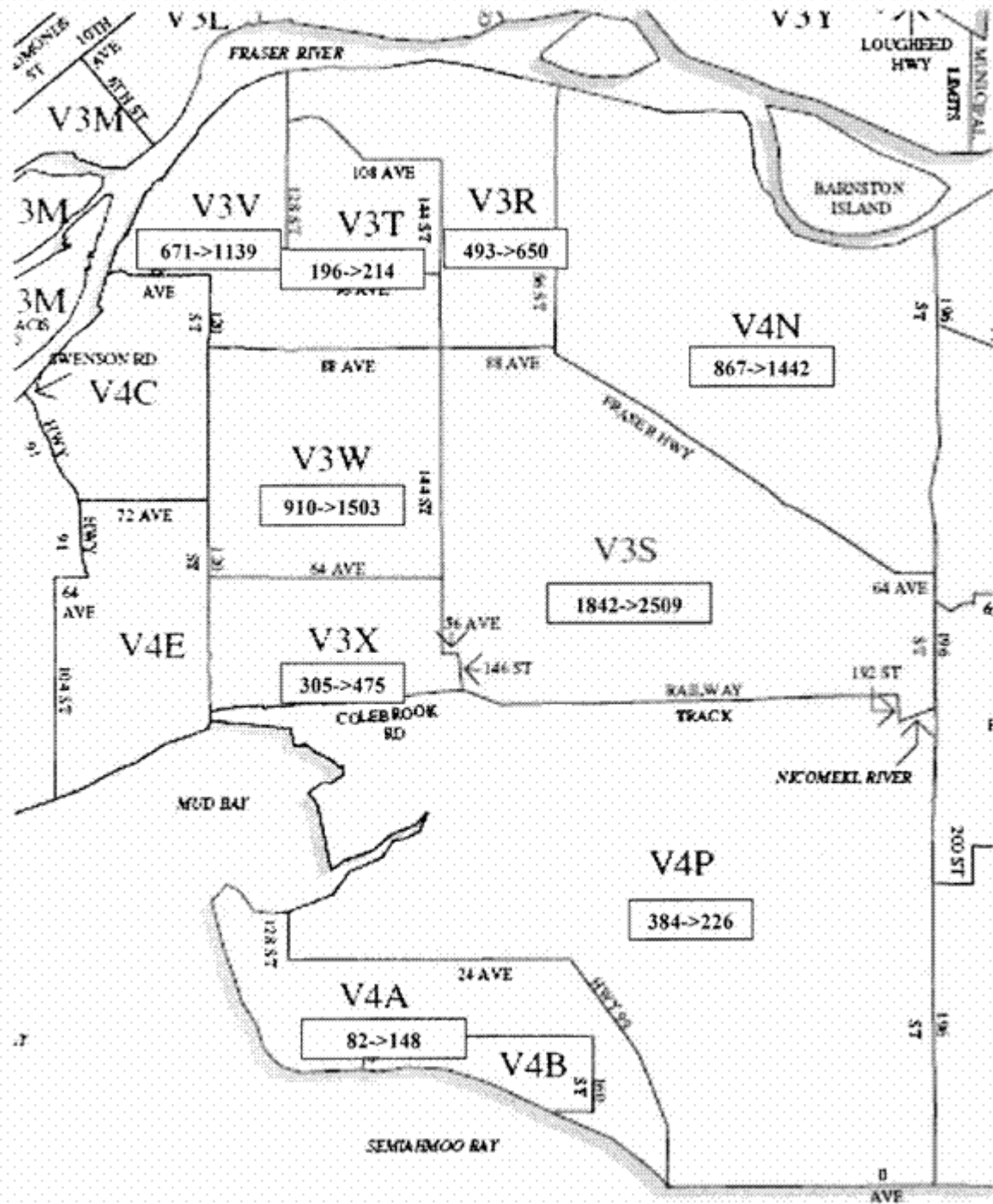
Tom Gill  
Councilor, City of Surrey

Appendix II



Appendix III

Growth in Truck Ownership 2001-2005 by Postal Code





Appendix IV

**Revenue and Cost Estimate Per Acre of Truck Parking**

REVENUE PER ACRE

\$5,000 per month  
20 stalls per acre at \$250 per stall

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CAPITAL COST PER ACRE FOR CONSTRUCTION

\$1,460

per month  
(site preparation, grading, base preparation, paving, drainage,  
fencing and lighting [not including land])  
\$250,000 per acre amortized over 25 years at 5% annual interest

OPERATING COSTS PER ACRE

\$2,500 per month  
(maintenance, security, administration, etc.)

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COSTS PER MONTH EXCLUDING LAND

\$3,960

per month

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RESIDUAL AVAILABLE TO SUPPORT LAND PURCHASE  
month

\$1,040 per

**SUPPORTABLE MORTGAGE FOR LAND PURCHASE**

\$1,040 paid on a monthly basis over 25 years at 5% annual  
interest will support

**\$178,000/a**

**cre**

**APPENDIX B**

**CITY OF SURREY: SUSTAINABLE TRUCK PARKING STUDY  
SURVEY OF TRUCK PARKING PRACTICES AND PREFERENCES**

The City of Surrey wishes to determine how better to accommodate overnight truck parking in the City, recognizing the importance of the trucking industry to many residents, as well as the desire to maintain a safe and beautiful residential environment. We wish to obtain information from stakeholders on parking issues and solutions. Please review the questions below, enter your information and place the completed questionnaire in the Questionnaire Box near the entrance to the hall, or fax or mail the completed questionnaire to Mark Allison, Surrey City Hall.

Fax: (604) \_\_\_\_\_

Mail: Mark Allison  
Surrey City Hall  
14245 - 56th Avenue  
Surrey, BC V3X 3A2

1. Where do you live? \_\_\_\_\_  
(address or nearest major intersection, city)

2.a If you own or drive a truck, which best describes the size of the vehicle (insert number of trucks by size)

- ☐ 2-axle truck, less than 5,000 kg                      ☐ 2-axle truck greater than 5,000 kb  
☐ 3-axle truck  
☐ 4 or 5-axle truck                                              ☐ more than 5-axle truck

2.b What type of goods do you transport in your truck? (check one below).

- ☐ gravel  
☐ containers  
☐ other freight  
☐ other (specify) \_\_\_\_\_

2.c Where do you normally park your truck at night / weekends?

- ☐ at home (address as above or other) \_\_\_\_\_  
(address or nearest intersection, city)  
☐ at work \_\_\_\_\_  
(address or nearest intersection)  
☐ other (specify) \_\_\_\_\_  
(type of facility and address / nearest intersection)

2.d Do you pay for truck parking?

- ☐ yes                      ☐ no

If yes, do you pay    ☐ Monthly    ☐ Daily

If yes, how much do you pay? Truck Only                      \$ \_\_\_\_\_  
Truck and Trailer Combination                      \$ \_\_\_\_\_

Trailer Only \$ \_\_\_\_\_

2.e Are you an independent carrier or do you work as part of a company fleet? (check one box)

☐ independent carrier ☐ company fleet

3. Do you think that trucks should be allowed to park in residential areas?

☐ yes ☐ no

If yes: ☐ on own property ☐ on street

3.b Do you think that trucks should be required to park only in industrial areas?

☐ yes ☐ no

3.c Do you think that the City should provide public parking lots in industrial areas for use by truckers?

☐ yes ☐ no

3.d If public truck parking areas are provided, would you use these parking areas?

☐ yes ☐ no

Would you pay user cost? (check one)

☐ yes, \$200 per month per ☐ Truck ☐ Truck and Trailer Combination  
☐ Trailer Only  
☐ yes, \$400 per month per ☐ Truck ☐ Truck and Trailer Combination  
☐ Trailer Only  
☐ no

3.f What amenities do you feel should be provided at the public parking area, costs of which would be included in the monthly fee.

☐ gravel lot only  
☐ paved lot  
☐ security fence  
☐ street lighting  
☐ washing facilities  
☐ bathroom facilities and rest areas  
☐ maintenance area

4. Please provide any other general comments about the truck parking problems and solutions in the City of Surrey.

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Please insert your questionnaire in the Questionnaire Box or return by fax or mail to Mark Allison,  
Surrey City Hall.

Fax: (604) 591-2507

Mail: Mark Allison  
Surrey City Hall  
14245 - 56th Avenue  
Surrey, BC V3X 3A2