

The Infrastructure Decision Support Project Video Series eBook



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Infrastructure
Decision Support

NZ's Asset Management Success Story Revealed
IDS Success Stories



IDS CONVERSATIONS

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New Zealand's Asset Management Success Story

This eBook is a compilation of the transcription of the video series on the Infrastructure Decision Support Project that Ross Waugh produced.

Read the discussions of David Fraser, Chairman IDS Board and Theuns Hennings, CEO of IDS on the IDS project.

Ross Waugh hosted the conversations.

Inframanage.com produced the videos and published them on the [Inframanage Blog](#).

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The Infrastructure Decision Support Project

Good morning. My Name is Ross Waugh. And I'm here representing Inframanage.com and today in March 2016 we're having a discussion with David Fraser and with Theuns Henning about IDS that is Infrastructure Decision Support.

In terms of infrastructure management, it's actually one of New Zealand's best keep secrets. And it is an industry-owned company that provides top level optimized decision-making and analysis for particularly our transportation industry here in New Zealand and also for the water utility network industry as well.

David is the chairman of the IDS board and Theuns is the CEO.

Ross: David you've been involved with IDS since the beginning. Tell me just a little bit about how it started and where it's got to now.

David: Thanks Ross. Yes, Ross, we started, I guess the concepts were back in the mid-90s, but in 1998, we identified that the dTIMS software was the software that would take our whole [asset management](#) in New Zealand to a new scale and a new ability to map the condition of our networks into the future and optimized expenditure in condition up based on the investment we have available to us.

Ross: Correct. And David, just in terms of very simply the structure, we have our public works engineers, have a charitable company, with the board and then a commercial delivery owned, do you want to explain on that at all?

David: Ross, I think you've summed it up pretty well. We are owned by the industry and we're for the industry. Any returns we can make or small margins, I guess is the right in terms of money, we put back into the

development. We're a charitable company and it's great to be a part of an enterprise like this.

Ross: And Theuns, this project, back in the late 90s when it's started off was sufficiently exciting and revolutionary at that time that my understanding it got you here to New Zealand from South Africa?

Theuns: That's right Ross. I got involved in the original implementation in 1998. A temporary project that became permanent later on. So I never left New Zealand after that.

Ross: It's very good. So, in terms of the videos, we're going to have a series of nine videos from here. We will just unpack a little bit of the really great gains we had as an industry with the IDS project here in New Zealand.

There's been some weaknesses with the model on what we've been doing. We're going to be open about that so that you can learn from our experience. And we're also going to look at just whether the model that we've developed here in New Zealand, which we think is quite innovative, could be applied in the area where you are.

So thanks very much for watching the videos and we look forward to seeing you on the next one.

The IDS Business Model

Good morning. It's Ross Waugh here from Inframanage.com with David Fraser and Theuns Henning. And we're continuing our discussion around IDS.

In this particular video, we are going to be talking about the vision that IDS had when it was first setup in the late 1990s and just how it's developed in some of the key attributes that IDS have that are quite different from other models that have been run for this sort of outputs.

Ross: So David, could you talk to us about just the overall setup of IDS and also how you've partnered with a provider and how successful that's been.

David: Okay Ross. Ross, the exciting thing about IDS and the original concept envisioned was that we were seeking to make advance asset management tools available to every unit of local government in New Zealand, irrespective of their size.

So we wanted those who are aspiring to become really good asset managers to have these tools available to them that you know, in normal circumstances the council were not been able to afford.

And Deighton saw what we're trying to do and they came on board and really helped us facilitate that. We were able to get into a collective arrangement not only within New Zealand but with Deighton's and actually really provide these opportunities across the country.

Ross: And David, my observation in the last 18 years is that Deighton's have been a very active partner in this relationship. And they put a lot of effort, a lot of the senior staff, executives, owners even (who are) quite committed to this relationship with New Zealand.

Do you just want to give us a bit more of an insight into that?

David: Yes Ross I couldn't speak highly enough of the approach that Deighton has taken to this. I think we are actually quite different to some of the other parts of the world where they operate.

And they've seen that they can really help us but I think they also see that we provide some opportunities and some experiences that they perhaps won't get elsewhere. And Deighton is a very interactive, involving type of company.

They run user conferences each year where we can go and participate and we can give them feedback of the things that we see would improve not only our performance but also would improve the product they provide, and they're very open to suggestions. They're fantastic to work with.

Ross: That's quite.... Every software vendor my observation does a lot of work in that area obviously, make those promises so it's quite refreshing to hear good feedback about one that delivers on those promises.

Theuns, another thing that's quite unique about the IDS arrangement is the consortium. And that's a consulting consortium. Can you just unpack that a little bit for us?

Theuns: Ross, yes we often get envied by the rest of the world, technical sectors about what we have achieved in this regard. Initially, the project was rolled up by one company but then two years after that, consortium of consulting engineers and contractors, everybody basically participating in this project has got to sit around the table, and we share technical developments amongst us. When we go out to clients, we will compete fiercely but when we get into the room, we actually work well together. So I think that's quite unique.

David: Can I just add a little bit to that. One of the strengths of the consortium is New Zealand is quite a small country. And sometimes these conflicts of interest or some of those issues, which the consortium gives us the ability to work our way past those in some situations.

Ross: It does. And just for viewers from larger countries in the Northern Hemisphere, New Zealand engineering is a very small team. The senior people you're talking less than a hundred and we all know each other.

And we will meet quite regularly at conferences and within the consortium. So one of the real advantages of the IDS consortium is it's been able to be managed at the senior level to get past the inevitable questions around engagement and IP and things like that.

So Theuns, could you talk to us, within the consortium and IDS, how's the intellectual property handled there. This is always a concern around these sorts of things. So...

Theuns: It's correct Ross. The business model is that we have the license to use the Deighton software which is a vehicle for the intellectual property that we have developed in New Zealand.

Initially, we've adopted the full World Bank HDM philosophy and approach and even some of the deterioration models that came from the World Bank. Later, over time, we've done our own research, our own developments and we've incorporated that base practice into the IP that we have.

So if you want to think about it, it's almost like Microsoft Excel with we have developed a very special spreadsheet that is owned by the New Zealand industry.

Ross: Well thank you for that conversation Theuns and David.

And if you want more information particularly about that part of the model, we'll put some links in under the video. Also the IDS website has the additional information about that.

Thank you for watching this video. And we look forward to seeing you on the next one.

How Does the IDS Work in Practice

Good morning, it's Ross Waugh here from Inframanager, and we're continuing our series on New Zealand's IDS, Infrastructure Decision Support, one of the best kept secrets of our asset management industry over the last 20 or years. With me is David Fraser and Theuns Henning.

And the question I guess a lot of viewers and people looking in at this video we have, Gentlemen is how does IDS actually work in practice?

Theuns: Ross we often get that question as you're saying. There's not a single answer to the question. I guess one of the success factors something that we will talk about more in the next video, is we adapted as the sector has developed.

In the beginning there was a sense that local government would like to have these skills internally, to run their own models, do the analytics themselves. Later on the industry changed with a lot of services, professional services we've farmed out to the consulting industry.

At that stage, much of the modeling then were undertaken outside by private providers. Which then brought the need for IDS to take a strongest steering role in that and through our consortium and the collaboration around the consortium in the development team, we've replicated that structure and we offer a better service to all our clients.

So if they want to get the model executed, they contact IDS. They have the choice of whether they go through the formal procurement process but the best man around the table in the consortium will then be chosen to do the physical analysis for that agency.

We then in the process also then have the necessary quality assurance processes in place. And also make sure that the outcome we delivered to our end client is then well understood in terms of what it means strategically for the investment, future investment and to their maintenance.

Ross: And David just in terms you've had a leadership role with wider industry around IDS, can you explain to our viewers how that's worked in practice?

David: Yes Ross, I think it's quite interesting and I think we could go back to the industry as a whole as more things were contracted out from within the local authority sector. The local authority engineer's organization, embraced those from outside of – of being the immediate employees of this sector, they embraced them into the Local Government Engineer's Association.

So there's been a collective and collaborative approach lead from top down. And the great thing about the model is it's a strategic tool and we really try to encourage the ownership of the strategic tool within the local authority sector in other words, the client role – but getting support from those who are providing the services both consultants and contractors to embrace that high level long-term vision and understand what it is all about and getting the right ownership into the delivery of the works.

Theuns: I may add to that David. The modelling process itself is but a very small component of the entire asset management spectrum, yet it is of strategic importance because of course that sets the future investment planning and also the level of service that you would like to achieve on your networks.

So I guess through the consortium, we've provide that independently to the councils and then they have the options whether they're going to use the outcomes themselves or create an external provider into coming out doing that strategical planning for them.

David: And Ross, picking up from that small component that's actually also very vital component, the New Zealand government has recognized that infrastructure

doesn't align itself with the terms of political elections but infrastructure has much longer life.

And so that which has called upon New Zealand to produce a 30-year Infrastructure Strategy for all of its own infrastructure assets. And this tool is actually a fantastic tool for identifying where the trends going to be, where the investment needs will be over the life of the assets.

Ross: And just picking up on the New Zealand government, Theuns is talking about the developing along a long-term investment profile that's just take you straight to funders.

Now, I know IDS has had quite an interaction with the New Zealand Transportation Agency who do fund a quite a bit of the road infrastructure work in New Zealand. Just unpack for us some of the, how that's worked in practice with IDS and helping investment prioritization.

David: Yes the New Zealand Transport Agency has been a great support of the project and they have shared the funding with the local authorities, so they've encouraged local authorities to get involved and through that process they've actually supported the modelling but also scrutinize the outcomes and look to understand how can be best used for long-term investment.

Ross: And that's a very good new stories. So we wrap that up here and thank you for watching this video.

We'd like to encourage you to watch the next one. We were just going to be looking a little bit more about some of the success stories with IDS. Thanks for watching.

IDS Success Stories

Good morning, its Ross Waugh here from Inframanage.com and this video is a continuation of our series of videos on Infrastructure Decision Support here in New Zealand, one of our hidden success stories in our asset management journey over the last 20 years or so. I'm here with David Fraser, chairman of IDS and Theuns Henning, the CEO.

And one of the things that's happened with IDS in the 18 years, that's been, the project's been running, is there's been some incredible success stories.

And Theuns, I just like to give you the opportunity to tell us more about those successes and the project.

Theuns: Thank you Ross. I think it's well-known that in initial stage of any software implementation, it's new, it's fresh, and everyone is excited with it. And then over time the excitement dwindled a little bit as you know.

We have been looking at a coverage across New Zealand for a very long time with a third of local government, being very active and proactive with their modeling, doing great work. And now the third did something. And we have another third that were watching from the sideline to see how things are going and waiting to get involved.

But then our legislation changed. We've got the same requirements as the MAP-21 in the US where local authorities got to do long-term asset management planning running for 30-year period.

And that really prompted a new energy into the project. And I would say easily today we would be modelling for more than two-thirds of all local authorities in New Zealand and we have the vision of changing that to a

hundred percent coverage. I want to model every kilometer of road in New Zealand in the next 2 years.

Ross: That's a very good challenge. And I know David, there's some really really good return on investment out of this project for the industry. You've got some numbers there over up to 18 years. Could you just tell us about that?

David: Yes Ross. Ross, it's quite interesting when you start to look at the typical numbers that are generated. If we take the average size New Zealand local authority and we're not talking about the large authority but just the average size, the actual modelling cost turns out to be about half a percent of their transportation or the roading budget for the year.

And when we look at the savings in terms of their maintenance and operations budget and their renewals, it turns out to be around about 16 to 21 percent of savings and that includes some efficiency gains as well.

So not only do they make a huge savings return of around about 32 to 40, in terms of multiplier, but they're also in the process of actually improving the condition of the network overall in the long run.

Ross: So that's a massive ROI isn't it? And that's just been a demonstration of the huge value of this project to the New Zealand transportation industry. Coming off that though, Theuns I know that the project's extended in the last two years.

Theuns: Absolutely Ross. With the success that we had with transportation and the road industry, there were some of our colleagues in the water sector that's starting to ask questions and given the Deighton software is flexible to incorporate any type of assets, we have then been looking at developing three water model for New Zealand and we have done that in collaboration with one of our authorities in Dunedin.

And came up with the three-water model templates so we can do the same sort of analysis that we've been doing in the past and now that's also in the

water sector. That template is available internationally if anybody is interested in that.

Ross: And just to wrap up this video, one of the things that still strikes me quite apart from that massive return on investment and just the huge gains we've had across the entire transportation sector in New Zealand, has been this IP situation or the IP capture with IDS.

So just in terms of success there, can you give us a little bit more information Theuns?

Theuns: Ross as you mentioned, this is a big success factor for IDS. No matter how many people you have in the room, somebody will come up with a great idea or perhaps a different perspective at looking at the same problem.

Now we will be able to capture all of those ideas and share it nationally. So it is available to everybody who's part of this project and that IP belongs to the New Zealand public sector, so we have to keep that that way but certainly everybody is contributing freely to that.

Ross: And just to wrap that up. That is how you make gains. You know the improvements in sectors are lots and lots of incremental small gains and by collaborating here in New Zealand, we've been able to continue to drive that forward.

Thanks for watching this video, we look forward to seeing you in the next one when we continue this IDS story.

IDS and Industry Adaptation

Good morning, its Ross Waugh here from Inframanage.com and in this video we're continuing our discussion about Infrastructure Decision Support, the New Zealand IDS project.

One of the hidden secrets of [New Zealand asset management](#) over the last 20 years. With me is David Fraser and Theuns Henning.

And in this video we're going to be discussing just some recent changes in the industry in the last two years. It had been quite exciting for the IDS project and just another stage in this adaptation as industry needs change.

Theuns, could you tell us a little bit more about what's happened in the last two years?

Theuns: Ross I think one of the highlights in the last two years has been particularly a council in New Zealand down in the South Island, it's the Central Otago District Council.

In the previous video I spoke about the councils that didn't participate in the project from the beginning and Central Otago was one of them. It took them ten years before they saw the need to pull in the model.

They always thought that the perhaps their data wasn't good enough. It's a very small network, sealed road network of around 350 kilometers and never saw the return that they would get on undertaking the model of their network.

At the stage when they've started considering it, they were looking at making some savings on their network and the Council was rightfully concerned

about reducing the investment on the network and what the possible consequences might be.

The dTIMS model was run on their network and had a fantastic outcome. It confirmed what the engineers believe to be the perfect strategy for that network.

But I think the greatest value was now having the evidence, scientifically-based evidence in the outputs that they could present to their Council who then accepted the saving with confidence.

Ross: One of the things I know also Theuns about that Central Otago model, the design model that you did – it has been so successful though that it ended as a case study in the International Infrastructure Management Manual. Was they also calibrated, the model.

They got a very senior contract foreman and then their own senior foreman who went out and check the model production. So you have this human and model calibration going on and they were all lined up and that was, the Council, their decision makers took the two together and were happy to adjust their investment profile.

Theuns: Correct. I have to give credit to the Council in terms of their staff how they adopted the model as part of their process. They decided to do it and then and with that commitment made great success out of it. I think it's to date one of the big flagships that demonstrates what we are about to achieve in New Zealand.

David: And Ross, there's actually another aspect about Central Otago that we haven't picked up on that. And that is if you look at the statistics across New Zealand, Central Otago would have one of the lowest cost per kilometer of any of our roading networks that is based on some very good glacial foundations.

Their roads are relatively cheaper in terms of some of the other comparative councils to maintain and to run. And they have very good riding characteristics.

So at a snapshot, at a high level, you would never pick Central Otago as one of those people that perhaps you could save lots of money with and get – the truth is that when the model went in, some tremendous savings were generated just with a far more confidence level than how the road was performing in particular.

Ross: And I think because I brought the case study up for the International Infrastructure Management Manual, Theuns I know a little bit about this one. There was the introduction of some new data collection techniques as part of the development of that model which is another thing that's happening in the industry in the last couple of years.

Theuns: Correct. The model that we have developed in New Zealand was developed on the basis of we can do a model regardless of the status of the data within a council. However, starting with the model process then gives the data so much more purpose and then focus improved data practices perhaps newer data items to come in over time.

Over time the robustness of the outcome then improves with it. We've seen tremendous differences between councils who started earlier with the data as today versus the council that did not do it.

Ross: And do you think that's just the modelling gives them a focus for the data collection and cleanup and end up knowing what they don't know? Is that the...

Theuns: Correct Ross. It's absolutely that. The sense of purpose is everything. And by giving the data purpose and analyze it to a very high degree exposes some of the weak areas but it also brings forward that aspect of turning data into useful information.

David: Ross we can actually summarize that from our observations is that those who decided not to model say ten years ago because they didn't have good data, generally still don't have good data. But those who decided to model in spite of their lack of robust data have now some best data sets in the country. And that whole modelling and interaction of data has encouraged that far better ownership and far better application of using the information available.

Ross: So just to summarize for our viewers, what's come out in the last couple of years has been the changing use of data, improving your data sets and the model's really focusing you on that, but also taking this to strategic and logical view that the dTIMS and IDS processes has got is working with very small networks in New Zealand much more perhaps than originally imagined. We're getting some really good gains out of that.

It doesn't matter what size your network is, it's worth considering.

Thanks for watching this video, we encourage you to watch the next part of the series as well.

IDS Success Factors and Strengths

Good morning. It's Ross Waugh here from Inframanage.com and we continue our video series on Infrastructure Decision Support, one of the hidden success stories of New Zealand asset management over the last 20 years.

I'm here with David Fraser and Theuns Henning. And IDS and its predecessor RIMS, this project has been running for 18 years. And over that 18 years there's been some key success factors that have dropped out of the project.

We thought that it would be very useful to you our audience just for those key success factors to be described in a bit of detail. So Theuns if you could just lead us on that and take us through those success factors.

Theuns: Thank you Ross. I think foremost is the ability to link our investment needs to a specific level of service. It's perhaps the pinnacle in asset management. The ultimate decision in terms of what you deliver to your community lies with the politicians.

Our job as asset managers is to tell them what the cost will be, now and in the long term. In terms of achieving the level of service, perhaps they want to look at cost savings on the network. You can then turn that question around and tell them if you want to reduce cost, this is ultimately what your network long-term will look like.

David: Yes Ross, it's actually one of the key things we did in Hastings District when I used to work with them. And that was we actually took the optimal program in terms of our current investment.

We then squeezed the investment term down and so what happen to the condition of the network and then we also threw some more money at the network and saw what happened if we threw more money at it.

And the interesting thing is we're able to show quite clearly that if we pushed our investment too low then the network would deteriorate quite rapidly. But when we, conversely, when we threw more money on it we got no real gain. So we were able to optimize in front of the politicians, the best investment for a long term.

Ross: So that was in terms of running different modelling scenarios?

David: It was running different scenarios but mainly in terms of the... in that particular case, varying the financial side, not the condition.

Theuns: The level of service connected to the financial investment is of course the primary aspect we deal with on the day to day basis. Something that we often neglect or perhaps forget about, is the underlying risk behind certain investment strategies or maintenance strategies.

In that sense I think one of our great success factors was that ability to start looking at risk profiles for local councils and for the state highways much more intensively. We even have some probabilistic models that help us to quantify the outcome, the risk outcome or risk profile for different investment levels.

Ross: And just because I have been involved in industry right through that period, our understanding in New Zealand of risk as a result of this modelling processes has changed quite a lot, hasn't it?

Theuns: Absolutely. The interesting technical aspect that came to light is that what we see on the road is often misleading or perhaps does not give us the full picture in terms of the underlying risk behind that pavement performance.

So we found that physical defects and signs on the road pavement forecast a rapid failure or accelerated failure only in 30 percent of the cases. So through appropriate use of data, through the modeling process, you get a far better idea of the pavements that's going to be a problem tomorrow or maybe a year or two from now.

David: I think that's one of the strengths of the whole tool we have. And that is, we work with a.. particularly with roads, we work with a product that has quite a

lag time between the decision we make today and the consequence. And the consequences can be both negative and positive.

And the beauty of this tool is that it enables us to see what the consequences are from decisions we make today well into the future. And that's an incredible strength that we've never had previously.

Ross: It's certainly is and I'll take you back to the big recession we had in New Zealand in the late 80s and early 90s where we didn't have that tool available and we were cutting a lot of expenditure out of budgets just because there's no money and we couldn't see what it did to us. But we certainly saw what it did to us on the ground about a decade later. And there was a huge catch up there.

Theuns, just picking up on one of the things you said in the last video as well, is one of the successes of the whole process has been focusing data, focusing different ways of capturing data to get more out of the models.

Theuns: That is correct Ross. The models obviously require some variables that explain the changes over time. And often those variables, when they are missing, the predictive power of the model reduces.

So in the process of determining the critical data items, the robustness of the forecasting is increasing. And as a side issue, the authority just has better data that they can report on over the long term monitoring trends.

So collectively the model and the data collection has become a very important technical partnership of giving the authority so much more information to base their decisions on.

Ross: So just that snapshot of some of the successes that came over in the last 18 years of the IDS project.

So if you want to see additional information on the internet, just have a look at ids.org.nz where I know they're going to be case studies and further information about these success stories if you're wanting to take a bit more detail.

IDS Project Challenges Faced

Good morning, it's Ross Waugh here from Inframanage.com. And we're continuing our series of videos on Infrastructure Decision Support, the IDS project in New Zealand.

In our previous videos, we've looked at the successes and the model that we've been running with IDS. And in this video, we want to just be open and honest about some of the challenges that this project has had.

This collaborative model obviously had a lot of work that needs to be done. And over an 18-year project, we've been well aware of these challenges as an industry.

I'm here with David Fraser and Theuns Henning. And David you were going to lead off with some of those challenges that have been faced.

David: Yes Ross, this is actually a very interesting question you've raised here. One of the challenges we faced is that people who are good at modeling don't necessarily have a background of the practical side of the industry and so they have this attitude for modeling but don't necessarily fully appreciate all the ins and outs and nuances that the seasoned practitioner would have from working in the field.

On the other hand, when you approach a seasoned practitioner, he may not have the real aptitude for modeling. So the challenge we have is how do we get those two parties together, understand their differences, understand the opportunities that each of them creates for the other and then proceed with what's best for the asset, what's best for the owner of the asset in the long run. And it's quite a challenge.

Ross: And I think in one of our previous videos, we've talked about there's still road controlling authorities in New Zealand that were sitting there watching. And do you think that's part of that dynamic with those people with a strong

operational basis? Maybe the complexity of the model is something that they're not convinced about?

Theuns: Absolutely Ross. Yes, I believe that's one of the factors that keep them back. In the same way, there's also a sense of complexity around the model. There's mathematical equations. There are some basic statistics that are part of the modeling process.

And often being perceived by engineers as a very complex issue, and I think we often have technical staff as David said, that make very good modelers but they might not be always capable of selling the outcome in a simple understandable fashion. So we have had a number of iterations trying to improve especially on the communication side in doing that part better.

Ross: I think that example is given of Central Otago in the previous video where they did take the model and the practitioners together to verify that the model was a real adaptation that's come along recently that has added some strength to what's been quite a challenge in this project.

Theuns: Indeed it reminds a challenge to get field people the appreciation for the different lengths that the model puts on the planning of road maintenance work is just a different perspective that the human eye and the human brain necessarily have.

So we want to give them a greater appreciation of the value that the outcomes bring to the field process at the same time we want to get the modelers to have a greater appreciation of some practical aspects in the modeling outcomes, that they can communicate better or perhaps they can gather some more practical aspects in the modeling process.

David: And I think Ross even, to add to this, one of the complications we have is quite often there's a turnover of staff in the council. So you may have somebody who's been right in with the play, knows what's going on, he moves on to another place or he or she moves on to another place and replaced by somebody who's quite fresh to this and they don't necessarily understand the background or the why's or wherefores. So we have to make

sure that we are available to actually help those people through when we can.

Theuns: One of IDS's main strategies is to keep on replenishing our modeling group. The reality is they would say the good modelers get noticed. They get better offers somewhere else or they get promoted into more strategically within the organization. So we do these skills if they're definitely in our group.

Ross: Yes. I know from observing IDS and the industry over a long period of time, and it's part of the reasons why I'm making this video for New Zealand is with those changes in staff and personnel and political interface and senior executives in organizations, the story of what's been going on with IDS is tended to get lost sometimes and people try to reinvent the wheel again and David, you might be in a good position to comment on that.

David: Ross I think one thing we shouldn't lose sight in that IDS and the modeling services it provides is strategic. So it's actually a long term talk.

And quite often people who are trying to understand what's going on are very focused on the operational or the short term needs and they can't... it's quite hard for people to grasp that what you do for the long term may not necessarily address the short term thing you see immediately. So there are some other challenges just in creating that understanding the long term responsibilities and some of the trade-offs for the here and now.

Ross: And so just to wrap up this video. The real tension between short term operational – got to get the job done now, directions for the engineers who are in the road controlling authority of the network, looking after the network, versus the real gains that it can be got from strategic modelling and just maintaining the skill base and managing that tension is being one of the real challenges of the IDS project over the last 18 years.

Thanks for watching the video, just to invite you to continue to watch.

Our next video is going to be around "Can this model be deployed in other places."

So we look forward to seeing you there.

Replicating the IDS Model

Good morning, it's Ross Waugh here from inframanage.com and again we're continuing the series of videos on IDS, New Zealand's Infrastructure Decision Support project that's been running for nearly 20 years now. With me is David Fraser and Theuns Henning.

In this video, we wanted to examine, can this model that we've been running, can this project be replicated in another country or another jurisdiction? And the first question that I would like to ask to you Theuns is, should it be replicated?

Theuns: Good question Ross. And I wish I had a straight answer for that, the reality it all depends. I think that they may be different levels within a country, small regions or smaller authorities within the pocket of the country that can work together.

Taking it to the United States perhaps at the state level, it's going to be a difficult process to do. But I think in smaller local authority areas, most of the country that we talked about that are doing asset management, it will be, they will reap the benefits from this model.

Ross: And David you've been with IDS project for the 18 years that it's been running. Do you think the model can be replicated outside New Zealand?

David: Yes Ross. It's an interesting question and if I pre-phrase my answer with the word "depends." One of the challenges is you need a collaborative spirit, you need a common vision and you need some common goals. Now, to actually achieve that across the number of organizations that you need some good leadership.

And so I think it could be quite easily replicated with the right leadership and that leadership modeling the attitudes and the approaches it wants to see occur across the teams that would be involved.

Ross: And one of the things that we discussed on the previous videos also is that this has been an 18-year journey for New Zealand, that we don't have this understanding 18 years ago.

So just looking back over that entire period David, the understanding has grown, the collaboration's growing, the leadership's come and gone but could you just give us a bit of an insight on that journey in terms of how you would start and where you would go to from there.

David: I think Ross, it's bit like an athlete training at times. You cannot drop the ball. You got to keep yourself in good condition and fit. The enthusiasm from across the industry has waxed and waned a little. And sometimes when we make the assumption that everybody's on board, you find it to have actually.....you've dropped the ball.

So we just need to make sure that we keep in touch, that people understand what the vision is. And as new people come into the relative workforce and different teams that they understand what it's all about and why and how it's happened. Yes, that's part of the challenge.

Theuns: There's differently a strategy needed for all the aspects that make up such initiative like this one. The resources, for example, the technical resources, you need to replenish that pool with the young ones, with new ones all the time.

The experienced modelers got places and they need that stimulation from the young ones challenging the status quo, coming up with new ideas. So you got to keep the whole process vibrant. And for each one of those aspects, you need a strategy to keep on doing the right things all the time.

Ross: So just to summarize your responses, David and Theuns, I pick up that it can be a model that can be replicated but it's a lot of hard work and it's going to

be a learning process as you go along. But we've got really got a lot of really good information as to how we managed this journey here in New Zealand.

And if somebody is interested in following us up a bit further, they could have a look at the IDS website. And make contact or reach out to there and if they wanted a bit more specific guidance in a particular area.

David: Most definitely.

Theuns: Most certainly.

Ross: Well thank you for watching this video and just to encourage you to watch the last video in the series about has this whole project been worth it? And thank you for taking the time.

Has the IDS Project Been Worth the Effort?

Good morning I'm Ross Waugh from Inframanage.com and today we're talking about IDS New Zealand Infrastructure Decision Support model and project that's been running for the last 18 years. This is the last of the series of 9 videos. In this one, we're going to ask the question, "Has the project been worth it?"

With me I have David Fraser and Theuns Henning, both have been involved in this project from its inception 18 years ago.

So Theuns, we'll start with you. Has the project been worth it?

Theuns: Ross, absolutely. I think that a question that I have to ask myself every now and again, is this still worthwhile being involved with? If I get the choice, will I do it again?

And I think it's been a wonderful journey of learning. And in the end, I can put my hand on my heart today and believe that I've made the difference to this country's understanding of asset management and understanding of investment needs so by all means, yes, I will do it again.

David: Yes, and Ross, just picking up from where Theuns left off. Every now and then I have the privilege of mentoring some young folks that are coming into the asset management industry. And I share some experiences and some ideas with them and some concepts and many of those have been picked up through the work I've done with IDS.

And I just get so much pleasure when I see these young people grabbing the concepts and running with them and really catching the passion if you like to get this right into the long term. And I think it's a wonderful opportunity.

It's created an environment and a platform where we can actually move forward together as a nation and develop our young people into something that will actually be of benefit to society into the long term. I think it's great.

Ross: And as I've looked in on the outside of this project over quite a long period of time and seeing the gains to our industry in New Zealand, the incremental improvements that have gone on year after year, the huge return on investment by just taking that strategic view and then applying it within calibrated models back to operational delivery of service to our road users and to our networks in New Zealand, I have to say, it's been well worth it.

I think it's just an absolutely fabulous project. It's been an example that's been used in international case studies. We've been privileged to have a strong vendor and a strong association with Deighton, in terms of what we've delivered here.

Being new Zealanders, we don't talk too much about our successes. We're a bit like our sports teams. We like to let our talking happen on the field. But this has been a great project.

We encourage you to continue to being involved in it if you're here in New Zealand; to have a hard look at it if you're out of New Zealand and see how you can adapt our learning to your asset management situation, to make sure you're thinking strategically, delivering operationally, getting your optimum investment profile for your network over a long period of time.

Thank you very much for watching. I trust that these videos have been an encouragement to you on your work and giving you some ideas to take forward in whatever field of asset management you're involved in. Thank you!