

In³roads

DRIVING BETTER ROADS

PBC-01 FIVE YEAR REVIEW



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TRANSIT NEW ZEALAND

As the mid point of the 10 year Performance Based Contract PBC-01 held by Inroads arrives it is timely to review the achievements of the contract and how it has delivered on Transit New Zealand’s objectives over the last five years.

This contract is one of four collaborative agreements which Transit holds with Local Councils (others include Marlborough Roads and the delegations of Tauranga City and Rotorua), and one of five performance based contracts (others being the Performance Specified Maintenance Contracts: PSMC 01 in Southwest Waikato, PSMC 02 in Northland, PSMC 03 for the Auckland Harbour Bridge and PSMC 05 in Auckland).

The PBC-01 contract was established in collaboration with the Western Bay of Plenty District Council. The combined contract area covers a roading network laid out in a fishbone configuration, with the state highways making up the spine. Hence, by the nature of the network covered, the length of state highway in the contract is short in comparison with Transit’s other state highway contract lengths; yet the overall size of the PBC-01 is substantial enough to sustain this form of contract and realise the significant savings and efficiency gains that can be achieved. Transit accepts that, given the nature of the contract area, the majority of savings generated from this contract model will be realised by the Western Bay of Plenty District Council. However Transit reaps an equal share of the more intangible payback generated through efficient delivery of services and good customer relations.

Transit’s key objectives in managing and operating any network are to improve safety to meet the government’s 2010 road safety targets, provide good customer and stakeholder services in terms of meeting agreed service levels, and to have regard for the natural and social environment. Of key importance to Transit are the assurances that the investment in the asset is protected and, specifically, that the asset is not consumed over time and that the contract delivers value for money. These goals are consistent with the District Council’s goals. The key performance indicators for the contract have been designed, and are continually reviewed, to ensure that these objectives, set jointly by both clients, are perpetually met.

This report celebrates the not insignificant ability of the Inroads team to deliver on these performance measures, which can only be achieved through their strong sense of ownership of the network and their firm partnership with their clients.

In terms of customer service the pivotal advantage of the PBC-01 amalgamation is that all customers can be dealt with quickly and efficiently by the one entity. It is a big ask to expect road users to determine whose road they are travelling on when they have need to report an issue or request a particular service.

As the midway point is reached Transit can look back with some satisfaction at what has gone before, but also challenges the contract team to continue to meet the expectations of Clients and road users for the remainder of the contract.



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WESTERN BAY OF PLENTY DISTRICT COUNCIL

PBC-01 is a 10 year performance based maintenance contract for the roading network within the Western Bay of Plenty District. The contract has joint principals, Transit New Zealand and the Western Bay of Plenty District Council, and includes the maintenance of both state highways and local roads. The contract was awarded to Opus International Consultants, who formed an alliance partnership with McBreen Jenkins and Works Infrastructure known as Inroads.

Prior to the development of the performance based contract model the Council had numerous maintenance contracts for the delivery of operational services. These multiple contracts included unsealed maintenance, sealed maintenance, bridge maintenance, traffic services, RAMM data collection, professional services and minor safety improvement works.

During the development of the performance based contract model the Council combined its operational services delivery into two main contracts, being a professional services contract and a physical works contract. As well, it combined with Transit New Zealand in a joint principals contract arrangement for the delivery of a combined network safety contract, to gauge how a joint arrangement might work.

The PBC-01 scope of service includes network maintenance, capital improvement works such as pavement rehabilitation, pavement widening, minor safety improvements, seal extension works, new footpath development, implementation of the Council's 10 year street lighting strategy. Also included is storm damage reinstatement and repair, RAMM inventory data capture and professional services such as public service requests management, the data collection contract management and administration, resource consent processing input and comment, visibility improvements and network management.

The data used for the contract's annual key performance measures has been captured under an independent data collection contract which commenced at the same time as the PBC-01.

The PBC-01 contract is administered for the joint principals by the Bay Roads office which is made up of a contract superintendent, a technical manager and office support. The Superintendent reports to the contract's management board which is made up of representatives from Transit New Zealand, the Council and the contractor.

The Council has made savings over traditional contract service delivery which it has chosen to invest in additional seal extension improvements.

Geographically, the majority of road users travel both the state highway and local road networks when moving around the district or to neighbouring regions. The benefits of this combined network model include a "one stop shop" for the public's roading issues which has resulted in an informed transportation-focused customer care team.

The Council has the option to include additional capital improvement works as contract variations or go to the market for the delivery of these services.

The contract's joint principal arrangement promotes improved communication between the network's two authorities.

A single service provider acting for the Council over a 10 year period allows the ability to trial innovations which are not easily achieved from conventional models.

The Council's management and administrative effort has been reduced because of the significant reduction in the number of current contracts.

The Council believes that the PBC-01 contract model is generally delivering outcomes which satisfy its intended levels of service and expected network improvements.



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SUPERINTENDENT'S OVERVIEW

Bay Roads is the entity set up specifically to administer the ten year PBC-01 contract on behalf of Transit New Zealand and Western Bay of Plenty District Council. The three Bay Roads staff, the Superintendent, a technical manager and an administration officer, are based in the same building as Inroads staff.

Background

Overall it has been very pleasing to observe Inroads develop a team that is dedicated to understanding the network condition, how it deteriorates and when to intervene.

Inroads is now a very capable unit that is committed and focused on achieving the very best outcomes for the clients and road users.

Resources for construction management and the delivery of professional services were, of necessity, more than doubled 18 months ago and this led to a corresponding improvement in performance in these areas.

Customer/Client Expectation

Observers of the PBC in operation, still take any area of pavement distress as an indication that the contract is not delivering the required outcomes.

What this indicates is that we still have not managed to fully inform our customers and stakeholders of the significant and fundamental differences between the conventional contracts for road maintenance and the PBC model. Namely:

- that the considerable savings (\$30m for WBOPDC) on the contract are being achieved by specifying the condition in which the assets are to be maintained and completely surrendering the means of achieving this to the contractor's control
- that a great deal of effort is being put into gathering data on the asset condition and into understanding the mechanisms and timeframe involved in failure
- that by intelligent and efficient work programming the network can be kept in the required condition for the absolute minimum cost
- the required condition of the network is set out in a raft of over 200 key performance measures (KPMs). In essence the KPMs require Inroads to have the network at a stated average condition with a maximum proportion of the network being in a worse condition at any time.

To date Inroads level of compliance with these KPMs has given the clients every satisfaction.

A typical example of the difficulty we are experiencing in getting a general understanding by users and stakeholders is maintenance of Local Authority drainage.

- It is not a contract requirement to keep all culverts clear at all times
- The culvert KPM is more about structural integrity than hydraulic efficiency and blockage has only a minor influence on the culvert condition KPM.
- However Inroads is fully responsible for any consequent damage.
- To protect themselves from this liability Inroads need to put a lot of effort into keeping the drainage systems functioning, and they do.
- Nevertheless, heavy rain washes gravel and dead vegetation including shelter belt trimmings into channels and blocks some of the 3000 culverts.



Operations

Customer satisfaction (as evidenced by the level of complaints from the public) is very important to both clients (WBOPDC and Transit) and at times can assume greater significance than the measured and reported compliance with contract standards and contract response times (which Inroads is complying with quite well). In the Local Authority part of the network Inroads is suffering from negative perceptions conveyed to Council for two clearly identified reasons.

- 1) Any improvements to levels of service generally results in rising expectations from road users.
- 2) Residents on unsealed roads have one (or both) of the following agendas:
 - the (mistaken) belief that a steady stream of complaints about the surface condition will lead to Council deciding to seal the road earlier than currently planned
 - if the road is not to be sealed soon then it must be kept almost as smooth as a sealed road, and preferably with no loose stones, no mud and no dust.

Another example of unrealistic expectations relates to maintenance of the rural road corridor.

The contract performance measures are mostly concerned with:

- safety, comfort and convenience
- strength, serviceability and remaining life, with generally little regard to amenity (appearance) aspects of rural roads.

However, some people seem to believe that the road corridor should be kept in a park-like condition. It never has been and, given that the length of LA rural road in the district is 917 km, it probably never will be.

KPM Review

At present Inroads, Bay Roads and the two clients are jointly reviewing the KPMs with the intention of either modifying or discarding those measures where either:

- the measure can not be made sufficiently stable to deliver meaningful results
- the measure is not achieving anything, or worse
- the measure is driving behaviour inconsistent with client objectives.

Audits

The PBC has been subjected to a steady stream of visitations from various auditors. The most recent was by the Office of the Auditor General (OAG) which produced a report that was tabled in Parliament in June 2007.

OAG Report

This Performance Audit's brief was to assess arrangements for jointly maintaining state highways and local roads. However, the report made a few observations of other aspects of the PBC as well.

The audit noted that communication across the parties to the contract is good and there is a high standard of information to the Management Board and sound relationships exist across all parties at all levels. The audit also noted that "the 2006 BBO Project Evaluation concluded that the Lump Sum is intact with no variation to the sum set for the original scope, and if this is the case then the forecast savings to Council of \$30m should be made".

Innovation

The PBC-01 contract states that innovation is strongly encouraged and the Contractor is expected to develop innovative ways of providing the services. Innovation was a cornerstone of Inroads tender.

Bloxam Burnett and Olliver (BBO) in their August 2006 Project Evaluation Report stated "there is evidence of a strong culture of continuous improvement within Inroads, with individual personnel independently pursuing opportunities related to their own activities". This environment of ownership is often promoted as a benefit of performance based models, but rarely is it so transparently delivered.

BBO commented that Inroads reporting of innovations is more focused on the innovation process rather than the outcomes and they then went on to list some noteworthy improvements that have been implemented, some of which demonstrate that it is a matter of interpretation whether or not some improvements are in fact innovation.

The challenge to Inroads for the future is to develop or discover innovative practices and materials that improve delivery of services and that also have that elusive inventive component or wow factor.



MANAGER'S SUMMARY

Introduction

The 10 year PBC-01 performance based contract celebrated its fifth anniversary and reached the half way mark on 1 October 2007.

At this point in the Contract a quick review shows benefits achieved by the clients, Transit New Zealand and Western Bay of Plenty District Council, as well as the ongoing development of new initiatives to deliver a better service to the primary customers - the road users.

Inroads believes that in combining the maintenance of the Western Bay of Plenty roading network, the Clients made significant savings through a good decision to improve productivity and efficient use of resources on a network with a fishbone layout.

The parties involved in the execution of performance based maintenance contracts require a different mindset to the participants on traditional specified maintenance contracts. Some of the differences are as follows:

- The Client hands over control of its roading asset to the contractor, in this case for 10 years, as long as certain criteria such as the Key Performance Measures are met during the contract period.
- Through good asset management of the network, the contractor will optimise the condition of the network through extensive data collection and analysis. The asset management is done from a commercial perspective as these contracts are bid competitively on the open market and savings have been achieved by the Clients through this process.
- The contractor has to show ownership of the network and instil this ownership throughout the workforce.
- Risk management becomes the most important factor for decisions regarding drainage and associated maintenance as the Contractor could be exposed to more than \$800k in emergency work during storm events.
- A high level of customer care has to be maintained on the network but, in the case of local roads, there is additional political pressure on the level of service to be provided.
- Operational Performance Measures (OPMs), including the response time to correct defects, have a high profile on performance based contracts as these measures are mainly self audited by the Contractor.
- There is an open-book policy regarding the bid between the Superintendent and the Contractor.

Inroads started the PBC-01 contract on 1 October 2002 and the steep learning curve to incorporate most or all of the above differences has now been completed. Inroads has a great understanding of the Key and Operational Performance Measures and these measures have been amended, or in some cases dropped, either because they do not support good asset management or the original intent of the performance measure was not achieved.

KEY CHANGES FOR THE CLIENTS DURING THE PAST FIVE YEARS

Risk Transfer

The largest portion of risk transfer from the Western Bay of Plenty District Council to Inroads is the emergency work risk of \$800k per year for ten years. This threshold was exceeded during the storm event in May 2005. The transfer of this risk to Inroads triggers an awareness that the general maintenance of drainage, clear culverts and slope protection has to be of a high standard.

Another risk transferred by the Clients is the criteria for design and construction of rehabilitations and other new road construction when it has to be proven that after construction the road complies with a 25 year life. To date this criteria has been met.

There is always a severe risk that through poor asset management, the contractor will not meet its KPM obligations. During the past year the contractor passed all the Key Performance Measures and this is discussed later.

External Audits

Internal audits on Inroads are done on a regular basis:

- Opus: Technical reviews, ISO 9001 Compliance
- Ernest and Young: Accounting Procedures
- Alliance Partners

Unbiased external audits were done by Bloxam, Burnett and Oliver (BBO) in Years 2 and 4 of the Contract.

BBO concluded in their Year 2 report that:

- the PBC-01 generally is functioning satisfactorily and achievement of the contract outcomes looks possible
- WBOPDC is satisfied
- Transit is satisfied
- the lump sum is intact.

BBO concluded in their Year 4 report that:

- significant improvements have been made in service delivery in respect of Operational Performance Measure compliance since the previous project evaluation
- Inroads is to be commended for the continued improvement of their systems used for delivering the services
- Inroads is generally meeting their contractual obligations and, in some cases, exceeding the Clients' expectations. All consulted stakeholders consider the contract to be a largely successful and a healthy implementation of the long-term performance based model. The evaluation team concurs.

Another external audit was performed by the Auditor General's Office on collaborative contracts between Transit and other parties. Similar conclusions as above were reported.

Raising the Clients' Profiles

During the last 15 months, eight papers on the PBC and processes have been delivered at conferences. These conferences included Transit's conference, a Low Volume Road Conference arranged by REAAA, and other industry-related forums.

Numerous papers have been delivered at internal Opus conferences on matters such as maintenance and processes used for unsealed roads, maintenance processes developed on PBC-01 compared with the traditional "find and fix" methods and operational performance measure improvements.

The PBC-01 model has been promoted at various international conferences around the world, especially in Canada, the United States, Australia and the UK, by Opus speakers such as Tony Porter.

Inroads has had visits from overseas experts to gain first hand knowledge of the process and systems used. Overseas visitors have included representatives from Main Roads Western Australia and the Department of Transport, Ontario, Canada.

Systems and Processes Developed and/or Used on PBC-01

Some of the most significant successes during the first 5 years of the contract have been achieved by development and innovation of the management systems and procedures used by Inroads.

The following "off the shelf" computer software programs have been introduced or improved for extensive use on PBC-01:

- Exor is being used by Inroads for programming and defect recording, tracking closure of completed work and payment
- dTIMs developed for network
- @RISK model developed for PBC

Additionally, other programs have been developed to provide extensive in-depth data including exception reporting, financial tracking linked to the maintenance programme and the ability to review road curvature, texture and crash data from various sources to identify possible links.



KPM REPORT

KEY PERFORMANCE MEASURE REVIEW

Key Performance Measures (KPMs) control the medium to long-term health of the roading network and assets for both local roads and state highways in the Western Bay region.

There are 26 broad analysis groups which include requirements for

- road performance such as roughness, texture, visibility and safety. This information comes from information gathered from machines such as the high speed data truck
- other asset performance, such as bridges, culverts, lights, retaining walls and footpaths.

Within these asset groups there are 53 Contractual Standards. These are broken down into 207 Key Performance Measures which Inroads is required to meet.

What do The Measures Do?

If these measures are met or exceeded, then the condition of the roads and associated assets will be meeting the Clients' levels of service both now, year by year and into the future. From a local road perspective the levels have been set by WBOPDC, following extensive ratepayer surveys, in order to balance community expectation and willingness to pay principles along with road user safety and long-term affordability. The Transit levels are set from their national guidelines, and a requirement that they are sustainable over the long term funding arrangements.

While some KPMs require an increasing or improving level of service, such as less crashes over the period of the contract, some like smoothness are required to be maintained to the same standard. Others, such as lighting in a new subdivision, may be expected to deteriorate over their natural life cycle. All KPMs have inherent allowances for traffic and population growth in the District over the term of the contract.

The KPMs also control where Inroads investment is required to maintain performance. Actual growth within the District is automatically allowed for up to specified limits within the lump sum. This gives the clients consistent and predictable cash flow planning, while passing the risk component to Inroads. There have also been significant savings to the clients, brought about by combining a big package of work into one contract with one supplier over a 10 year period.

Frequency of KPM Review

The Key Performance Measures collect data over varying timeframes varying from monthly for some measures to annually for most and up to every 2 or 4 years for a few of the measures. The frequency depends on how quickly a particular asset changes and how often measurement points are necessary to give an accurate picture of the particular asset's performance over time.

Measuring the KPMs

Most data is collected by independent contractors who specialise in calibrating their unique and expensive machinery, validating the data to ensure accuracy and who have developed detailed quality assurance processes to ensure robust and consistent data is delivered.

Data is also collected manually by trained teams who specialise in collecting measurement data in the field and ensuring that practical measures are also monitored over time.

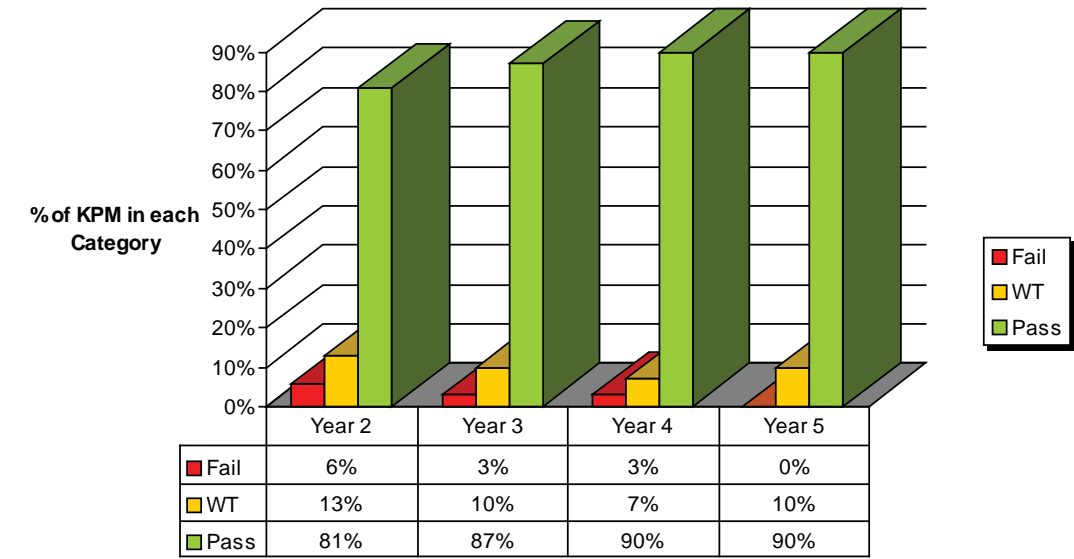
KPM Achievement to Date

Right from the start of the contract Inroads concentrated on putting systems in place in order to understand the KPMs and to predict how specific assets would perform over time. This was of course dependent on many things, including:

- the quality of materials used
- the quality of workmanship
- the delivered quality
- various work practices and policies.

Inroads intention was to achieve or exceed the measures wherever possible without over-investing too soon or spending money in areas not valued by the clients, WBOPDC and Transit.

Initially, Inroads inherited a network where large improvements needed to be made over a few years. It was anticipated that it would be some time before the effect of our strategies was evident in improved KPMs.



Out of the initial 207 KPMs, Inroads had a six percent failure. Over the five years since benchmarking, we have reduced the failed KPMs from 6% to 0%. The KPMs within tolerance (WT) which are generally accuracy and repeatability issues, have continued to hover around the 10% ± 3% mark. This is a significant improvement over the 5 years to date and reflects well in what the road users see for their money on the network. This improvement in KPM performance is represented in the graph above.

The KPMs that failed or were close to failing (within tolerance) are tabulated below. Although some of the same type of KPMs keep popping up, albeit in different road groups, none of the KPMs has failed two years in a row.

For example, the Surfacing Defects Index (SDI) which measures defects on sealed and unsealed roads occurred in most years in one road group or another. This took time to predict year-by-year, particularly as to how the KPM was going to perform and the relationship between what Inroads did on the road in practice versus the results we needed to achieve.

As a consequence several changes have been required to how we do things. We had to review the way the KPMs are measured and analyse the effect of our practices in order to achieve the result desired by our clients.

A significant outcome of PBC-01 has been the high success rate in meeting and, in some instances, exceeding the KPMs.

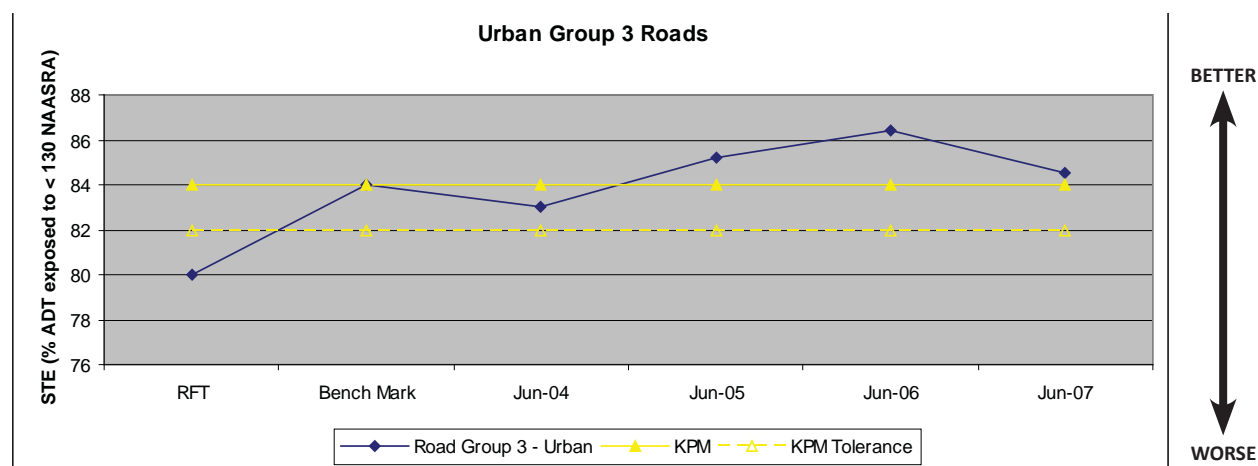
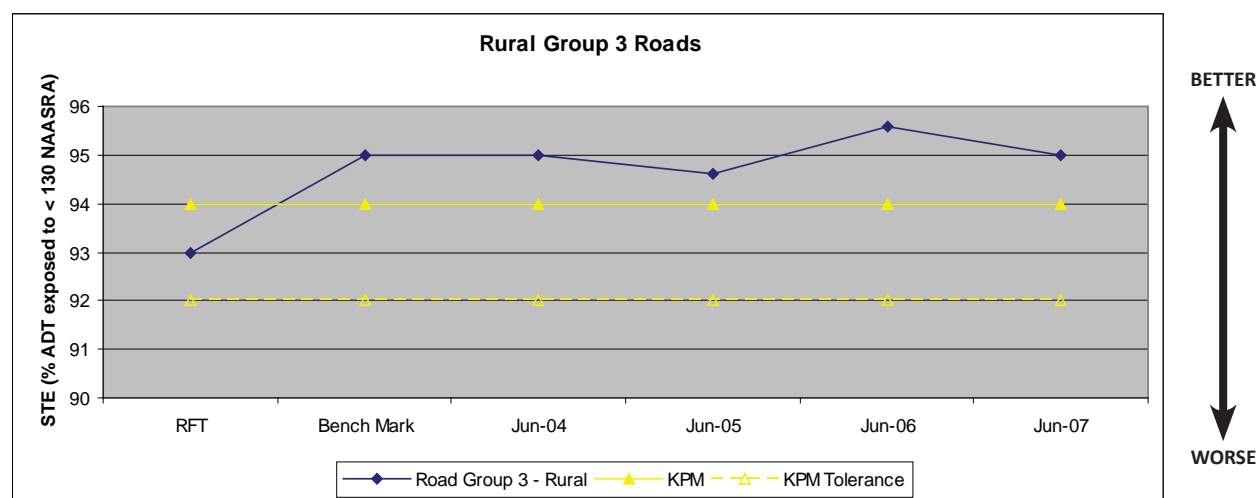
Year	Within Tolerance	Fail
2004	Smooth Travel – 3 urban Texture – 3 urban 4 rural 5 rural Lighting – Structural Condition Footpaths SDI – Sealed 4 and 5	Roughness – 4 urban and 5 urban Unsealed Metal Depth - all groups
2005	Mean Roughness – 3 rural Smooth Travel – 3 rural Texture – 3 rural SDI Unsealed – 5 Culverts Water Channels – Lined Minor Structures - Stock	Lighting – Average Lux Lighting – Maximum Lux Width – Unsealed
2006	Mean Roughness – 3 rural and 4 urban Texture – 3 rural SDI Unsealed - 5 Culverts – Stock Index	SDI-Sealed–Road Group 3 urban and 4 rural
2007	Mean Roughness – 3 Urban SDI – Unsealed – Road Group 6 Water Channels – Unlined	Nil

CURRENT HEALTH AS MEASURED BY KPM

Smooth Travel Exposure (STE)

The STE or how smooth a road is to vehicles has improved markedly as evidenced by the following graphs.

Quality of workmanship in the treatments undertaken has seen a marked improvement in the level of service to road users.



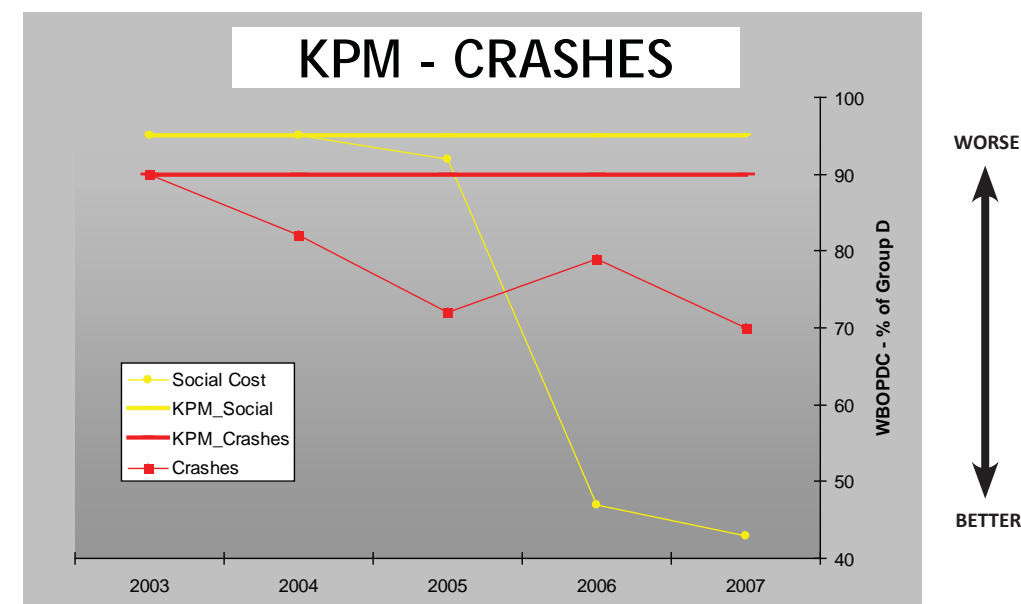
Crashes

Crashes are very difficult to predict or control. Nevertheless, Inroads has committed to lowering the crash rates by reducing the incidence of roading factors which may contribute to a crash occurring or impact on its severity. The cost of crashes is monitored and our Crash KPM requires us to be better than other similar roading controlling authorities in New Zealand.

Inroads takes a proactive role in safety and crashes in the area and provides personnel dedicated to safety coordination. Their primary role is to bring together teams from the Police, the Fire Service, road controlling authorities and emergency departments to develop and promote local campaigns focussing on the three Es:

- Engineering: where the physical attributes of the road or surrounds can be modified to assist in either eliminating crashes or at least reducing the severity if they do occur
- Education: signs, advertising campaigns, surveys and general promotional material to encourage road users to be more aware of the issues surrounding safety and the factors that can contribute to crashes occurring
- Enforcement: Inroads personnel sometimes assist the Police, who are responsible for enforcement, with campaigns such as breathalyser testing

This approach ensures that all avenues for reducing the road toll are coordinated and combined for maximum benefit across the network. As illustrated in the following graph there has been a significant reduction in both the number of crashes with road related factors and the social cost as a percentage against similar road controlling authorities around New Zealand. For our network both are well below the required KPMs.

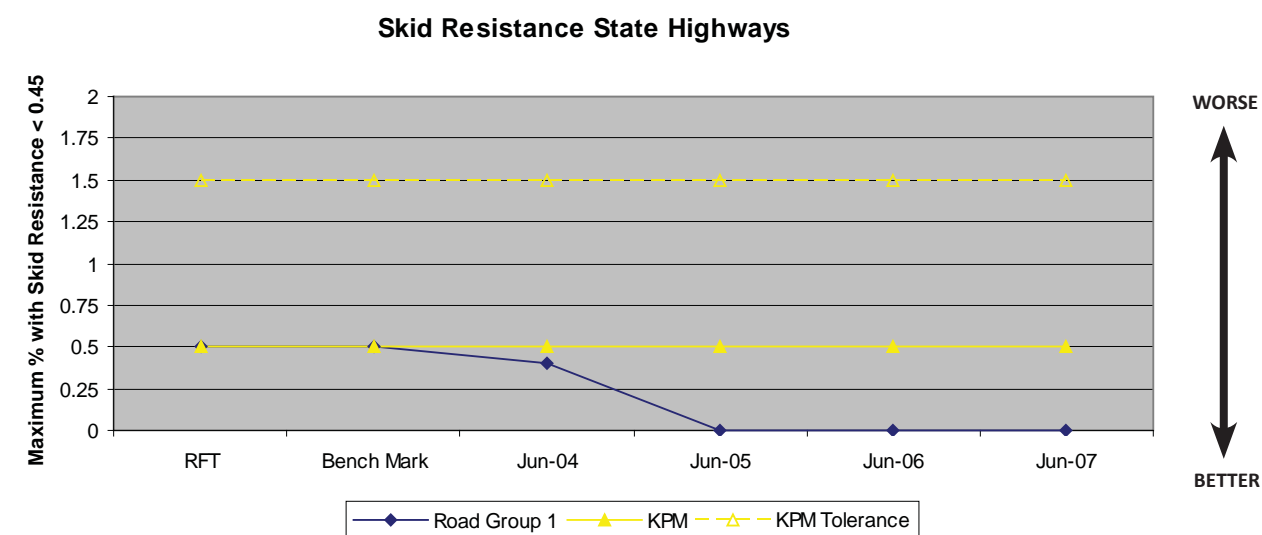


Skid Resistance Measurement

As part of the High Speed Data (HSD) measurement, skid resistance on the state highways is measured by two test wheels mounted in the middle of each wheel path on the High Speed Data truck. Each wheel is applied to the road surface under a set load with a controlled flow of water just in front of the test wheel.

As the vehicle moves forward, the test wheel measures the available wet skid resistance of the road surface. Measurements are made because it is important to ensure all vehicles have predictable and consistent skid resistance in the wet, and so minimise the likelihood of crashes due to lack of traction. Several different standards are necessary, dependent on such things as the tightness of curves and proximity to intersections or pedestrian crossings.

To date, Inroads has initiated several maintenance techniques to improve skid resistance in the high demand areas. These include selection of the right type of aggregate on the surface of the road, water blasting to remove surplus bitumen and surface particles. Some results are presented in the following graph.



Moving Forward

Inroads will continue to improve our existing systems and develop new ones to further refine and improve our management of roads, ensuring continuing benefits to road users as well as to Western Bay of Plenty District Council and Transit New Zealand.



Carrying out physical work on a performance based contract is all about meeting the expectations of the controlling authorities, the general public and the ratepayers, as well as those of the Inroads alliance partners – Opus Consultants, Works Infrastructure and McBreen Jenkins.

As noted previously the contract requires Inroads to meet certain Key and Operational Performance Measures (KPMs and OPMs) which were set by WBOPDC and Transit to meet their respective expectations. The performance measures are not always in line with what the general public, ratepayers and road users are expecting. It would also be fair to say that, in some instances, these performance measures are not fully understood with the result that it is perceived by some that the contract outcomes are not being met.

Balancing these expectations/outcomes has been very difficult. This was compounded during the first three years of the contract when Inroads was not meeting the local road OPM response times.

In February 2006 Inroads reviewed the methodology to address both the response times for local road work and later that year implemented new procedures. The benefits from the restructuring have been very apparent with a much improved performance measure achievement and better management of the budget.

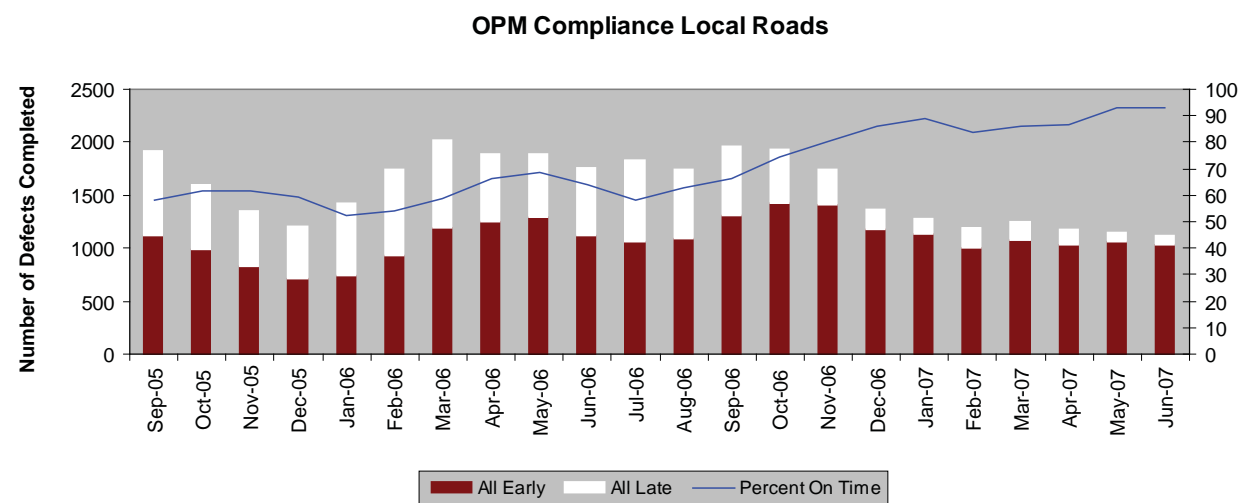
ACHIEVING CONTRACT DELIVERABLES

Traditional Find and Fix Work Method Abandoned

The traditional find-and-fix method of carrying out maintenance work was abandoned in February 2006 in an effort to better address the response times for the local road OPMs.

Work crews are now sent out on a pre-determined work programme which is determined according to the traffic management requirements and work activities and prioritised according to the OPM response time. The effect of this change in the work method has been dramatic. Inroads response times have changed from being about 50% compliant to now being consistently 90% compliant. This is illustrated in the Local Road OPM Compliance graph below. While 100% compliance is the target, such a level of compliance is extremely difficult to achieve. Some defects, for example, are notified in the middle of the night or during stormy weather when maintenance work cannot safely be undertaken and this work can be completed past target.

Since revising the programming method the number of outstanding jobs/defects has also reduced significantly, and this is also illustrated in the following graph.



Work Areas and Activities of Alliance Partners

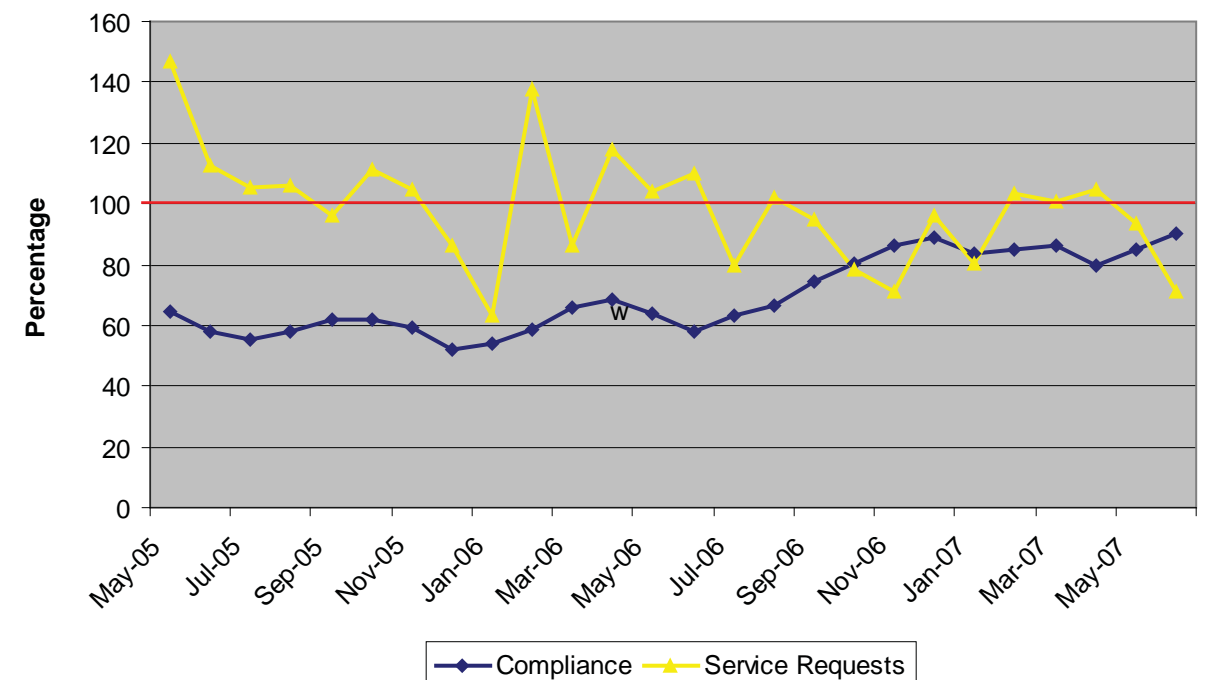
At the commencement of the contract Opus allocated the work into a state highway and local road split according to the experience of the alliance partners and the relevant traffic management requirements. However, such a split did not drive the ownership required to meet a combined WBOPDC and Transit contract area and the related work activities. Both contractors continued to work as if there were two separate contracts. Clearly this had to be changed as the efficiency gains anticipated from combining the state highways and local roads were not being realised. In August 2006 the work areas and allocated activities were abandoned on the basis that a different approach was required to achieve the desired outcomes.

Management of Plant and Labour Seconded to Inroads

To achieve the required ownership and to optimise the cost efficiencies gained by combining the WBOPDC and Transit roading networks into one contract, the Inroads alliance partnership agreed on a changed structure to manage the maintenance responsibilities. Staff were seconded from Opus Consultants, Works Infrastructure and McBreen Jenkins to control the daily activities of the plant and labour assigned to carry out the work required to meet the contract OPM and KPM requirements. This new approach was introduced in August 2006.

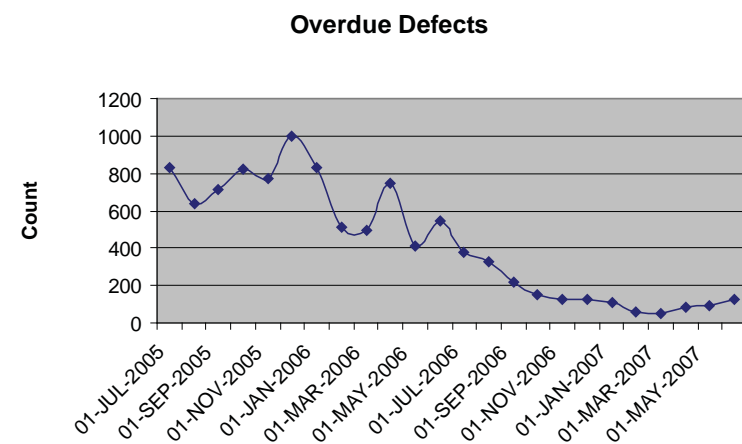
To ensure that these changes did not effect the expectations of the public and ratepayers, service requests were tracked over a period to see whether the reduction in expenditure had any effect on their expectations. The outcome of this can be clearly seen in the next graph. Inroads had to be sure that the changes in methodology did not affect customer expectations and the number of complaints received remains constant at about 225 per month. The months where there has been a marked increase can generally be attributed to specific events such as a major storm. Other events, such as the issue of rates demands or a serious crash, also can sometimes result in an increase in service requests.

Compliance and Service Requests



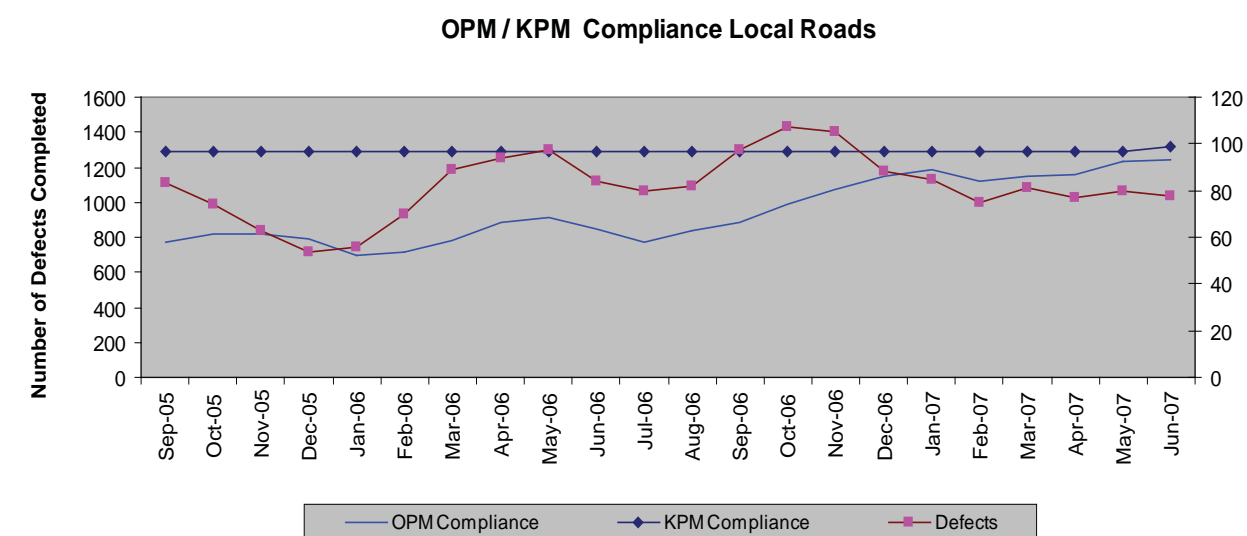
Effect of Changes

To see whether they would deliver the desired outcomes, Inroads graphed the OPM response against related customer service requests. The previous graph (Compliance and Service Requests) indicates that the OPM response time (completing work within the specified time for the specific defect) is now tracking at above 90% while the Service Request numbers are gradually tracking downwards. It is also interesting to note that, while they are reducing in numbers, the level of service requests received has not changed significantly as a result of increased compliance. Inroads believes that the expectation of the general public is a moving target which will never be fully met as when compliance is achieved and the condition of the asset increases there is a corresponding increase in expectation by the general public.



The Overdue Defects graph illustrates that while the OPM compliance is improving and the number of defects repaired each month is declining, the KPM measures have not been affected and Inroads is still achieving compliance. This following graph (OPM/KPM Compliance Local Roads) confirms that KPM compliance is being maintained at close to 100% and the number of defects is starting to track downwards which would indicate that the roading network is improving with the changes.

In summary, the changes made have been a significant departure from the way in which a traditional maintenance contract is delivered and, in particular, are different to what was submitted in Opus' tender methodology.



Interestingly, of the three tenderers for PBC-01, Opus was awarded the highest attribute mark for this traditional find and fix work method which we have now abandoned. This leads Inroads to believe that there are significant gains to be made by all parties in looking outside the square in the way we are delivering physical works. The combination of local roads and state highways into one contract, plus all maintenance activities under the control of one identity, will achieve efficiencies and improvements in the asset with a reduction in costs that can only be achieved by having one identity controlling all work activities on a combined state highway/local road network.

OPM/KPM changes

In December 2006 a review of both the OPMs and KPMs was undertaken and it was generally agreed that the performance measures were meeting both WBOPDC and Transit expectations with the exception of the unsealed road performance measures. In August 2007 the contract OPMs were changed to reflect the key performance standards which has resulted in an earlier intervention level than that delivered under the OPM standards. This change also made it clearer to everybody what the standards are for an unsealed road. To date, it is too early to report on the outcome of these changes.





CUSTOMER CARE REPORT

Five Years of Customer Care under PBC

The first five years of PBC-01 have seen significant improvements in the service provided to the customers – those people who lodge a service request about an issue on the roading network managed under the contract – as well as improvements in capturing and recording information enabling Inroads to provide both clients with a raft of information about customer issues.

With roading authorities in New Zealand placing an increasing focus on meeting and monitoring the needs and expectations of their customers, PBC-01 has provided the opportunity for both WBODC and Transit to enhance the service provided to their customers. Within the ten year PBC contract, customer care responsibilities have been clearly identified and specific performance targets established. These targets are tracked and reported as part of the Management Performance Measures. Advising all customers who lodge a service request on how the issue will be resolved is recognition for them that both WBOPDC and Transit value their input. The ability to evaluate the level, frequency and range of issues raised through the service request process also assists in gaining a better understanding about whether the levels of service which Inroads must deliver under the contract are meeting the needs and expectations of customers.

Contractual Responsibilities

The PBC contract document specifies that customer care should provide a service which communicates to the customer the importance of their request to both Principals, that clear and concise information is provided to each person who has lodged a service request – generally a road user, ratepayer, community group or elected representative - about the intended response to that service request, and that the Operational Performance Measures (OPMs) which prescribe the levels of service to be provided under the contract are met.

To achieve these outcomes we need access to information and open communication channels. The contract started in October 2002 and, in the five years since then, Inroads has made significant progress in managing and programming its maintenance responsibilities by improving the level and quality of information collected about the network. With all staff having instant access to a comprehensive range of data, Inroads is able to provide every customer with up-to-date information about the roads covered under the contract and of the status of any defect already identified. Capturing this increasing array of information has been one of the most significant improvements since the start of the contract. From it, all manner of trends and frequencies can be tracked. The same information is also readily available to both clients and to the Superintendent (client representative) and his staff who work from the same building as the Inroads team.

Customer care work is predominantly related to service requests, the majority of which relate to maintenance issues. As well as the 2 dedicated customer care staff, there is also input from 3 roading inspectors, and data, operations and resource management personnel.

SERVICES REQUESTS

Programs Utilised

The process for documenting the service request information and passing it to Inroads has not changed since the start of the contract. All service requests, whether they are for local road or state highway issues, are logged into WBOPDC's service request management system known as Origen. The improvements have occurred in what happens once the service request is received electronically by the Inroads staff.

Inroads uses a programme known as Exor to capture and manage the programming of maintenance defects to meet the performance measures set out in the contract. Exor tracks all relevant information – the date on which each road or road section has been inspected, defects which are either being monitored or are programmed for physical work, whether or not there has been a service request for each defect, the due date for completion (where appropriate), the quantity of material which will be required to complete the repair, the level of traffic management which will be needed and finally the date when the physical work has been completed. Any service request issue which is being monitored or has been programmed for work is cross referenced between Origen and Exor. This means that the current status of any defect can readily be tracked if an enquiry is made about a service request outcome.

Access to Data

Instant access to the data enables Inroads customer care team to know immediately whether a defect described in a service request has already been identified by one of our inspectors. If the defect is already programmed for repair in Exor the relevant response time (Operational Performance Measure completion target date) will be automatically generated and we can immediately advise the customer of the intended repair and the timeframe. If it is a defect that is being monitored, it will be checked within a few days of receiving the service request to determine if it has now deteriorated to the point that remedial work should be programmed. There are a number of maintenance issues with no specified repair time, for example local road drainage maintenance. Such defects are rectified as asset management priorities or work packages dictate, and the customer is advised accordingly. Any defect which has not already been identified is passed to the appropriate road inspector who will check the issue on site and determine the appropriate outcome.

Part of the Process

All service requests received slot into the process and are individually tracked to closure. The outcome of each service request, including Exor references and any timeframe within which programmed work is required to be completed to meet operational performance requirements, is documented in the Origen system when the service request is closed off. More importantly, each customer is contacted and advised of the outcome of their request. The Exor programme tracks defect issues from identification through to the completion of physical work. Relevant defects have the service request reference added and significant effort goes into ensuring that these jobs are actioned as required under the contract and therefore as undertaken to the customer.

Reasons for Lodging a Service Request

The number of service requests received fluctuates depending on a variety of issues. Bad weather can often result in a noticeable increase in the number of service requests, many of which require an urgent response. An increase is often noted when rates demands have been issued and following media publicity about crashes or potential safety issues.

Residents living in the region have a wide range of lifestyles and varying expectations about the level of maintenance and improvements they expect on the roading network. This is particularly the case for local roads, where residents and frequent users of specific roads often have very clear ideas on the level and frequency of maintenance which they would like to see provided. Some residents have indicated that they would prefer to see the level of service increased with an earlier intervention level or a shorter time for the repair to be completed. Residents on some roads have been known to organise a roster to lodge service requests in the belief that this will result in more or faster maintenance or perhaps that their road will be elevated to a higher priority on the seal extension programme.

There is also evidence to suggest that the increasing number of rural lifestyle blocks being developed in the Western Bay area has resulted in a number of service requests from residents new to rural life and with "city" expectations which are sometimes considerably higher than the level provided under the PBC contract.

What is clear from the data collected is that there is often little correlation between service requests and the condition of the road as it relates to the Performance Measures. There are numerous service requests which correctly indicate that maintenance intervention, as determined by the specified levels of service nominated in the contract, is required. However, there are also a significant number which appear to be lodged for reasons which are not always clear. While monitoring provides an insight into which issues the customers see as important, service requests need to be kept in perspective.

Customer Expectation

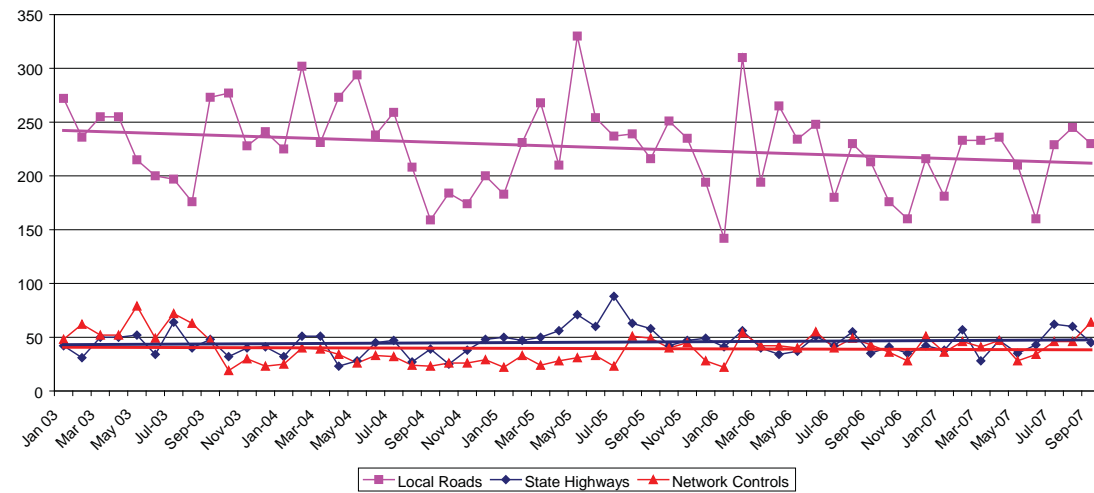
Customer satisfaction is monitored monthly by an independent research company with a weekly target of 85%. Each month over 40 customers who have recently lodged a service request are surveyed about the process and, while there have been some unexplained fluctuations, the target has generally been met over the duration of the contract. Clarification is sought for all negative responses relating to the timing and quality of information about the intended outcome of each service request and, wherever possible, improvements made to address or mitigate any issues which have resulted in negative feedback.

Number of Service Requests

The following graph (Service Request Trends) tracks the number of service requests received since the contract commenced. While local road Service Requests are tracking gradually down, the number received for state highway issues is slowly increasing.

The roading network (planning applications, safety improvement suggestions) numbers remains relatively steady.

**Service Request Trends
January 2003 - September 2007
(including linear trendline)**



Outcomes

Other monitoring has identified that less than half the roading defect issues raised by service request end up in Exor either programmed for repair or to be monitored. The remainder are for issues that were either within specification to such an extent that they did not justify monitoring, were outside the scope of the contract (such as a pothole in a drive which is the responsibility of the adjoining land owner), or they related to issues which are not funded by the road controlling authority.

Inroads has a weekly work programming meeting and every defect either programmed or being monitored which has had a service request logged against it is monitored to ensure that it is dealt with in a timely and appropriate manner. The number of defects appearing on this list has reduced significantly over the 2 years the programming meetings have been operating and, more significantly, has shown a marked improvement since Inroads took over management of the maintenance resources and programming in 2006. The graph to illustrate this is shown in the Operations Review section of this document. Further, only 3% of the defects in Exor are related to customer service requests. While requiring a relatively high level of input from a number of personnel, service requests make up a very small portion of the total maintenance work carried out under the contract.

Summary

The advent of PBC has resulted in significant improvements to the level and standard of customer care. The information available about the network enables accurate and up-to-date information to be conveyed quickly to anyone lodging a service request. Customers feel that their input is valued and they appreciate the feedback. Western Bay of Plenty District Council and Transit New Zealand are seen to be listening to the concerns of road users and the PBC-01 contract is delivering as promised.





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