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Cost-effectiveness of Work and Income employment assistance

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MINISTRY OF SOCIAL DEVELOPMENT
Te Manatū Whakahiato Ora

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Introduction

The purpose of this report is to give a high-level overview of the impact and cost-effectiveness of employment assistance provided by the Ministry of Social Development (MSD). Work and Income (W&I) employment assistance includes both programmes (eg, Taskforce Green), financial assistance (eg TIA) and services (eg information seminars). This year's report is for the 2010/2011 financial year and updates previous MSD work (2010) on the performance of employment assistance to include programme participants between 2000 and 2010. The results do not reflect changes to programmes after 2010, but programme changes are highlighted in the analysis where possible.

This report is part of ongoing efforts to provide consistent estimates of the outcomes and impact of W&I employment assistance in New Zealand. It is also part of MSD's obligations under the Public Finance Act (1989) to demonstrate the cost-effectiveness of its expenditure. The information provided here is intended to help inform decision making around programme funding, design and operation.

Summary

Total expenditure on Work and Income employment assistance was approximately $266 million for the 2010/2011 financial year. Of this expenditure, we were able to assess effectiveness for 57 per cent, or $152 million of assistance. It is too early to assess the effectiveness for 26 per cent of total expenditure on W&I assistance as relates to new assistance. This includes $18 million for Foundation Focused Training Opportunities and $15 million for Training for Work. For 17 per cent of expenditure in the 2010/2011 financial year, we cannot yet reliably estimate performance, mainly due to incomplete data.

In the first part of the results, we group assistance for assessed expenditure (57 per cent of total expenditure), into five categories:

- **effective**: participants spend more time in positive outcomes than the comparison group
- **promising**: assistance was too small to evaluate but are based on another effective form of assistance
- **mixed**: the evidence fails to provide a clear indication of whether the assistance is effective, for example, Vocational Service Employment which has positive impact on part-time work outcomes but negative impact on off-benefit outcomes
- **ineffectual**: assistance that make no significant difference to participants' outcomes
- **ineffective**: participants spend significantly less time in positive outcomes than the comparison group.

Results for the 2010/2011 financial year show that 13 per cent of assessed expenditure was spent on effective assistance, 3 per cent on promising assistance, 39 per cent on assistance with mixed results, 11 per cent on ineffectual assistance; and 34 per cent on ineffective assistance (almost all of which, 99.8 per cent, was Training Opportunities Programme (TOPs) funding).

Table 1 shows the allocation of W&I employment assistance and 2010/2011 expenditure by assessed effectiveness.

Table 1: Allocation of employment assistance and 2010/2011 expenditure by assessed effectiveness

Effective	Promising	Mixed	Ineffectual	Ineffective
Skill Investment subsidy ($7.7 m)	Local Industry Partnerships ($1.8 m)	Vocational Service Employment ($33.7 m)	Limited Service Volunteers ($10.8 m)	Training Opportunities Programme ($50.8 m)
Straight to Work ($6.5 m)	Jobs with A future ($1.6 m)	Employment Placement Initiative ($13.7 m)	PATHS ($3.1 m)	Activity in the Community ($0.1 m)
Job Search Assistance ($3.2 m)	Cadet Max ($1.1 m)	Training Incentive Allowance ($9.4 m)	Outward Bound ($0.5 m)	
Taskforce Green ($1.6 m)		Work Confidence seminars ($1.8 m)	Work Experience Trial ($0.5 m)	
Enterprise Allowance ($1.0 m)		Skills Training ($0.2 m)	Career Advice ($0.5 m)	
Case Management Initiative ($0.4 m)			Course Participation Assistance Programme ($1.8 m)	
			Work and Income Seminar ($0.02 m)	

In the second part of the results, assessed expenditure is grouped in terms of how W&I assistance helps different groups of participants into employment. Where possible, we disaggregate the results by benefit type and cohort. We found that some assistance showed positive results for some outcomes, for example, participants going on to further, more advanced training, or progressing to part-time work; but did not always result in off-benefit outcomes. For some of the assistance, such as Vocational Service Employment, full-time work may not be the appropriate determinant of success.

Future work

The next performance report for the 2011/2012 financial year will update the above analysis and include a number of planned enhancements. In particular, Budget 2011 enabled Statistics New Zealand to transform the Linked Employer-Employee Data (LEED) from a stand-alone integrated database to an Integrated Data Infrastructure (IDI), allowing data integration from the Ministries of Education and Social Development, Inland Revenue Department, New Zealand Customs Service and other agencies. We will continue to develop our measures of impact and effectiveness using the new IDI. The IDI has the potential to provide much richer information on the impact of employment assistance on employment and earnings, and pathways from benefit dependency to independence through employment.

Analysis

The analysis covers MSD Work and Income (W&I) employment assistance and includes 44 programmes and services. The analysis is in two parts. The first part summarises the overall results for average effects, and by participant characteristics (currently limited to main benefit type). The second part is by assistance type and provides more detail on the performance of individual programmes and services included in the review.

Part one: Overall results

In this part of the report we summarise the effectiveness of assistance according to whether they improve participants overall outcomes. Using the average impact of the programme or service, performance is categorised from 'effective' through to 'ineffective'[1] for participants. To help with interpretation we start this part of the report by outlining the measures used, including their construction and limitations, before going on to discuss effectiveness results. Part one ends with a discussion of plans to update and enhance these results for the 2012 financial year.

Measuring efficiency, impact, and effectiveness

Several measures have been developed to assess the performance of employment programmes.

Efficiency: how much does it cost to deliver assistance for an individual participant?

Effectiveness or **impact**: by how much does the assistance improve participants' outcomes?

Cost-effectiveness: if the assistance is effective, do the benefits outweigh its costs?

We provide a summary of measures for each type of assistance such as the example below for Taskforce Green. Unless otherwise stated, dollars are expressed as real 2011 dollars. For more detail on the measures, refer to the technical notes (page 47).

Programme	Expenditure (F11, 000)	Cost per participant start[a]	Impact[b]	Cost-effectiveness[c]	ROI[d]
Taskforce Green	$1,599	$5,281	*16.5	$320	*$2.11

a: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.
b: Impact of the programme on time spent in combined positive outcomes (weeks).
c: The cost per participant start divided by the impact of the programme on combined positive outcomes (TE: too early to assess cost-effectiveness; NE: programme is not effective).
d: Return on Investment based on reduction in participant income support costs only.
*impact is statistically significant at the 95% confidence interval.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Efficiency

Efficiency measures the cost of delivering assistance for an individual participant. In this report, we measure efficiency as the average cost per participant start

[1] The current report does not cover non-participant effects (eg substitution and displacement effects). Work in this area is planned for the next report.

$$\text{(Efficiency} = \frac{\text{total expenditure on the programme}}{\text{number of participation starts)}}$$

We use participation starts and assistance expenditure information over the last three financial years to provide an average cost-per-participant start, with this value expressed in real (2011) dollars.

Example: Taskforce Green costs, on average, $5,281 per participant start.

Impact

Impact is the effect assistance has on the time participants spend in a particular outcome, for example, weeks spent in paid work. The impact demonstrates whether the assistance improves participant outcomes, and by how much, if it does.

We estimate impact by comparing results for programme or service participants and a comparison group. If participants spend significantly more time than the comparison group in a positive outcome, then that assistance is **effective** for that outcome. In this analysis, we focus on two outcome measures: 'combined positive outcomes', and independent of Work and Income assistance.

Assistance is considered 'Not Effective' (NE) in two ways.

- **ineffective** assistance are those where participants spend significantly less time in positive outcomes than the comparison group
- **ineffectual** assistance makes no significant difference to participant outcomes.

Example: Taskforce Green increased the time participants spent independent of Work and Income assistance by 16.5 weeks (ie Participants spent 226.5 weeks independent of Work and Income assistance, while the comparison group spent 210.0 weeks).

Cost-effectiveness

Cost-effectiveness is a measure of how much it costs to improve participant outcomes. The lower the cost per impact then the more cost-effective the programme is.

$$\text{(Cost-effectiveness} = \frac{\text{cost per participant start}}{\text{impact (in weeks))}}$$

Example: It costs $320 to increase by one week the time Taskforce Green participants spend independent of Work and Income assistance (ie $5,281/16.5).

Cost-benefit (fiscal)

We represent cost-benefit as the return on investment (ROI). The ROI is the amount of fiscal savings made through a programme or service, for each dollar of assistance cost. A value above $1 indicates the fiscal savings exceeds the assistance cost.

$$\text{(ROI} = \frac{\text{fiscal savings}}{\text{cost per participant start.)}}$$

In this report, we provide reduction in income support costs as the **only** benefit of assistance. We plan to include other fiscal costs (ie increased tax from employment) in subsequent analysis. We have not accounted for any offsetting costs from non-participant effects. In the long-term, the goal will be to provide both estimates of social and participant net-benefits, in addition to the current focus on fiscal costs and benefits.

Example: Taskforce Green reduced income support expenditure by $11,138, providing an ROI of $2.11 of income support savings for every $1 of programme cost (ie $11,138 / $5,281).

Interpreting the results

Precautions must be taken when interpreting the summary results. Where possible, we have highlighted these issues in the analysis.

- **Consistent measures**: The performance measures have been applied consistently to all assistance regardless of the type. This means measures can be compared across all of the assistance assessed. It is acknowledged that assessing effectiveness mainly on the basis of a reduction in income support may be too narrow a measure given the other potential benefits of a particular form of assistance.
- **Average impact**: Findings are based on the average impact and can vary by cohort or benefit group. Underneath the average result, assistance may work well for some groups but not for others.
- **Cumulative effects**: These findings are based on cumulative impacts – the total time elapsed since participants started on the programme or service. Elapsed time can vary by assistance according to how long it has existed. In some cases, insufficient time has passed to fully evaluate newly introduced assistance (normally we would need at least two years for an assessment of effectiveness). It is also important to note that programmes and services can change over time. Separating out the effect of policy and operational changes on performance has not been attempted in this report.

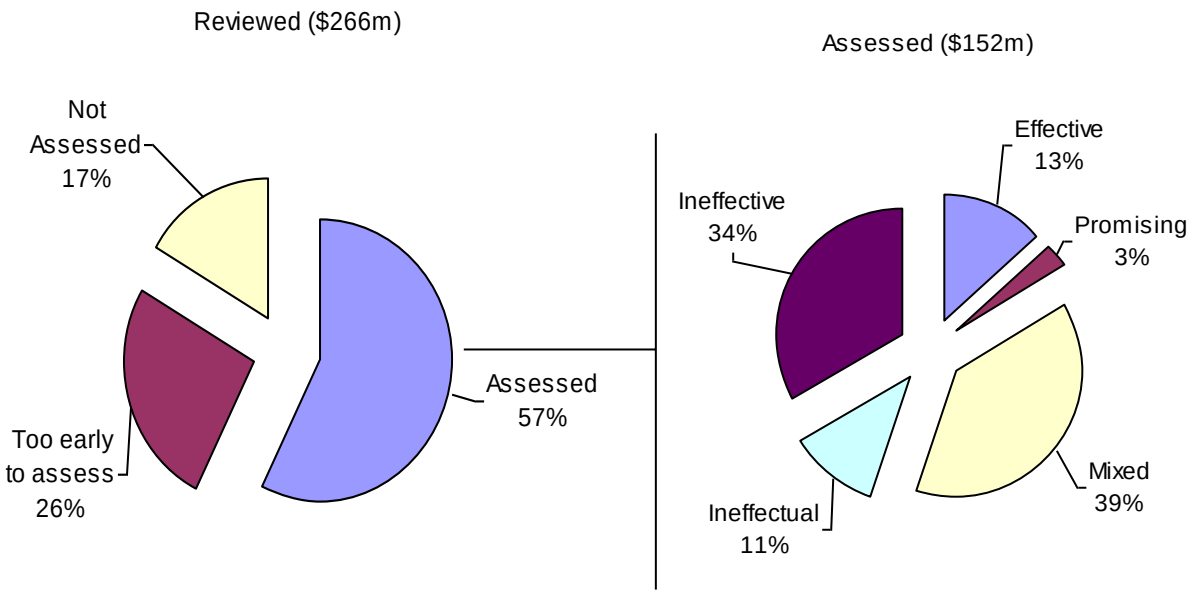
Effectiveness of Work and Income assistance

Here, we summarise the effectiveness of assistance according to whether they improve participants overall outcomes. The categorisation of expenditure effectiveness was developed for the 2009 'line-by-line review', and used in the previous version of this report (MSD 2010).

Overall effectiveness of employment assistance

Total expenditure on the 44 programmes and services covered in this review was approximately $266 million in the 2010/2011 financial year. We were able to assess effectiveness for 57 per cent of this $266 million (Figure 1). For the remaining expenditure, 26 per cent is for new assistance where it is too early to assess effectiveness, while for 17 per cent we cannot reliably estimate performance. Figure 1 shows the expenditure relating to assistance assessed. Of that expenditure, 13 per cent was on effective assistance, 3 per cent was on promising assistance, 39 per cent was spent on assistance that had mixed results, 11 per cent on assistance that was ineffectual, and 34 per cent of expenditure was spent on ineffective assistance.

Figure 1: Assessment of the effectiveness of expenditure on employment assistance [a, b]



a: Percentages may not add up to 100% due to rounding.

b: 2010/2011 financial year.

Table 2 shows the allocation of W&I assistance covered in the analysis according to our classification of effectiveness. The following section covers each of these groups from effective through to ineffective.

Table 2: Allocation of employment assistance and 2010/2011 expenditure by assessed effectiveness

Effective	Promising	Mixed	Ineffectual	Ineffective
Skill Investment subsidy ($7.7 m)	Local Industry Partnerships ($1.8 m)	Vocational Service Employment ($33.7 m)	Limited Service Volunteers ($10.8 m)	Training Opportunities Programme ($50.8 m)
Straight to Work ($6.5 m)	Jobs with a future ($1.6 m)	Employment Placement Initiative ($13.7 m)	PATHS ($3.1 m)	Activity in the Community ($0.1 m)
Job Search Assistance ($3.2 m)	Cadet Max ($1.1 m)	Training Incentive Allowance ($9.4 m)	Outward Bound ($0.5 m)	
Taskforce Green ($1.6 m)		Work Confidence seminars ($1.8 m)	Work Experience Trial ($0.5 m)	
Enterprise Allowance ($1.0 m)		Skills Training ($0.2 m)	Career Advice ($0.5 m)	
Case Management Initiative ($0.4 m)			Course Participation Assistance Programme ($1.8 m)	
			Work and Income Seminar ($0.02 m)	

Effective assistance (13 per cent of assessed 2010/2011 expenditure)

Of the assessed expenditure on assistance included in this report, 13 per cent was spent on programmes and services evaluated as effective. That is, the assistance significantly increases the positive outcomes of participants relative to the comparison group. However, this does not necessarily mean the assistance was cost-effective or, within our narrow measure of fiscal savings, have a positive Return on Investment (ROI).

Table 3: Summary performance information on effective employment programmes

Programme	Cost per participant start[a]	Lapse period (years)[b]	Full impact observed	Impact[c]	ROI[d]
Skill Investment Subsidy	$2,966	2	No	*6.0	*$1.96 @2.0 yrs
Straight 2 Work	$3,369	2.5	No	*6.3	*$0.97 @2.5 yrs
Job Search Assistance	$424	6.5	Yes	*3.1	*$3.14 @5.0 yrs
Taskforce Green	$5,281	8	No	*16.5	*$2.11 @8.0 yrs
Enterprise Allowance	$8,589	7.5	No	*43.1	*$1.68 @7.5 yrs
Case Management Intiative	$1,472	5.5	Yes	*8.9	*$1.32 @5.5 yrs

a: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.

b: Lapse period (years) since programme start.

c: The cost per participant start divided by the impact of the programme on combined positive outcomes (TE: too early to assess cost-effectiveness; NE: programme is not effective).

d: Return on Investment based on reduction in participant income support costs only. The @ years indicates the period the ROI has been calculated over and is the average for all participant cohorts between 2000 and 2010. NE: programme is not effective.

*impact is statistically significant at the 95% confidence interval.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Straight to Work

Because we have not observed the full impact of Straight to Work, the effectiveness and ROI understates the long-term performance of the programme. Participants show a positive return between 2.5 and 3.5 years after starting the programme, with the earliest participants (starting 2004) showing a return on investment of $2.66 after 6.5 years.

Skill Investment Subsidy, Straight to Work and Enterprise Allowance

We have not offset these performance measures for potential non-participant effects (ie substitution and displacement effects). We anticipate that a proportion of programme benefits come at the expense of other labour market participants. We plan to incorporate these offsets in subsequent updates of this report.

Promising assistance (3 per cent of assessed 2010/2011 expenditure)

Alongside effective assistance, there are a small number of promising programmes (Table 4).

Table 4: Summary performance information on promising employment programmes

Programme	Cost per participant start[a]	Lapse period (years)[b]	Full impact observed	Impact[c]	ROI[d]
Local Industry Partnerships	$5,247	-	-	Based on Straight 2 Work effectiveness	
Jobs With A Future	$3,909	-	-		
CadetMax	$3,255	-	-		

See Technical Notes for definitions.

Local Industry Partnerships, Jobs with a future and Cadet Max

As these three programmes are based on the Straight to Work programme we assume they have the same performance as Straight to Work. At present, the number of participants is too small for formal evaluation. However, if these programmes do increase in size, we will evaluate them in their own right.

Mixed results assistance (39 per cent of assessed 2010/2011 expenditure)

For several programmes and services, it is not clear whether they are effective (Table 5).

Table 5: Summary performance information on mixed effectiveness employment programmes.

Programme	Cost per participant start[a]	Lapse period (years)[b]	Full impact observed	Impact[c]	ROI[d]
Vocational Service Employment	$4,275	6	Yes	*17.4	*$0.55 @6.0 yrs
Employment Placement Initiative	$1,239	2	No	*-2.2	$0.45 @2.0 yrs
Training Incentive Allowance	$2,569	-	No	*-6.6	NE
Work Confidence seminars	$1,108	-	Yes	*2.5	NE
Skills Training	$2,045	7	Yes	*3.9	$0.39 @7.0 yrs

See Technical Notes for definitions.

Vocational Services Employment

Vocational services employment shows benefits in terms of increased part time work while on benefit, but income support savings are less than the programme cost. Assessing the effectiveness of this programme primarily on a reduction in income support costs may be too narrow a measure given the potential benefits of employment on health and associated medical costs.

The Employment Placement programme

This programme has undergone a number of changes that warrant further analysis. This programme was effective for earlier programme participants (2003 and 2004), but not so for more recent participants. We plan to examine how changes in the operation of this programme and in the economic cycle may have affected programme performance.

Training Incentive Allowance (TIA)

TIA does not help Invalid's Benefit participants into employment, but it does have a long-term positive impact for DPB participants. Based on early participant cohorts the programme has a positive cumulative impact after six years and continues to do so. After 11 years, we have still not observed its full impact. However, for more recent cohorts (after 2004), the impact is not as positive and we anticipate it will take longer for the programme to have an overall positive impact on these participants.

Ineffectual assistance (11 per cent of assessed 2010/2011 expenditure)

These programmes and services tend to make little difference, either positive or negative, in the outcomes of participants (Table 6). Such assistance could have the potential to be effective, since some previous participant cohorts do show small positive effects.

Limited Service Volunteers (LSV)

The impact of LSV has varied between participant groups. The programme showed a positive impact on reducing income support expenditure for those who participated in 2005-2006, but not large enough to have a positive return (ie ROI is less than $1). The most recent participants (2009 onward) appear to be on a similar impact track as the 2005-2006 participants. A further consideration is that we have not examined LSV's potential impact on other domains, such as criminal offending.

Work Experience Trial

Although this programme has positive impacts on off-benefit and income support expenditure (with a large positive ROI), these effects are not statistically significant.

Table 6: Summary performance information on ineffectual employment programmes

Programme	Cost per participant start[a]	Lapse period (years)[b]	Full impact observed	Impact[c]	ROI[d]
Limited Service Volunteers	$5,286	-	No	*-3.1	NE
Outward Bound	$3,896	8	Yes	7.0	$0.34 @8.0 yrs
Work Experience Trial	$1,652	9	Yes	5.2	$2.84 @9.0 yrs
PATHS	$10,059	-	Yes	2.9	NE
Career Advice	$579	-	Yes	1.3	NE
Course Participation Grant	$211	4.5	No	0.8	$0.55 @4.5 yrs
Work and Income Seminar	$3	-	Yes	-0.5	NE

See Technical Notes for definitions.

Ineffective assistance (34 per cent of assessed 2010/2011 expenditure)

One-third of assessed expenditure was on programmes that our analysis indicates are ineffective (Table 7). These programmes significantly **decrease** the time spent on positive outcomes of participants relative to the comparison group. It follows that these programmes are not cost-effective.

Training Opportunities Programme (TOPs)

TOPs was ineffective in improving participant outcomes, and at the start of 2011 was split into two programmes - Training For Work (TfW) and Foundation Focused Training Opportunities (FFTO). We expect to provide early findings on the reconfigured Training Opportunities Programme in late 2012.

Activity in the Community

This programme is considered ineffective as the programme results in repeat participation, rather than movement into employment. Since 2007, eligibility for this programme was restricted to non-work tested clients. However, because of the small numbers of participants involved we have not been able to estimate the programme's impact on these non-work tested participants.

Table 7: Summary performance information on ineffective employment programmes

Programme	Cost per participant start[a]	Lapse period (years)[b]	Full impact observed	Impact[c]	ROI[d]
Training Opportunities	$5,344	-	Yes	*-7.7	NE
Activity in the Community	$400	-	Yes	*-15.1	NE

a: TOPs result based on three financial years of programme expenditure (nominal 2007, 2008, 2009 dollars). Participation starts based on TEC data for 2007, 2008 and 2009 financial years. Activity in the Community results based on the last three financial years of programme expenditure (nominal dollars) and participation starts.

For remainder of footnotes, See Technical Notes for definitions.

Too early to assess (26 per cent of total 2010/2011 expenditure)

There are a number of new programmes where insufficient time has elapsed (under two years) to determine programme effectiveness (Table 8).

Community Max

We have nearly two years of outcomes for Community Max participants. Based on the trend in impact over this period we see no indication that this programme will have a large positive long-term impact. On this basis, our provisional conclusion is that this programme will not be cost-effective, particularly given its high per participant cost. Note this programme ceased to operate on 30 June 2011.

Table 8: Summary performance information on too early to assess employment programmes

Programme	Cost per participant start[a]	Lapse period (years)[b]	Full impact observed	Impact[c]	ROI[d]
Job Ops	$3,333	1	No	*-4.9	*$0.74 @1.0yr
Community Max	$10,808	1.5	No	*-2.2	*$0.38 @1.5 yrs
Foundation Focussed Training	$2,319	-	-	Effectiveness not evaluated	
Training For Work	$3,295	-	-		

See Technical Notes for definitions.

Job Ops

We have nearly two years of outcomes information for participants. The trend in the impact indicates a modest positive long-term impact. However, it is not certain whether the programme's ROI will be positive (eg greater than $1 savings for each $1 of cost). Note that Job Ops has been replaced by Job Ops with Training, a programme with a stronger focus on on-the-job training that is better targeted towards at risk young job seekers.

Not assessed (17% of total 2010/2011 expenditure)

There are a number of programmes and services funded in the 2010/2011 financial year that we have not evaluated (Table 9). The reason we have not been able to report on effectiveness for these programmes is mostly because numbers of participants were too small or data was recorded in a way that we could not analyse. For completeness, we have listed the information available to us above. Data on participant starts is not available for a third of these programmes, meaning we cannot calculate the average cost per participant start.

Table 9: Expenditure on programmes where effectiveness has not been estimated

Programme	Expenditure (,000)[a]	Participant Starts[b]	Cost per participant start[c]
Transition To Work Grant	$21,727	100,792	$217
Mainstream Employment Programme	$3,198	551	$16,815
Youth Transition Services	$2,525	-	-
Community Employment	$1,804	-	-
Migrant Employment Assistance	$762	20	-
Mayors Task Force	$471	46	-
Be Your Own Boss	$414	248	$1,520
Youth Life Skills	$1,000	-	-
Cycleways Project	$338	-	-
Self Employment Initiative	$305	151	$1,034
Redundancy Support	$134	-	-
Business Training and Advice Grant	$72	191	$358
Seasonal Work Assistance	$373	-	-
Christchurch Programme Boost	$132	-	-
Christchurch Rebuild	$50	-	-
Future Focus	$1,481	436	$3,469

Programme	Expenditure (,000)[a]	Participant Starts[b]	Cost per participant start[c]
Earthquake Support Subsidy	$9,615	-	-
Job For A Local	$206	-	'-

a: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.

b: Number of participant starts.

c: The cost per participant start divided by the impact of the programme on combined positive outcomes (TE: too early to assess cost-effectiveness; NE: programme is not effective).

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Comparing effectiveness between the 2010 and 2012 reports

In Table 10 we compare the assessed effectiveness for programmes covered in this report (2012) to the previous cost-effectiveness report (2010).

Table 10: Comparison of effectiveness rating of employment assistance programmes between 2010 and 2012 reports

Employment assistance [a]		Effectiveness rating [b]	
Type	Name	2010	2012
Training programmes	Training Opportunities Programme	Ineffectual	Ineffective
	Skills Training	Ineffectual	Mixed
Case Management	Case Management Initiative	Effective	Effective
Health Interventions	PATHS	Unknown	Ineffectual
Information Services	Career Advice	Unknown	Ineffectual
Into Work Support	Transition To Work Grant	Effective	Unknown
Job Search	Job Search Assistance	Effective	Effective
Matching	Employment Placement Initiative	Promising	Mixed
	Skill Investment subsidy	Effective	Effective
Self Employment Assistance Subsidy	Enterprise Allowance	Effective	Effective
Tertiary Study	Course Participation Assistance Programme	Effective	Ineffectual
	Training Incentive Allowance	Promising	Mixed
Training for pre-determined employment	Straight to Work	Effective	Effective
Vocational Services	Vocational Service Employment	Unknown	Mixed
Work Confidence	Limited Service Volunteers	Ineffectual	Ineffectual
	Outward Bound	Promising	Ineffectual
	Work Confidence seminars	Ineffectual	Mixed
Work Experience	Activity in the Community	Ineffective	Ineffective
	Taskforce Green	Effective	Effective
	Community Max	Promising	Too early to assess
	Work Experience Trial	Ineffectual	Ineffectual
	Job Ops	Promising	Too early to assess
	Work and Income Seminar	Unknown	Ineffectual

a Programmes are classified by the 2012 programme type and name. There may be some variations in programme names between 2010 and 2012.

b: Effectiveness (impact) of the programme on time spent in combined positive outcomes. Positive outcome components vary by programme. There is some variation in effectiveness categories between years.

Effective: the programme significantly increases the positive outcomes of participants relative to the comparison group.

Promising: programme is expected to have a future positive impact.

Ineffectual: programme has no significant difference on positive outcomes between the participant and comparison groups.

Mixed: it is not clear whether the programme is effective.

Too early to assess: programmes where insufficient time has elapsed to determine effectiveness

Ineffective: programme participants spend significantly less time in positive outcomes than the comparison group.

Unknown: programme not evaluated this year.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Our categorisation of effectiveness has changed between the two reports, specifically:

- Too early to assess (insufficient information to date) programmes have been taken out of the previous Unknown (no evaluation undertaken to date or planned).
- A Mixed evidence category was created this year for programmes for which the evidence fails to provide a clear indication of whether the intervention is effective

Main changes in programme classifications

Several programmes changed their effectiveness rating between 2010 and the current report.

Training Opportunities (Ineffectual → Ineffective): Longer outcome periods and the increased dominance of the 2002-2008 cohorts on overall results mean that the Training Opportunities Programme now reports a significant negative impact on participant outcomes.

Transition to Work Grant (Effective → Unknown): We have concluded that we cannot reliably estimate the impact of the Transition to Work Grant using current methodology.

Training Incentive Allowance (Promising → Mixed): The possibility that TIA will show a long-term positive impact is the reason we rated it as promising in 2010. However, the lower impact of TIA on more recent participants means we are now more cautious about its overall performance.

Employment placement initiative (Promising → Mixed): Like TIA the variable performance of this programme means we are less certain whether, in its current form, it is an effective intervention.

Effectiveness by benefit group

In addition to examining overall programme performance, we also looked at the impact of programmes by benefit group (Table 11).

Unemployment Benefit (UB) and Independent Youth Benefit (IYB): because Unemployment Benefit make up the majority of programme participants, the overall results reflect the effectiveness of employment assistance for this group.

Domestic Purposes Benefit (DPB) and Widow's Benefit (WB): in many instances the impact of programmes are better for DPB clients than UB clients. However, the higher DPB impacts are through secondary outcomes (eg part-time work, stair-casing) rather than through increased independence from Work and Income assistance.

Sickness Benefit (SB): like DPB, clients on Sickness Benefit are more likely to show an overall positive impact from participation in programmes and services, but again, these impacts occur among secondary outcomes rather than through increased independence from Work and Income assistance.

Invalid's Benefit (IB): because of low participation rates we have limited information on the performance of programmes for Invalid's Benefit. Training Incentive Allowance is an exception, for which the evidence shows the programme is ineffective for this group.

No benefit (Not on main benefit):these are participants not on a main benefit up to two weeks before the programme starts. One clear pattern to emerge from this analysis is that employment assistance is not effective for clients who are not on a main benefit when they receive assistance. Because these clients are already off-benefit any income support savings tend to be small and usually insufficient to justify the initial cost of assistance.

Table 11: Impact of employment assistance by benefit type

Type	Name	Total[a]	By benefit group				
			UB and IYB	DPB and WB	Invalids	Sickness	No benefit
Training programmes	Training Opportunities Programme	×	×	—	—	—	×
	Skills Training	✓	—	✓	?	?	—
Case Management	Case Management Initiative	✓	✓	✓	?	?	×
Information Services	Career Advice	—	—	✓	?	?	—
Job Search	Job Search Assistance	✓	—	✓	?	✓	×
Matching	Employment Placement Initiative	×	—	?	?	?	?
	Skill Investment Subsidy	✓	✓	?	?	?	×
Self Employment Assistance Subsidy	Enterprise Allowance	✓	✓	?	?	?	?
Tertiary Study	Course Participation Assistance Programme	—	✓	—	?	—	—
	Training Incentive Allowance	×	?	×	×	?	?
Training for pre-determined employment	Straight to Work	✓	✓	?	?	?	?
Vocational Services	Vocational Service Employment	✓	?	?	✓	✓	×
Work Confidence	Limited Service Volunteers	×	×	?	?	?	?
	Outward Bound	—	—	?	?	?	?
	Work Confidence seminars	✓	—	✓	?	✓	?
Work Experience	Activity in the Community	×	×	—	?	?	?
	Taskforce Green	✓	✓	?	?	?	—
	Work Experience Trial	—	✓	?	?	?	?
	Job Ops	×	×	?	?	?	×
	Work and Income Seminar	—	✓	✓	?	?	×

a: Impact of the programme on time spent in combined positive outcomes. Positive outcome components vary by programme.
✓ Assistance resulted in more time spent in a positive outcome.
× Assistance resulted in less time spent in a positive outcome
- impact was not statistically significant at the 95% confidence interval
? no data was available to estimate impact

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Next steps

The next report for the 2011/2012 financial year will update results and include a number of planned enhancements listed below.

Employment, earnings and income outcomes

MSD has started linking its employment assistance information with Linked Employer-Employee Data (LEED) at Statistics New Zealand. For the first time we will be able to provide information on the impact of Work and Income programmes and services on the following outcomes:

Employment: estimate the impact on the time spent in employment in total, while on benefit and off-benefit. In addition, we can examine trends in job turnover and tenure.

Earnings: total and average earnings when in employment.

Income: examine the impact of programmes on total income (ie income support and earnings).

Note that there are some limitations associated with using LEED such as (but not limited to):

- Income data is reported on a monthly basis. We are not able to identify the days during a month for which a person was employed, or the hours per week that were worked.
- We will not be able to include income from IRD administered tax credits.
- Time lags in updating LEED. Available data will always be approximately 12 months old. This means that information will not be available for the more recent programme participants.
- Confidentiality, analysis, and the release of data from LEED are subject to Statistics New Zealand confidentiality provisions.

Employer use of Work and Income programmes and services

Because LEED has information on employers, we will have the opportunity to examine which employers use our employment programmes. Such information would be useful for better understanding the level of substitution and displacement associated with different programmes.

Non-participant effects of programmes

We plan to include estimates of the offsets that occur through substitution and displacement effects. This work is likely to involve a combination of international literature and assessment of how well Work and Income is managing non-participant effects. In addition, the Department of Labour is initiating work to directly estimate some of these non-participant effects.

Broader fiscal benefits

Access to tax data in LEED will allow us to include information on the impact of programmes on income tax. This will broaden our cost-benefit analysis to include impact on taxation as well as income support expenditure.

Part two: Performance by assistance type

In part two of this report, W&I assistance is grouped in terms of how it helps different groups of participants into employment. Aggregate level results are presented and, where possible, results by benefit type and cohort. Disaggregating results by benefit type and/or cohort provides greater insight into 'what works for whom?'

Placement programmes

Placement programmes are designed to help match clients to employment opportunities. Employment Placement initiatives is the largest of these, followed by Skill Investment Subsidy, while Self-employment assistance is a small part of total expenditure.

Employment Placement initiative (previously Outcome Based Funding)

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$13,685	10,424	$1,239	No	$0.45 @2.0 yrs	After 1 to 3 years

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	—	?	?	?	?

See Table 11 footnotes.

Employment placement initiatives contract third party providers to provide employment placement and support services for clients. Providers assist clients into work by assessing their skills and aspirations, sourcing appropriate vacancies, and supporting them with their job applications. These providers receive incentive payments once the clients they support have achieved employment.

Effectiveness of employment placement initiatives is mixed

The top line findings indicate the programme is not effective, and does not yet show a positive ROI. However, for 2003 and 2004 participants we see income support savings with 2004 having a positive impact (Table 12). By comparison, the programme shows largely negative impacts or no impact for those who started the programme between 2008 and 2009, with 2010 showing a better result. One reason might be that placement programmes do not perform well during periods of rising employment, as was the case in 2009.

Next steps

Examine changes in the programme performance: Changes in the performance in the programme warrant a closer analysis. We plan to examine changes in the operation of this programme and labour market conditions, and any bearing these may have had on programme performance.

Table 12: Elapsed time to when Employment Placement initiatives break even and have a positive return on income support savings[a] by participation year

Participation year[b]	Lapse Period	Break even point[c]	Positive return[d]	Recent Impact[d]	Total impact[e]
2004	6.5	0.5	~	$130	$2,188
2008	2.5	2	~	$798	$642
2009	1.5	~	~	-	-$638
2010	0.5	0.5	~	-	$71

a: See technical notes section for an explanation of how each outcome is constructed.
b: Year the participants commenced the programme.
c: The period after programme commencement that the cumulative outcomes of participants and comparison are equal. An ~ indicates this has not yet happened for the programme.
d: The period after programme commencement that the cumulative outcomes of participants exceed that of the comparison. An ~ indicates this has not yet happened for the programme.
e: Total income support savings over the lapse period for each participant cohort.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Skill Investment Subsidy

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$7,655	3,112	$2,966	No	*$1.96 @2.0 yrs	After 1 year

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalid's	Sickness	No benefit
Combined positive outcomes	✓	?	?	?	×

See Table 11 footnotes.

The Skill Investment Subsidy is a temporary subsidy offered to employers for a specific duration that reflects the level of assistance required to support the client into a permanent position by reaching the skill level other potential applicants for the job would possess. This includes the costs to employers of the time spent in training the client, and for other associated costs that may be incurred. The subsidy can also be used to fund training for the client, including improving literacy and numeracy, as well as or instead of the wage subsidy component.

Skill Investment Subsidy has consistently high impact on participants' outcomes

While the full impact of the Skill Investment Subsidy programme has not yet been observed, results show that the programme is having a positive impact with a good ROI (*$1.96 return for every dollar of programme expenditure). However, this figure has not included non-participant effects that would offset employment gains[2] or the gain in income tax from those in work. We plan to include these in subsequent updates to this analysis.

Skill Investment Subsidy is ineffective for clients not on a main benefit

The programme appears to be effective for clients on an Unemployment or Independent Youth Benefit. In contrast, the programme was ineffective for clients not on any main benefit when they started the programme.

[2] For more information on displacement and substitution effects, see page 62 of the Technical Notes.

Next steps

Understanding employer use of the Skill Investment Subsidy: while we believe hiring wage subsidises benefit participants, we have not accounted for the potential negative impacts of these programmes on non-participants through substitution and displacement effects. Over the next year, we will start to examine how employers use these programmes. This information will provide us with a sense of the degree to which the positive effects of the Skill Investment Subsidy are offset by costs to other job seekers in the labour market.

Improved targeting of the programme: the findings indicate there is scope to better target the Skill Investment Subsidy. A negative outcome for non-beneficiaries participating in the programme suggests little value in targeting this group with this programme.

Table 13: Efficiency, impact and cost effectiveness of matching programmes

	Programme		
Efficiency	Employment Placement Initiative	Skills Investment	Enterprise Allowance
Participation starts[a]	10,424	3,112	142
Average cost per participation start[b]	$1,239	$2,966	$8,589
Programme effectiveness			
Lapse period from participation start (years)[c]	2	2	8
Observed full impact[d,e]	No	No	No
Impact of Matching programmes on primary outcomes (in weeks), [e,f]			
Combined positive outcomes[g]	*-2.2	*6.0	*43.1
Independent of Work and Income Assistanc[e]	*-2.2	*6.0	*43.1
Cost effectiveness information[h]			
Combined positive outcomes	NE	$495	$199
Independent of Work and Income assistance	NE	$495	$199
Fiscal cost-benefit analysis (income support only)			
Reduction in income support costs[i]	$563	*$5,804	*$14,396
Return on Investment[j]	$0.45	*$1.96	*$1.68

a: Participation starts can include clients who have participated in the programme more than once in the financial year.
b: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.
c: Period after participation start date that outcomes and impacts are measured.
d: Is the outcome period sufficiently long to observe the full impact of the programme. If no, then the reported impacts understate the full positive or negative impact of the programme.
e: Estimated change in the time spent in each outcome state over the lapse period as a result of the programme (based on matching on observables impact method).
f: See technical notes section for an explanation of how each outcome is constructed.
g: Combines all positive outcomes for Matching programmes and includes time spent: Independent of Work and Income assistance.
h: The cost per participant start divided by the impact of the programme on each outcome (TE: too early to assess cost-effectiveness; NE: programme is not effective).
i: Includes main benefit, supplementary assistance and ad hoc (third tier) payments in 2011 dollars, discounted at 3.5% per annum.
j: Return is measured as the reduction in income support costs. Therefore, the return on investment is the saving in income support costs for each dollar of programme expenditure. Statistically significant positive values are shown in 2011 dollars. Positive
*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Enterprise Allowance

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$1,020	142	$8,589	No	*$1.68 @7.5 yrs	After 2 to 3 years

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalid's	Sickness	No benefit
Combined positive outcomes	✓	?	?	?	?

See Table 11 footnotes.

The Enterprise Allowance (subsidy and capitalisation) involves the provision of free capital and a temporary subsidy for business start up enabling clients without access to commercial capital to establish their own businesses.

Enterprise Allowance is effective for a small group of clients

Overall, this programme is cost-effective with a good ROI (*$1.68 return for every dollar of programme expenditure). We have evidence on the effectiveness of the programme for clients on unemployment related benefits. However, self-employment assistance will be suitable for only a small group of clients who have the skills and abilities to establish their own business. For this reason, Enterprise Allowance should remain a small programme.

We have not accounted for non-participant effects

The two concerns with Enterprise Allowance assistance are:

- the displacement of workers in competing firms
- the high cost per participant start, making it less cost-effective than hiring wage subsidies

For more information on displacement and substitution effects, see page 61 of the Technical Notes.

Next Steps

Examining employment outcomes for clients: Over time we will begin to include employment and earnings information with these evaluations. Such information will provide the first opportunity to examine how well clients are able to establish businesses in terms of earnings and additional employment. In addition, information about the business will allow us to examine which industries participants move into and any possible displacement effects.

Mainstream Employment Programme

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$3,198	551	$16,815		Not assessed	

See Technical Notes for definitions.

The Mainstream Employment Programme provides a package of wage and training subsidies and other support to help people with significant disabilities obtain work in the State sector and gain work skills.

We have not undertaken an evaluation of the Mainstream Employment Programme. A 2004 survey of programme participants found that two-thirds (69 per cent) were still in employment up to five years after their placement finished. Between six months to five years after finishing their placement, over half (53 per cent) of the participants held the same position which they had at the completion of their placement, and 16 per cent were employed by another employer (SSC, 2004).

Be Your Own Boss

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$414	248	$1,520		Not assessed	

See Technical Notes for definitions.

We have not undertaken an evaluation of Be Your Own Boss.

Self Employment Initiative

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$305	151	$1,034	Not assessed		

See Technical Notes for definitions.

The Self Employment Initiative is designed to assist job seekers into self-employment using such mechanisms as mentoring, training, business advice and coaching.

We have not undertaken an evaluation of the Self Employment Initiative.

Business Training and Advice Grant

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$72	191	$358	Not assessed		

See Technical Notes for definitions.

The Business Training and Advice Grant helps clients investigate or enter self-employment through the provision of training and advice. The amount available for the Business Training and Advice Grant is up to $1,000 (including GST) per person per project.

An evaluation of the Business Training and Advice Grant has not been undertaken. Because participants in training and advice programmes are required to be planning to take up, or are already receiving an Enterprise Allowance, it is difficult to estimate the impact of training and advice services on outcomes, ie, we will not know if it is the training and advice or the Enterprise Allowance that is having the effect. This expenditure can be considered an overhead of Enterprise Allowance, increasing its cost per participant start as well as reducing its cost-effectiveness.

Training programmes

Training programmes represent a substantial part of employment assistance, with the now ended Training Opportunities Programme making up the majority of the funding.

Training Opportunities Programme

Expenditure (,000)	Participants[a]	Per participant cost[b]	Observed full impact	Average ROI	Break-even point
$50,836	-	$5,344	Yes	*-$0.17 @4.0 yrs	Never

a: Participant count for 2011 financial year not known with certainty

b: Per participant cost calculated using TEC participant data for 2006, 2007 and 2008 financial years.

See footnotes for Table 3, p 9.

Impact on	UB and IYB	DPB WB	Invalid's	Sickness	No benefit
Combined positive outcomes	×	—	—	—	×

See Table 11 footnotes.

The Training Opportunities Programme (TOPs) was the main training programme for Work and Income clients until 30 December 2010. The programme offered training for people over the age of 18 who had low or no qualifications, or who were at risk of long-term unemployment. From 1 January 2011 TOPs was reconfigured into two training programmes - Training For Work (TfW) and Foundation Focused Training Opportunities (FFTO). FFTO and TfW are discussed in more detail below.

Training Opportunities was ineffective at improving participants outcomes

Results for the original Training Opportunities Programme (TOPs) continue to show that the programme was ineffective overall (Table 14), with a negative ROI (ie participation increased income support costs rather than reducing them). By benefit group, the programme is ineffective for Unemployment Benefit and non-beneficiaries, and ineffectual for DPB, Invalid's and Sickness Benefit recipients.

Table 14: Efficiency, impact and cost effectiveness of Training programmes

	Programme	
Efficiency	Training Opportunities	Skills Training
Participation starts[a]	-	826
Average cost per participation start[b],[c]	$5,344	$2,045
Programme effectiveness		
Lapse period from participation start (years)[d,e]	4	7
Observed full impact[e]	Yes	Yes
Impact of Training programmes on primary outcomes (in weeks), [f,g]		
Combined positive outcomes[h]	*-7.7	*3.9
Independent of Work and Income Assistance	*-12.8	*-3.6
Cost effectiveness information[i]		
Combined positive outcomes	NE	$521
Independent of Work and Income assistance	NE	NE
Fiscal cost-benefit analysis (income support only)		
Reduction in income support costs[j]	*-$1,257	$796
Return on Investment[k]	NE	$0.39

a: Participation starts can include clients who have participated in the programme more than once in the financial year.
b: Skills Training result based on the last three financial years of programme expenditure (nominal 2011 dollars) and participation starts.
c: TOPs result based on three financial years of programme expenditure (nominal 2007, 2008, 2009 dollars). Participation starts based on TEC data for 2007, 2008 and 2009 financial years.
d: Period after participation start date that outcomes and impacts are measured.
e: Is the outcome period sufficiently long to observe the full impact of the programme. If no, then the reported impacts understate the full positive or negative impact of the programme.
f: Estimated change in the time spent in each outcome state over the lapse period as a result of the programme (based on matching on observables impact method).
g: See technical notes section for an explanation of how each outcome is constructed.
h: Combines all positive outcomes for Training programmes and includes time spent: Off-main benefit, on Placement programmes, Tertiary study, Part-time work on benefit, on Job Search programmes, and on Work Experience programmes.
i: The cost per participant start divided by the impact of the programme on each outcome (TE: too early to assess cost-effectiveness; NE: programme is not effective).
j: Includes main benefit, supplementary assistance and ad hoc (third tier) payments in 2011 dollars, discounted at 3.5% per annum.
k: Return is measured as the reduction in income support costs. Therefore, the return on investment is the saving in income support costs for each dollar of programme expenditure. Statistically significant positive values are shown in 2011 dollars. Positive values that are not statistically significant are considered ineffectual. A negative return is regarded as NE: programme is not effective.
*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated.
- Count for 2011 financial year not known with certainty.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Evidence on the ineffectiveness of Training Opportunities Programme (MSD, 2011a) resulted in the redesign of the programme into TFW and FFTO. Because these changes were introduced at the start of 2011, it is too early to report on whether these changes have improved the programme. We expect to provide early findings on the redesigned Training Opportunities Programme in 2012.

Foundation Focused Training Opportunities (FFTO)

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$18,204	7,355	$2,319	Not assessed		

a: may under state the per participant costs, since Training Opportunities funding was split in the middle of 2010/2011 and we cannot determine how much of the Training Opportunities funding was used to fund Foundation Focused Training Opportunities.

For remainder of footnotes, See Technical Notes for definitions.

FFTO is designed to help clients with substantial skill deficits. The purpose of the programme is to enable learners with low qualifications who are at high risk of long-term unemployment, to engage in further education or training.

The programme is administered by the Tertiary Education Commission (TEC) and has the following parameters:

- a maximum duration of 26 weeks
- some part-time programmes
- a strong on-the-job or work-based component
- targeting of clients at high risk of long-term benefit receipt.

It is too soon to assess the effectiveness of FFTO

Because the programme commenced on 1 January 2011, it is too early to assess its impact on participants outcomes. We expect to provide early findings in 2012.

Next steps

Assessing the effectiveness of FFTO: Because the programme started in 2011, we will not be able to report on the impact of the programme until 2012. It will not be until 2014 that we can begin to make initial conclusions on its overall effectiveness.

Training for Work (TfW)

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$15,192	4,710	$3,295	Not assessed		

See Technical Notes for definitions.

The outcome sought from the TfW programme is for clients to leave benefit for sustainable employment. This programme is administered by the Ministry of Social Development (MSD) with the following features:

- a maximum duration of 13 weeks
- a strong link with employers and local job markets
- short and work-focused, designed to equip participants with skills that are in demand in the local labour markets and mainly target clients with a medium risk of long-term benefit receipt.

It is too soon to assess the effectiveness of TfW

Because the programme only commenced on 1 January 2011, it is too early to assess its impact on participants outcomes. We expect to provide early findings in 2012.

Next steps

Assessing the effectiveness of TfW: because the programme commenced in 2011, we will not be able to report on the early impact of the programme until 2012. It will not be until 2014 that we can begin to make definitive conclusions on its overall effectiveness.

Skills Training/Targeted Training

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
239.29	826	2044.98	Yes	$0.39 @7.0 yrs	Never

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalid's	Sickness	No benefit
Combined positive outcomes	—	✓	?	?	—

See Table 11 footnotes.

Skills Training helps disadvantaged clients into employment by addressing their specific employment barriers. Participants are expected to develop job-related skills to assist them into employment, and job search skills to a sufficient standard to undertake job search activity and secure employment. An example of Skills Training is training for call centre operators. The Skills Training programme began to be wound down during the 2010 financial year.

Skills training was ineffectual in improving participants outcomes, but had moderate impact for DPB recipients

This programme has had a modest impact (off main benefit outcomes are not significant) with a low ROI ($0.39 return for every dollar of programme expenditure).

For DPB participants the programme had a positive impact, mainly through increased time spent in tertiary study, part time work and programme stair-casing. However, these impacts have not resulted in a significant reduction in income support costs.

Tertiary Study

These programmes and services provide extra financial help to clients undertaking tertiary study.

Training Incentive Allowance (TIA)

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$9,442	3,539	$2,569	No	*-$1.75 @5.0 yrs	Not to date

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	?	×	×	?	?

See Table 11 footnotes.

TIA provides financial assistance to people receiving the Domestic Purposes Benefit, Invalid's Benefit, Widow's Benefit, or Emergency Maintenance Allowance. The aim of TIA is to enable participants to undertake employment-related training to improve their work skills and increase their prospect of getting full-time or part-time employment.

TIA is ineffective for clients on an Invalid's Benefit, but may have a long-term positive impact for clients on DPB.

We have observed the full impact of the TIA on Invalid's Benefit and conclude that this allowance is ineffective for this group (Table 15). Results are more mixed for clients who started on the allowance while on a Domestic Purposes or Widow's Benefit.

Table 15 Efficiency, impact and cost effectiveness of Tertiary programmes

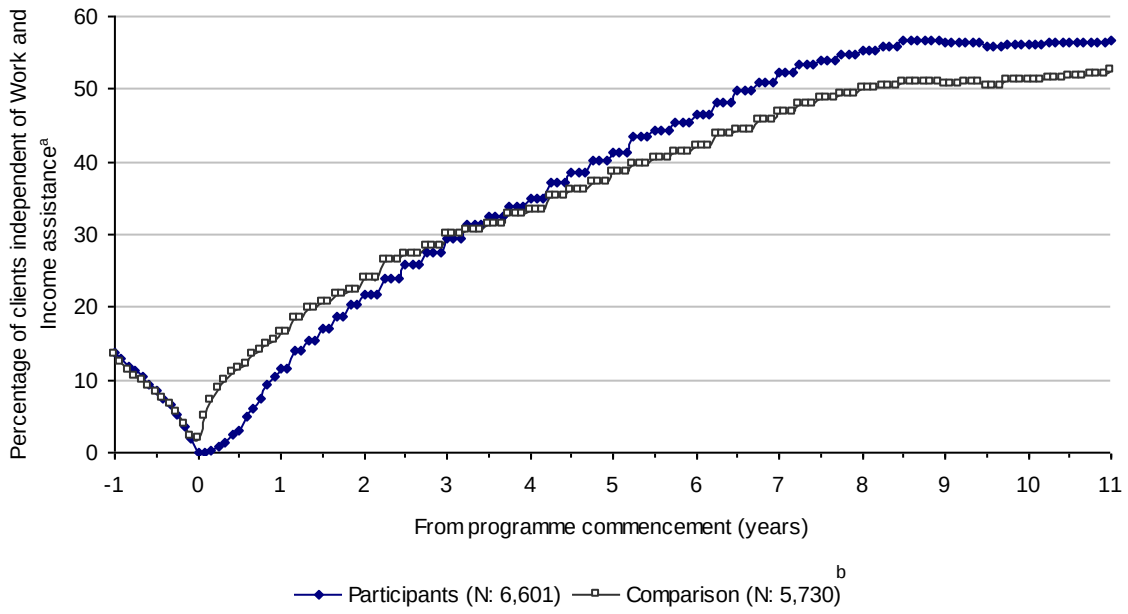
	Programme	
Efficiency	Course Participation Assistance Programme	Training Incentive Allowance
Participation starts[a]	8,335	3,539
Average cost per participation start[b]	$211	$2,569
Programme effectiveness		
Lapse period from participation start (years)[c]	4.5	5
Observed full impact[d,e]	No	No
Impact of Tertiary Study programmes on primary outcomes (in weeks), [e,f]		
Combined positive outcomes[g]	0.8	*-6.6
Independent of Work and Income Assistance	-0.6	*-7.1
Cost effectiveness information[h]		
Combined positive outcomes	NE	NE
Independent of Work and Income assistance	NE	NE
Fiscal cost-benefit analysis (income support only)		
Reduction in income support costs[i]	$116	*-$4,505
Return on Investmen[tj]	$0.55	NE

a: Participation starts can include clients who have participated in the programme more than once in the financial year.
b: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.
c: Period after participation start date that outcomes and impacts are measured.
d: Is the outcome period sufficiently long to observe the full impact of the programme. If no, then the reported impacts understate the full positive or negative impact of the programme.
e: Estimated change in the time spent in each outcome state over the lapse period as a result of the programme (based on matching on observables impact method).
f: See technical notes section for an explanation of how each outcome is constructed.
g: Combines all positive outcomes for Tertiary Study programmes and includes time spent: Off-main benefit, on Placement programmes and in part-time work on benefit.
h: The cost per participant start divided by the impact of the programme on each outcome (TE: too early to assess cost-effectiveness; NE: programme is not effective).
i: Includes main benefit, supplementary assistance and ad hoc (third tier) payments in 2011 dollars, discounted at 3.5% per annum.
j: Return is measured as the reduction in income support costs. Therefore, the return on investment is the saving in income support costs for each dollar of programme expenditure. Statistically significant positive values are shown in 2011 dollars. Positive
*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Figure 2 shows the cumulative impact on TIA participants in terms of time spent independent of Work and Income assistance. Monthly results over 11 years are shown for participants starting in 2000. The main point to note is that interval outcomes for participants do not exceed the comparison group until four years after starting the programme. From this point, the cumulative impact changes from a negative trend to a positive one, but it is not until seven years have elapsed that the cumulative impact becomes positive (see Figure 3). In other words, the positive impact of the allowance from year five onwards exceeds the negative locking in effect over the initial four years.

Figure 2: Interval outcomes of TIA participants and comparison group commencing the programme in 2000

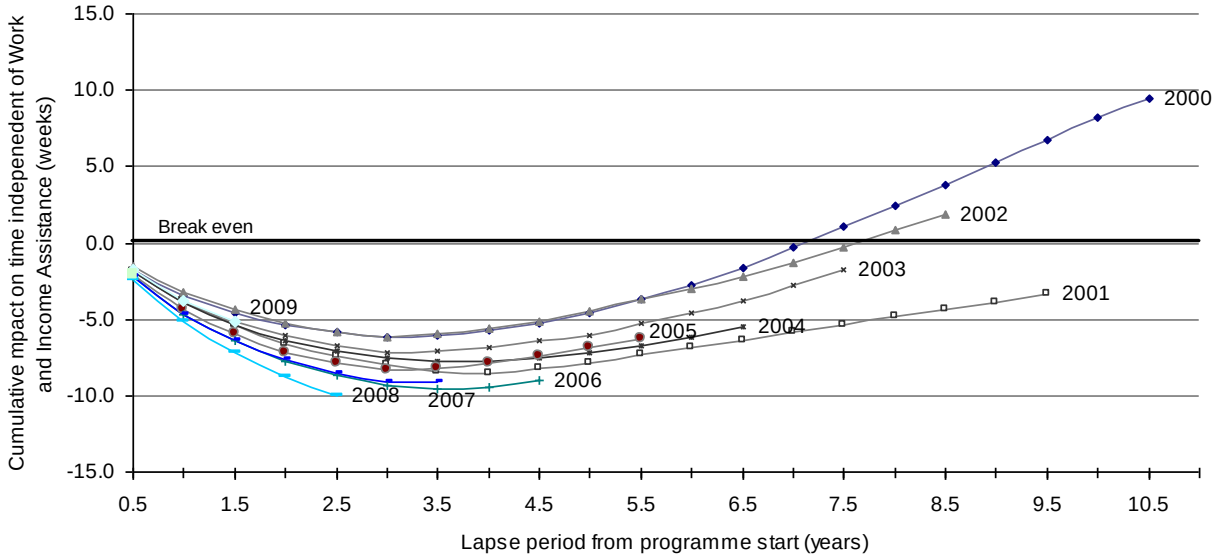


a: No longer receiving a main benefit (eg Unemployment Benefit) or Work and Income employment assistance (eg wage subsidy).
b: Comparison group are matched to participants based on observed characteristics of participants at programme start.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Figure 3 shows the cumulative impact of TIA by cohort year. For an intervention to be effective, its cumulative impact has to be positive. For the Training Incentive Allowance, only two participant groups (2000 and 2002) show a positive cumulative impact by the end of their outcome window. The trend in cumulative impact for more recent cohorts (ie those starting after 2005) appears to be lower than earlier cohorts (although 2009 looks better). This suggests it will take longer for the allowance to have a positive impact for these participants.

Figure 3: Cumulative impact on Independence from Work and Income assistance by participation year



Each line shows the cumulative impact of TIA on each participant cohort. The break-even line is the point were participant and matched comparison group have the same average outcome (ie impact is zero).

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Next steps

Examining the changing impact of Training Incentive Allowance: the impact of the allowance appears to have changed over the last 10 years. Over this period there have been a number of policy and operational changes. It may be useful to examine whether there is any relationship between these changes and the impact on clients.

Examining the continued participation by Invalid's Beneficiaries: this analysis shows that the TIA is ineffective in improving outcomes for clients who started on this form of assistance for those on an Invalid's Benefit. We may need to examine what role, if any, this allowance has in assisting Invalid's Benefit clients into work.

Course Participation Assistance Programme

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$1,751	8,335	$211	No	$0.55 @4.5 yrs	After 2.5 to 8.5 years

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalid's	Sickness	No benefit
Combined positive outcomes	✓	—	?	—	—

See Table 11 footnotes.

The Course Participation Assistance Programme provides non-taxable, non-recoverable financial assistance toward the actual and reasonable costs for clients participating in short-term (generally less than 12 weeks) employment-related training courses or programmes. The objective is to help clients take part in training and work-related skills development.

Course Participation Assistance Programme is ineffectual

Overall, the impact of this assistance appears to be modest. While it has a comparatively low per participant cost and is cost-effective, it does not yet show a positive ROI (return for every dollar of programme expenditure). Cumulative outcomes over four and a half years show almost no difference between Course Participation Assistance Programme participants and a matched comparison group. The programme was of little benefit in terms of clients becoming independent of Work and Income assistance.

By benefit group, the assistance was effective for clients on an Unemployment or Independent Youth Benefit. The grant was ineffectual for most other benefit groups for which we have been able to estimate an impact.

Training for pre-determined employment

Pre-determined employment assistance partners industry and employers to identify, and meet, existing employment needs. Clients are supported with relevant training and placement support.

Straight to Work

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$6,505	1,738	$3,369	No	*$0.97 @2.5 yrs	After 2.5 years

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	✓	?	?	?	?

See Table 11 footnotes.

Straight to Work involves selecting potential participants for industries with existing employment opportunities. Selected participants are then given relevant training and placed with employers. Straight to Work pre-employment training lasts up to 12 weeks, with a post-employment support component of up to three months. The training (often combined with work experience) is relevant to the industry within which there are existing employment opportunities. Work experience placements can act as a trial period of employment for both the employer and participant. Table 17 summarises the overall performance of training for pre-determined employment programmes.

Straight to Work is effective for clients on an Unemployment or Independent Youth Benefit

While headline results for Straight to Work are modest, programme results show that it is effective for its target group – clients on an Unemployment or Independent Youth Benefit. Our analysis shows these clients spent significantly more time independent of Work and Income assistance than their comparison group (Table 16). No impact could be estimated for clients in other benefit groups.

Longer term impacts for participants are promising

We have not observed the full impact of Straight to Work, but initial results are promising. Table 16 shows the impact on income support savings by the year participants started Straight to Work. For all years, the programme shows a positive return within six months of commencing the programme. The recent impact column shows the additional income support savings in the last two years in the outcome period. In all instances, the programme continues to demonstrate ongoing savings. The ROI column shows the return on investment for each participant year, and indicates that the programme has a positive ROI between 2.5 and 3.5 years after commencing the programme (ie the 2007 participant group).

Table 16: Elapsed time to when Straight to Work breaks even and has a positive return by participation year

Participation year[b]	Lapse Period	Break even point[c]	Positive return[d]	Recent Impact[d]	Total impact[e]	ROI
2004	6.5	0.5	0.5	*$2,625	*$8,971	$2.66
2005	5.5	0.5	0.5	*$2,114	*$7,656	$2.27
2006	4.5	0.5	0.5	*$2,272	*$6,137	$1.82
2007	3.5	0.5	0.5	*$2,577	*$4,937	$1.47
2008	2.5	0.5	0.5	*$2,099	*$2,336	$0.69

2009	1.5	0.5	0.5	*$1,904	$0.57
2010	0.5	0.5	0.5	*$357	$0.11

a: See technical notes section for an explanation of how each outcome is constructed.
b: Year the participants commenced the programme.
c: The period after programme commencement that the cumulative outcomes of participants and comparison are equal. An ~ indicates this has not yet happened for the programme.
d: The period after programme commencement that the cumulative outcomes of participants exceed that of the comparison. An ~ indicates this has not yet happened for the programme.
e: Total income support savings over the lapse period for each participant cohort.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

We have not accounted for non-participant effects

The way Straight to Work is designed we expect non-participant effects to be small. Since the programme targets industries with labour shortages, the argument can be made that these employers had fewer candidates to select from and substitution effects would not be as large. To test this, we plan to examine employer use of the programme in 2012.

Next steps

Examining employer use of the programme: in 2012, we will look at how employers make use of this programme.

Table 17: Efficiency, effectiveness and cost effectiveness of Training for pre determined employment programmes

Efficiency	Straight to Work
Participation starts[a]	1,758
Average cost per participation start[b]	$3,513
Programme effectiveness	
Lapse period from participation start (years)[c]	2.5
Observed full impact[d,e]	No
Impact of Training for pre-determined employment programmes on primary outcomes (in weeks), [e,f]	
Combined positive outcomes[g]	*6.3
Independent of Work and Income Assistance	*6.3
Cost effectiveness information[h]	
Combined positive outcomes	$559
Independent of Work and Income assistance	$559
Fiscal cost-benefit analysis (income support only)	
Reduction in income support costs[i]	*$3,271
Return on Investment[j]	*$0.93

a: Participation starts can include clients who have participated in the programme more than once in the financial year.
b: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.
c: Period after participation start date that outcomes and impacts are measured.
d: Is the outcome period sufficiently long to observe the full impact of the programme. If no, then the reported impacts understate the full positive or negative impact of the programme.
e: Estimated change in the time spent in each outcome state over the lapse period as a result of the programme (based on matching on observables impact method).
f: See technical notes section for an explanation of how each outcome is constructed.
g: Combines all positive outcomes for Training for pre-determined employment programmes and includes time spent: Independent of Work and Income assistance.
h: The cost per participant start divided by the impact of the programme on each outcome (TE: too early to assess cost-effectiveness; NE: programme is not effective).
i: Includes main benefit, supplementary assistance and ad hoc (third tier) payments in 2011 dollars, discounted at 3.5% per annum.
j: Return is measured as the reduction in income support costs. Therefore, the return on investment is the saving in income support costs for each dollar of programme expenditure. Statistically significant positive values are shown in 2011 dollars. Positive
*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Local Industry Partnerships

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$1,835	758	$5,247	Not assessed		

See Technical Notes for definitions.

Industry partnerships help industries, employers and government to establish a co-ordinated employment training and recruitment framework. Work and Income teams form partnerships with industry sectors and employers experiencing skill and labour shortages. Jobseekers are selected with training designed around the entry-level requirements for the industry. Industry partnerships may result in a Straight to Work programme.

Cadet Max

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$1,075	299	$3,255	Not assessed		

See Technical Notes for definitions.

Cadet Max targets youth clients with a programme similar to Straight to Work, but with a stronger emphasis on mentoring and helping participants identify their career goals. Because of the small number of participants and its recent introduction, we are not able to assess the effectiveness of this programme at this time. Given the similarity to Straight to Work, we assume the programme will have a similar impact, although its lower cost per participant start may mean it is more cost-effective.

Jobs with a future

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$1,609	253	$3,909	Not assessed		

See Technical Notes for definitions.

Jobs with a Future is based on the Straight to Work model. This programme helps employers increase productivity by up-skilling employees. Because of the small number of participants and its recent introduction, we are not able to assess the effectiveness of this programme at this time.

Work Experience Programmes

Work experience assistance can be categorised along two criteria. The first is whether it is subsidised or participants continue to receive a main benefit. The second is whether the placement is in open employment, in part of the community, or in the environment sector. Table 18 summarises the overall performance of work experience programmes.

Community Max

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$15,735	1,358	$10,808	No	*$0.38 @1.5 yrs	Not to date

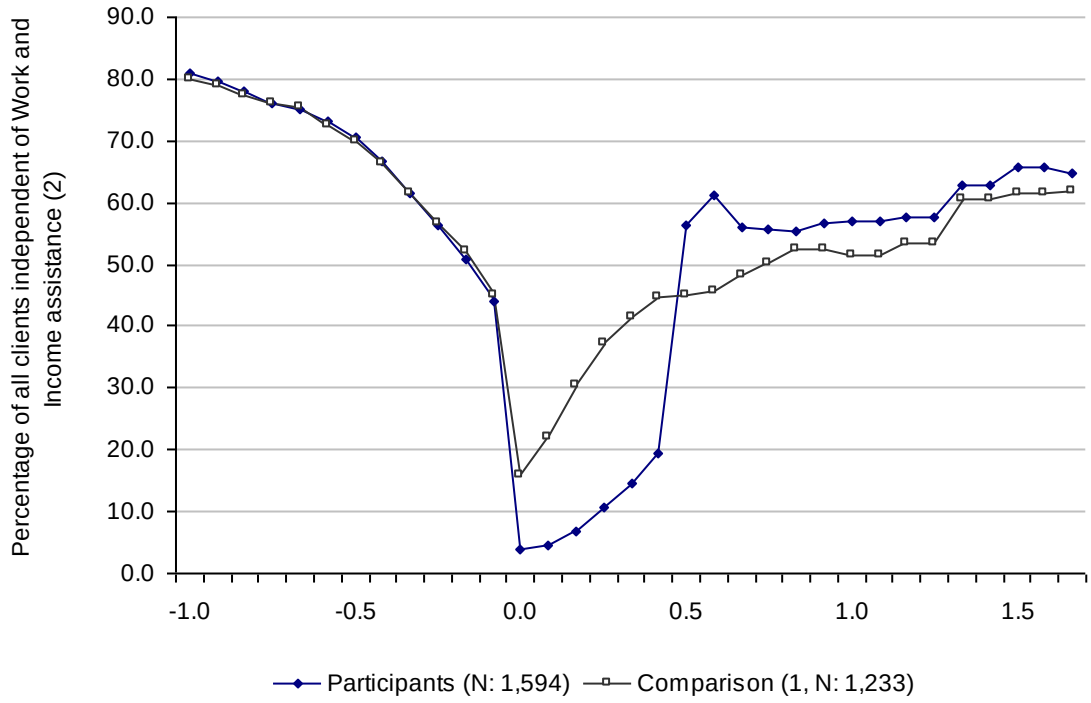
See Technical Notes for definitions.

Community Max provided a wage subsidy for six months for young people to help complete community-based projects, and cover the costs of supervision and training. The Community Max programme ended on 30 June 2011 with no new applications from that date.

Community Max is unlikely to be cost-effective

The full impact of this programme has not yet been not observed, but early results indicate a low ROI (*$0.38 return for every dollar of programme expenditure). The main reason for the low return is the very high cost of the programme at over $10,000 per participant. As Figure 4 shows, Community Max has a modest impact in terms of participants gaining Independence from Work and Income assistance. For this reason, it is unlikely that over the longer term this programme will achieve a sufficiently large fiscal saving to justify its high cost.

Figure 4: Proportion of Community Max participants in 2009 and comparison group independent of Work and Income assistance



a: No longer receiving a main benefit (eg Unemployment Benefit) or Work and Income employment assistance (eg wage subsidy).
b: Comparison group are matched to participants based on observed characteristics of participants at programme start.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Taskforce Green

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$1,599	365	$5,281	No	*$2.11 @8.0 yrs	After 2 to 4 years

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalid's	Sickness	No benefit
Combined positive outcomes	✓	?	?	?	—

See Table 11 footnotes.

Taskforce Green aims to assist clients to secure employment by providing a wage subsidy (up to $124 per week for no more than six months). The primary aim is to give participants work experience to build their confidence and work habits. The secondary aim is to benefit local communities and the environment through work that would not otherwise be done. Taskforce Green is also used to provide assistance during disaster relief.

Taskforce Green is a cost-effective programme overall

Taskforce Green continues to show a strong positive impact at an aggregate level. The programme is comparatively cost-effective with a good ROI (*$2.11 return for every dollar of programme expenditure).

Taskforce Green does not appear to be effective for non-beneficiaries

By benefit group, clients on an Unemployment or Independent Youth Benefit spent significantly more time in positive outcomes, particularly time off main benefit. Taskforce Green was ineffectual for non-beneficiaries. No impact could be estimated for clients in other benefit groups.

Work Experience Trial

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$523	380	$1,652	Yes	$2.84 @9.0 yrs	Never

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	✓	?	?	?	?

See Table 11 footnotes.

Work experience placements are unpaid placements with employers for up to four weeks at a maximum of 40 hours per week. The purpose of a work experience placement is to increase a participant's motivation, confidence, skills and self-esteem through connection to the workplace. It is not expected that people will necessarily move into employment with the employer who provides the work experience.

Work Experience Trials were not found to be effective

Overall, Work Experience trials were ineffectual, with no statistically significant increase in combined positive outcome or reduction in income support expenditure. Therefore, while the ROI for the programme is high (a return of $2.84 for every $1 expenditure), it is not statistically significant.

Activity in the Community

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$113	282	$400	Yes	*-$13.30 @8.5 yrs	Never

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	×	—	?	?	?

See Table 11 footnotes.

Activity in the Community projects offer opportunities to clients that are not subject to work obligations to gain voluntary unpaid experience in a community or voluntary organisation. The aim of Activity in the Community is to support social development outcomes for clients through participation in community-based projects. Since 2007, eligibility to Activity in the Community has been restricted to non-work tested clients, primarily those on a Sickness or Invalid's' Benefit.

Activity in the Community is ineffective in moving participants off-benefit

Overall results provide little evidence that the Activity in the Community programme is effective in assisting clients into employment. While it has a comparatively low per participant cost it shows a negative ROI (ie participation substantially increased income support costs rather than reducing them).

By benefit group, the programme was ineffective for clients on Unemployment or Independent Youth Benefit, and ineffectual for clients on a Domestic Purposes or Widow's Benefit. Social participation appeared to come at the expense of increased time on benefit. These clients spent significantly less time off main benefit. No impact could be estimated for those on an Invalid's' or Sickness Benefit or for non-beneficiaries.

Job Ops

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$20,366	5,560	$3,333	No	*$0.74 @1.0 yrs	Too soon to assess

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	×	?	?	?	×

See Table 11 footnotes.

Job Ops was a six month subsidised job placement for people aged 16-24 years with limited work experience and low skill levels to help them build confidence, and demonstrate their ability to work. Applications for Job Ops closed on 30 June 2011 with no new applications accepted from that date.

Table 18: Efficiency, impact and cost effectiveness of Work Experience programmes

	Programme			
Efficiency	CommunityMax	Taskforce Green	Work Experience	Activity in the Community
Participation starts[a]	1358	365	380	282
Average cost per participation start[b]	$10,808	$5,281	$1,652	$400
Programme effectiveness				
Lapse period from participation start (years)[c]	1.5	8	9	8.5
Observed full impact[d,e]	No	No	Yes	Yes
Impact of Work Experience Community programmes on primary outcomes (in weeks), [e,f]				
Combined positive outcomes[g]	*-2.2	*16.5	5.2	*-15.1
Independent of Work and Income Assistance	*-2.2	*16.5	3.3	*-28.6

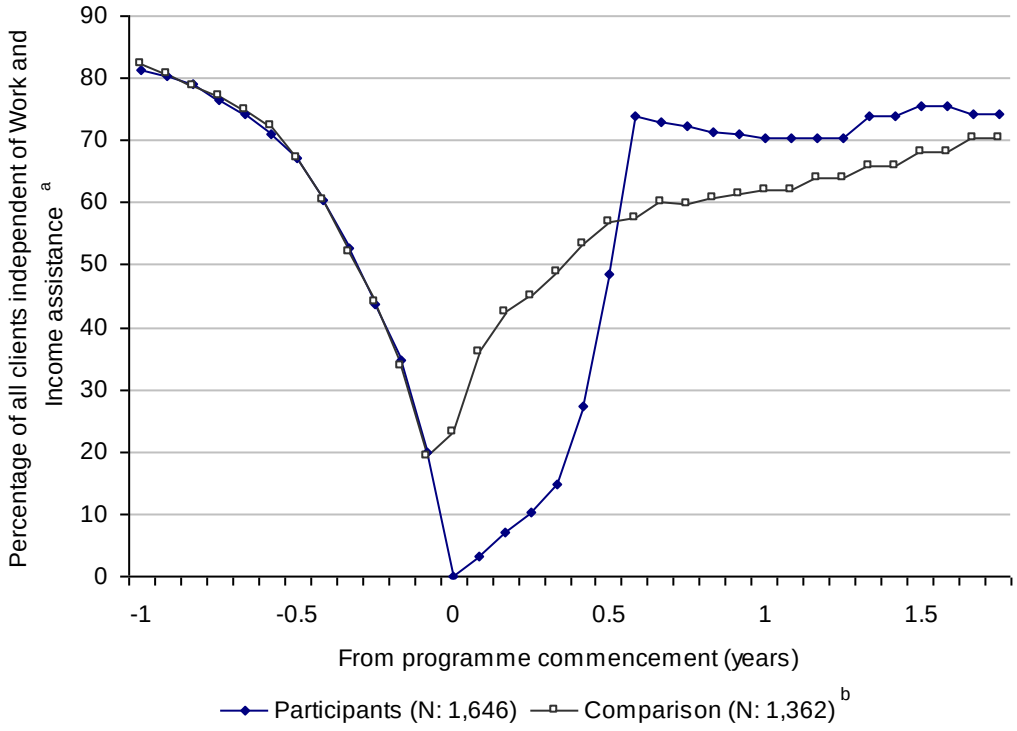
Cost effectiveness information[h]				
Combined positive outcomes	TE	$320	NE	NE
Independent of Work and Income assistance	TE	$320	NE	NE
Fiscal cost-benefit analysis (income support only)				
Reduction in income support costs[i]	*$4,132	*$11,138	$4,716	*-$5,569
Return on Investment[j]	*$0.38	*$2.11	$2.85	NE

a: Participation starts can include clients who have participated in the programme more than once in the financial year.
b: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.
c: Period after participation start date that outcomes and impacts are measured.
d: Is the outcome period sufficiently long to observe the full impact of the programme. If no, then the reported impacts understate the full positive or negative impact of the programme.
e: Estimated change in the time spent in each outcome state over the lapse period as a result of the programme (based on matching on observables impact method).
f: See technical notes section for an explanation of how each outcome is constructed.
g: Combines all positive outcomes for Work Experience Community programmes and includes time spent: Off-main benefit, on Placement programmes, Tertiary study, Part-time work on benefit, and on Job Search programmes.
h: The cost per participant start divided by the impact of the programme on each outcome (TE: too early to assess cost-effectiveness; NE: programme is not effective).
i: Includes main benefit, supplementary assistance and ad hoc (third tier) payments in 2011 dollars, discounted at 3.5% per annum.
j: Return is measured as the reduction in income support costs. Therefore, the return on investment is the saving in income support costs for each dollar of programme expenditure. Statistically significant positive values are shown in 2011 dollars. Positive
*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated. Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Job Ops is unlikely to be cost-effective

Because we have less than two years of outcomes information for Job Ops, it is still too soon to arrive at firm conclusions on its effectiveness (Table 19). Nevertheless, the trend in the impact of the programme is not encouraging. Figure 5 shows that while a high proportion of participants were independent from Work and Income assistance after the programme ended (from six months after programme commencement), the gain over the comparison group was short lived. As shown in the figure below, the gap between the two groups closes towards the end of the outcome period. The trend in comparison group outcomes indicates that the programme tended to target clients at low risk of long-term benefit receipt who generally do not require this level of assistance.

Figure 5: Proportion of Job Ops 2009 participants and comparison group independent of Work and Income assistance



a: No longer receiving a main benefit (eg Unemployment Benefit) or Work and Income employment assistance (eg wage subsidy).
b: Comparison group are matched to participants based on observed characteristics of participants at programme start.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

We have not accounted for non-participant impacts

Because Job Ops targeted private employers, it is likely that some of the subsidised placements would have occurred without the programme. In these instance, we expected to see deadweight effects (the employer would have hired the participant anyway) or substitution effects (the employer took the participant in preference to another job seeker). The deadweight effect is likely to be reflected in the comparison group outcomes. The high off-benefit outcomes suggest that participants were work ready and may have gained similar employment without the programme. Likewise the substitution offset could be high because the participants were employable and therefore may have substituted more disadvantaged job seekers. We plan to examine employer use of this and related programmes to better understand whether this might be an issue.

Table 19: Efficiency, impact and cost effectiveness of the Job Ops programme

Efficiency	Job Ops
Participation starts[a]	5,560
Average cost per participation start[b]	$3,333
Programme effectiveness	
Lapse period from participation start (years)[c]	1
Observed full impact[d,e]	No
Impact of Work Experience Trial Subsidised programmes on primary outcomes (in weeks), [e,f]	
Combined positive outcomes[g]	*-4.9
Independent of Work and Income Assistance	*-4.9
Cost effectiveness information[h]	
Combined positive outcomes	TE
Independent of Work and Income assistance	TE

Fiscal cost-benefit analysis (income support only)	
Reduction in income support costs[i]	*$2,452
Return on Investment[j]	*$0.74

a: Participation starts can include clients who have participated in the programme more than once in the financial year.
b: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.
c: Period after participation start date that outcomes and impacts are measured.
d: Is the outcome period sufficiently long to observe the full impact of the programme. If no, then the reported impacts understate the full positive or negative impact of the programme.
e: Estimated change in the time spent in each outcome state over the lapse period as a result of the programme (based on matching on observables impact method).
f: See technical notes section for an explanation of how each outcome is constructed.
g: Combines all positive outcomes for Work Experience Trial Subsidised programmes and includes time spent: Independent of Work and Income assistance.
h: The cost per participant start divided by the impact of the programme on each outcome (TE: too early to assess cost-effectiveness; NE: programme is not effective).
i: Includes main benefit, supplementary assistance and ad hoc (third tier) payments in 2011 dollars, discounted at 3.5% per annum.
j: Return is measured as the reduction in income support costs. Therefore, the return on investment is the saving in income support costs for each dollar of programme expenditure. Statistically significant positive values are shown in 2011 dollars. Positive
*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Next Steps

Examine the longer-term impact of Job Ops

In 2012, we plan to look at the longer term outcomes of participants on the Job Ops programme. We will be able to report on the employment status of participants and their earnings. How employers make use of this programme is also an area for further investigation.

Report on Job Ops with Training

Job Ops with Training replaced the Job Ops programme in mid 2011. Job Ops with Training is similar to the original programme with an additional requirement on employers to provide training to participants. Employers receive an initial subsidy payment of $3,000 to employ a young person. A further $2,000 paid after six months of the Job Ops with Training position and the agreed training for participants has been provided. In addition, programme eligibility is tighter; with participants needing to be either assessed as at risk of long-term benefit receipt[3] or have spent at least 13 weeks on benefit.

Because the Job Ops with Training programme started in mid 2011, it is too early to assess its impact on participants' outcomes. Take-up of the programme is currently low so we may not be able to report on programme effectiveness in 2012.

Employer use of wage subsidy programmes

In 2012, we will look at how employers make use of this programme.

[3] Based on a statistical risk profiling model, the LLTBR.

Work Confidence programmes

Work confidence assistance aims to improve the motivation and confidence of participants to either move into employment or undertake activities that will increase their employability. These programmes and services often target those entering the labour market (ie youth, sole parents and the long-term unemployed).

Outward Bound

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$540	151	$3,896	Yes	$0.34 @8.0 yrs	Never

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalid's	Sickness	No benefit
Combined positive outcomes	–	?	?	?	?

See Table 11 footnotes.

Residential motivational training refers to short-term training programmes designed specifically to provide skills, motivation and confidence. In general, programme content focuses on training in outdoor activities and general life skills. The aim is to develop self-esteem, discipline, confidence and initiative through participation in residentially-based outdoor education. There are two national training providers:

- New Zealand Defence Force (Limited Service Volunteers programme)
- Outward Bound

Other motivational training programmes may be contracted regionally

Outward Bound is not currently cost-effective

Outward Bound does not appear to have a significant impact overall (Table 21). The programme has a comparatively high per participant cost, is not cost-effective, with a low ROI ($0.34 return for every dollar of programme expenditure). However, participants are more likely to spend time in tertiary study and stair-casing on to other programmes.

Limited Service Volunteers (LSV)

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$10,753	1,789	$5,286	No	*-$0.12 @1.5 yrs	Not to date

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalid's	Sickness	No benefit
Combined positive outcomes	×	?	?	?	?

See Table 11 footnotes.

LSV is a six-week residential motivational training scheme run by the New Zealand Defence Force, designed to increase the number of young job seekers (17-25 year olds) entering employment or training. In 2010, the LSV programme was expanded to include two more sites, with modifications to course content and surrounding processes including pre- and post-programme support (MSD, 2011b).

Pre-2010 LSV is not currently cost-effective

Before enhancements to LSV in 2010, the programme was largely ineffective in increasing the time participants spent off main benefit, or in further education or tertiary study. An examination of previous participant groups found that it takes between four and seven years before LSV participants spend more time Independent of Work and Income assistance than the comparison group. However, in no instance are the reductions in income support costs sufficient to meet the initial cost of participating in the programme. Table 20 summarises the time before programmes reach break-even (no difference in income support savings) and positive return (programme has a significant impact on income support savings). For LSV, the programme only achieved a positive return for the 2005-2006 participants. However, even for this group, the overall savings ($2,495 per participant after 4.5 years) are less than the current cost of the programme.

It is still too early to assess the impact of the 2010 programme changes on participants' outcomes. We expect to provide early findings in 2012.

Table 20: Elapsed time to when LSV breaks even and has a positive return on income support expenditure by participation year

Participation year	Lapse Period	Break even point[b]	Positive return[c]	Recent Impact[d]	Total impact
2002-2004	6.5	3	~	$835	$1,181
2005-2006	4.5	1.5	3	*$1,315	*$2,495
2009	1.5	~	~		-$502
2010	0.5	~	~		*-$499

a: See technical notes section for an explanation of how each outcome is constructed.

b: Year the participants commenced the programme

c: The period after programme commencement that the cumulative outcomes of participants and comparison are equal. An ~ indicates this has not yet happened for the programme.

d: The change in the cumulative impact over the last two years of the outcome period. An * indicates this change exceeds one sigma of the total cumulative impact estimate.

e: Total income support savings over the lapse period for each participant cohort.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Next Steps

Continue to report on the impact of LSV: In 2012, we will continue to report on the impact of this programme and extend our analysis to include longer-term outcomes for clients.

Work Confidence

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
1766.27	1,534	1108.11	Yes	-$0.37 @4.5 yrs	Never

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalid's	Sickness	No benefit
Combined positive outcomes	–	✓	?	✓	?

See Table 11 footnotes.

Work confidence seminars are short-term courses designed specifically to provide the skills, motivation and confidence needed to help participants move into employment or undertake further training or education.

Work confidence programmes are ineffective for Unemployment Benefit recipients, but may have some benefits for those on DPB and Sickness related benefits

Overall results provide little evidence that the Work Confidence programme is effective. It is not very cost-effective and provides a negative ROI (ie participation increased income support costs rather than reducing them).

Results varied by benefit group as the programme proved effective for clients on a Domestic Purposes, Widow, or Sickness Benefit. Positive impacts came mainly in the form of increased part-time work while on benefit and programme stair-casing. In neither case did Domestic Purposes or Sickness participants spend more time independent of Work and Income assistance.

Table 21: Efficiency, impact and cost effectiveness of Work Confidence programmes

		Programme	
Efficiency	Outward Bound	Limited Services Volunteer	Work Confidence
Participation starts[a]	151	1,789	1,534
Average cost per participation start[b]	$3,896	$5,286	$1,108
Programme effectiveness			
Lapse period from participation start (years)[c]	8	1.5	4.5
Observed full impact[d,e]	Yes	No	Yes
Impact of Work Confidence programmes on primary outcomes (in weeks), [e,f]			
Combined positive outcomes[g]	7.0	*-3.1	*2.5
Independent of Work and Income Assistance	-2.4	*-6.0	*-8.4
Cost effectiveness information[h]			
Combined positive outcomes	NE	TE	$449
Independent of Work and Income assistance	NE	TE	NE
Fiscal cost-benefit analysis (income support only)			
Reduction in income support costs[i]	$1,305	*-$651	-$414
Return on Investment[j]	$0.34	NE	NE

a: Participation starts can include clients who have participated in the programme more than once in the financial year.

b: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.

c: Period after participation start date that outcomes and impacts are measured.

d: Is the outcome period sufficiently long to observe the full impact of the programme. If no, then the reported impacts understate the full positive or negative impact of the programme.

e: Estimated change in the time spent in each outcome state over the lapse period as a result of the programme (based on matching on observables impact method).

f: See technical notes section for an explanation of how each outcome is constructed.

g: Combines all positive outcomes for Work Confidence programmes and includes time spent: Off-main benefit, on Placement programmes, Tertiary study, Part-time work on benefit, on Job Search programmes, on Work Experience programmes, and on Training programme

h: The cost per participant start divided by the impact of the programme on each outcome (TE: too early to assess cost-effectiveness; NE: programme is not effective).

i: Includes main benefit, supplementary assistance and ad hoc (third tier) payments in 2011 dollars, discounted at 3.5% per annum.

j: Return is measured as the reduction in income support costs. Therefore, the return on investment is the saving in income support costs for each dollar of programme expenditure. Statistically significant positive values are shown in 2011 dollars. Positive

*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Job Search Assistance

Job search assistance involves programmes designed to improve the job search skills of participants and to ensure that job seekers, especially short-term job seekers, are active in looking for work. When combined with mutual obligations they can also have compliance effects, where people referred to assistance exit benefit rather than participate.

Job Search Initiatives

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$3,188	$2,888	$424	Yes	*$3.14 @5.0 yrs	After 1 to 3.5 years

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	—	✓	?	✓	×

See Table 11 footnotes.

Job search initiatives cover generic job search assistance provided by Work and Income. The content and nature of the assistance will vary between Work and Income offices and regions.

Table 22: Efficiency, impact and cost effectiveness of Job Search Initiatives

Efficiency	Job Search Initiatives
Participation starts[a]	2,888
Average cost per participation start[b]	$424
Programme effectiveness	
Lapse period from participation start (years)[c]	6.5
Observed full impact[d,e]	Yes
Impact of Job Search programmes on primary outcomes (in weeks), [e,f]	
Combined positive outcomes[g]	*3.1
Independent of Work and Income Assistance	-0.5
Cost effectiveness information[h]	
Combined positive outcomes	$138
Independent of Work and Income assistance	NE
Fiscal cost-benefit analysis (income support only)	
Reduction in income support costs[i]	*$1,331
Return on Investment[j]	*$3.14

a: Participation starts can include clients who have participated in the programme more than once in the financial year.

b: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.

c: Period after participation start date that outcomes and impacts are measured.

d: Is the outcome period sufficiently long to observe the full impact of the programme. If no, then the reported impacts understate the full positive or negative impact of the programme.

e: Estimated change in the time spent in each outcome state over the lapse period as a result of the programme (based on matching on observables impact method).

f: See technical notes section for an explanation of how each outcome is constructed.

g: Combines all positive outcomes for Job Search programmes and includes time spent: Off-main benefit, on Placement programmes, Tertiary study and in Part-time work on benefit.

h: The cost per participant start divided by the impact of the programme on each outcome (TE: too early to assess cost-effectiveness; NE: programme is not effective).

i: Includes main benefit, supplementary assistance and ad hoc (third tier) payments in 2011 dollars, discounted at 3.5% per annum.

j: Return is measured as the reduction in income support costs. Therefore, the return on investment is the saving in income support costs for each dollar of programme expenditure. Statistically significant positive values are shown in 2011 dollars. Positive values that are not statistically significant are considered ineffectual. A negative return is regarded as NE: programme is not effective.

*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Job Search Assistance appears to be most effective for DPB and Sickness clients

Overall results for the Job Search Assistance programme show that it is an effective programme, with a comparatively low participant cost, high cost-effectiveness, and good ROI (*$3.14 return for every dollar of programme expenditure).

By benefit group, clients on a Domestic Purposes, Widow's; or Sickness Benefit spent significantly more time in positive outcomes than their comparison groups. In contrast, the programme was ineffective for non-beneficiaries who spent less time independent of Work and Income Assistance.

We have not accounted for compliance effects for work tested clients

Job Search Assistance was ineffectual for clients on an Unemployment or Independent Youth Benefit, and no impact could be estimated for clients on an Invalid's Benefit. However, international evidence indicates that the main effect of job search programmes for these groups is through compliance. Put simply, potential participants exit benefit rather than participate in the programme (MSD, 2009).

Redundancy Support

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$134		-		Not assessed	

See Technical Notes for definitions.

Redundancy Support is a service that responds to business closures in regions. It aims to work alongside an employer to help affected staff transition into alternative jobs or training. As this programme is relatively new and also provided to non-Work and Income clients we may not be able to determine the effectiveness of this type of assistance.

Work Transition Financial assistance

Work Transition Financial assistance involves overcoming costs associated with entering employment. As these programmes and services target clients who have already achieved a positive outcome (employment), they are different in nature to assistance designed to 'make work pay'.

Transition to Work Grant

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$21,727	100,792	$217		Not assessed	

See Technical Notes for definitions.

The Transition to Work Grant is a non-taxable, non-recoverable payment that can be made to clients (or their partners), providing flexible financial assistance to help meet the additional costs of entering into employment. These costs can include job-seeking and job placement assistance, as well as short term bridging finance. The maximum amount payable is $1,500 in a 52-week period.

We cannot assess the effectiveness of the Transition to Work Grant

This grant is provided at the point of exit from benefit making it very difficult to disentangle the impact of the grant from the initial transition into work. Our analysis of the Transition to Work

Grant arrives at implausibly high ROI for this intervention. For this reason, these results are not presented in this report. An accurate assessment of the effectiveness of this grant would require a randomised trial to identify the effect of the grant on clients' off-benefit outcomes.

Seasonal Work Assistance

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$373		-		Not assessed	

See Technical Notes for definitions.

Seasonal Work Assistance provides a non-taxable payment to help clients moving into seasonal work in horticulture.

Seasonal Work Assistance is intended to encourage clients to take up seasonal horticulture work, in situations where clients may be concerned about any loss of income. This is by providing financial assistance to workers who are unable to work (and lose income), due to poor weather conditions.

Case management, Health and Information services

Work and Income also provide a range of assistance that does not directly help people into work. Often these programmes and services try to deal with issues that need to be resolved before a client can begin to move towards work.

Case Management Initiative

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$353	115	$1,472	Yes	*$1.32 @5.5 yrs	Inconsistent performance

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	✓	✓	?	?	×

See Table 11 footnotes.

The Case Management Initiative programme includes activities that provide specialist case management assistance contracted from an external third party.

Case management initiatives are cost-effective, except for non-beneficiary participants

Overall results show that the Case Management Initiative is cost-effective with a reasonably high ROI (*$1.32 return for every dollar of programme expenditure).

By benefit group, clients on Unemployment, Independent Youth, Domestic Purposes or Widow's Benefit spent significantly more time in positive outcomes than their comparison groups. In contrast, the programme was ineffectual for non-beneficiaries.

Work and Income Seminar

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$25	96,335	$3	Yes	*-$176.61 @4.0 yrs	Inconsistent performance

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	✓	✓	?	?	×

See Table 11 footnotes.

Work and Income Seminars are designed to make clients aware of all possible assistance before their case management interview, and to encourage a movement into work.

Work and Income seminars increase participation in further assistance

Current results show that, overall, the programme is not effective at increasing time off-benefit or generating income support savings (Table 23).

By benefit group, the programme does seem to be effective for clients on Unemployment; Independent Youth, Domestic Purposes or Widow's Benefit. These clients spent significantly more time in positive outcomes, primarily through programme stair-casing rather than increased time off-benefit. The programme was ineffective for non-beneficiaries.

Because of the low intensity of Work and Income seminars, we do not expect them to have a direct impact on participants' employment outcomes. In general, seminars increase participation in further employment assistance and it is through the effectiveness of these programmes that we might see any benefit.

Finally, the cost-per-participant start is an underestimate since these seminars are run by staff and we have not estimated the internal cost of delivering programmes and services.

Health Interventions: Providing Access to Health Solutions (PATHS)

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$3,129	179	$10,059	Yes	*-$0.23 @3.0 yrs	Never

See Technical Notes for definitions.

Health Interventions are programmes for clients on either Sickness or Invalid's Benefit who want to work, but need support to achieve this. In partnership with health providers, these programmes assist clients in accessing a wide range of health, employment and community services which enables clients to return to employment.

Providing Access To Health Solutions (PATHS), is an employment programme for clients on either a Sickness or Invalid's benefit who want to work but need support to achieve their objective.

PATHS appears to incur high cost with a modest impact

The PATHS programme appears to increase the time participants spend in part time work while on benefit. However, there is no sign yet that this increase in part-time work is resulting in movements into full time employment. For this reason, the programme does not have a positive impact on income support expenditure.

Career Guidance and Counselling

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$532	548	$579	Yes	*-$2.98 @6.0 yrs	Inconsistent performance

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	—	✓	?	?	—

See Table 11 footnotes.

The purpose of the Career Guidance and Counselling programme is to help clients make informed decisions about their employment and training choices by providing access to professional careers advice. It is difficult to determine the effectiveness of information services on off-benefit outcomes as they require several intermediate steps before a participant might act on the information. In addition, since careers information is widely available, the net impact of the careers advice is difficult to isolate.

Table 23: Efficiency, impact and cost effectiveness of Case Management, Health, and Information Services Initiatives

	Programme			
Efficiency	Case Management Initiative	PATHS	Career Guidance and Counselling	Work and Income Seminar
Participation starts[a]	115	179	548	96,335
Average cost per participation start[b]	$1,472	$10,059	$579	$3
Programme effectiveness				
Lapse period from participation start (years)[c]	5.5	3	6	4
Observed full impact[d,e]	Yes	Yes	Yes	Yes
Impact of Case Management programmes on primary outcomes (in weeks), [e,f]				
Combined positive outcomes[g]	*8.9	2.9	1.3	-0.5
Independent of Work and Income Assistance	-2.4	*-9.4	*-9.7	*-8.1
Cost effectiveness information[h]				
Combined positive outcomes	$165	NE	NE	NE
Independent of Work and Income assistance	NE	NE	NE	NE
Fiscal cost-benefit analysis (income support only)				
Reduction in income support costs[i]	*$1,946	*-$2,409	*-$1,724	*-$494
Return on Investment[j]	*$1.32	NE	NE	NE

a: Participation starts can include clients who have participated in the programme more than once in the financial year.
b: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.
c: Period after participation start date that outcomes and impacts are measured.
d: Is the outcome period sufficiently long to observe the full impact of the programme. If no, then the reported impacts understate the full positive or negative impact of the programme.
e: Estimated change in the time spent in each outcome state over the lapse period as a result of the programme (based on matching on observables impact method).
f: See technical notes section for an explanation of how each outcome is constructed.
g: Combines all positive outcomes for Case Management programmes and includes time spent: Off-main benefit, on Placement programmes, Tertiary study, Part-time work on benefit, on Job Search programmes, on Work Experience programmes, on Training programmes, and on Work Confidence programmes.
h: The cost per participant start divided by the impact of the programme on each outcome (TE: too early to assess cost-effectiveness; NE: programme is not effective).
i: Includes main benefit, supplementary assistance and ad hoc (third tier) payments in 2011 dollars, discounted at 3.5% per annum.
j: Return is measured as the reduction in income support costs. Therefore, the return on investment is the saving in income support costs for each dollar of programme expenditure. Statistically significant positive values are shown in 2011 dollars. Positive values that are not statistically significant are considered ineffectual. A negative return is regarded as NE: programme is not effective.
*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

It is difficult to determine if Career Guidance is effective

While the programme has a comparatively low per participant cost, it is not cost-effective and gives a negative ROI (ie participation increased income support costs rather than reducing them). By benefit group, clients on a Domestic Purposes or Widow's Benefit spent significantly more time in positive outcomes, primarily through programme stair-casing or tertiary study. The programme proved ineffectual for clients on Unemployment, Independent Youth, or non-beneficiaries, while no impact could be estimated for clients on an Invalid's or Sickness Benefit.

The issue with Career Guidance and similar information programmes is that these programmes have an indirect influence on outcomes, through changes in participant's labour market decisions. Therefore, the above negative impacts may reflect the effectiveness of participation in subsequent programmes and services other than the quality of advice. To come to a firm view on this programme's effectiveness will require a randomised trial to assess its impact.

Vocational Services

MSD contracts with community-based organisations to provide vocational services for people with disabilities.

Vocational Service Employment

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$33,669	8,384	$4,275	Yes	*$0.55 @6.0 yrs	Never

See Technical Notes for definitions.

Impact on	UB and IYB	DPB WB	Invalids	Sickness	No benefit
Combined positive outcomes	?	?	✓	✓	×

See Table 11 footnotes.

MSD contracts with community-based organisations to provide vocational services for people with disabilities. Clients employed in a contracted business enterprise (formerly known as approved sheltered workshops) are considered to be working in sheltered employment for Invalid's Benefit purposes.

Table 24 Efficiency, impact and cost effectiveness of Vocational Services Employment

Efficiency	Programme Vocational Services Employment
Participation starts[a]	8,384
Average cost per participation start[b]	$4,275
Programme effectiveness	
Lapse period from participation start (years)[c]	6
Observed full impact[d,e]	Yes
Impact of Vocational Services programmes on primary outcomes (in weeks), [e,f]	
Combined positive outcomes[g]	*17.4
Independent of Work and Income Assistance	*-43.9
Cost effectiveness information[h]	
Combined positive outcomes	$246
Independent of Work and Income assistance	NE
Fiscal cost-benefit analysis (income support only)	
Reduction in income support costs[i]	*$2,342
Return on Investment[j]	*$0.55

a: Participation starts can include clients who have participated in the programme more than once in the financial year.

b: Based on the last three financial years of programme expenditure (nominal dollars) and participation starts.

c: Period after participation start date that outcomes and impacts are measured.

d: Is the outcome period sufficiently long to observe the full impact of the programme. If no, then the reported impacts understate the full positive or negative impact of the programme.

e: Estimated change in the time spent in each outcome state over the lapse period as a result of the programme (based on matching on observables impact method).

f: See technical notes section for an explanation of how each outcome is constructed.

g: Combines all positive outcomes for Vocational Services programmes and includes time spent: Off-main benefit, on Placement programmes, Tertiary study, Part-time work on benefit, on Job Search programmes, on Work Experience programmes, on Training programmes, on Work Confidence programmes, and on Information services programmes.

h: The cost per participant start divided by the impact of the programme on each outcome (TE: too early to assess cost-effectiveness; NE: programme is not effective).

i: Includes main benefit, supplementary assistance and ad hoc (third tier) payments in 2011 dollars, discounted at 3.5% per annum.

j: Return is measured as the reduction in income support costs. Therefore, the return on investment is the saving in income support costs for each dollar of programme expenditure. Statistically significant positive values are shown in 2011 dollars. Positive values that are not statistically significant are considered ineffectual. A negative return is regarded as NE: programme is not effective.

*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Vocational Service Employment successfully increases part time work while on benefit

While Vocational Services Employment is cost-effective ($246) it has a low ROI ($0.55 return for every dollar of programme expenditure) (Table 24). This programme also has a comparatively high per participant cost. The main impact of the programme is to increase part time work while on benefit. Increased part time work can reduce income support costs through benefit abatements, but such reductions are modest compared to when a client moves off income support entirely.

By benefit group, the programme was effective for the target group of clients on an Invalid's or Sickness Benefit who spent significantly more time in positive outcomes than their comparison groups. In contrast, the programme was ineffective for non-beneficiaries.

Youth Assistance

Mayors Task Force for Jobs

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$471	46	$13,287		Not assessed	

See Technical Notes for definitions.

The Mayors Taskforce for Jobs (MTFJ) is a nationwide network of Mayors with a focus on youth employment and engagement in local communities. MSD is one provider of project funding for initiatives that support Taskforce goals at the local level.

We have not undertaken an evaluation of this initiative.

Youth Transition Services

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$2,525	307	$48,707		Not assessed	

See Technical Notes for definitions.

Youth Transition Services (YTS) is a service which assists young people into further education, training, work or other meaningful activities. The goal of the service is to improve a person's long-term independence and wellbeing. YTS is offered by local providers funded by MSD. From June 2012 YTS will be incorporated into Youth Pipeline.

We have not undertaken a further evaluation of YTS. However, an evaluation carried out by MSD (MSD, 2008) found that YTS was positively viewed by both youth participants and stakeholders. The evaluation also showed that 61 per cent of young people engaged in the initiative exited with a positive outcome, which included paid employment, training, a return to school, and tertiary education. However, the evaluation did not estimate what impact YTS had on these outcomes.

Migrant assistance

Migrant Employment Assistance

Expenditure (,000)	Participants	Per participant cost	Observed full impact	Average ROI	Break-even point
$782	1,641	-	Not assessed		

See Technical Notes for definitions.

The Migrant Employment Assistance programme provides funding for projects that work with recognised migrant communities to develop the skills needed to access the labour market. The programme provides access to information, advocacy and mentoring to improve employment outcomes for both individuals and communities as part of improving settlement outcomes.

We have not undertaken an evaluation of the Migrant Employment Assistance programme.

Technical notes

The Centre for Social Research and Evaluation (CSRE), MSD, draws on administrative data collected in the course of Work and Income's (W&I) daily business. This is a rich source of data with which to monitor the performance of employment assistance. The technical notes describe the methodology, and performance measures used in this report, in more detail.

Impact estimation: propensity matching

To estimate whether assistance improved participants' likelihood of achieving a positive outcome, we ask the counterfactual question: what outcomes would have occurred had the participant not participated in the programme or service?

By definition, it is not possible to observe the counterfactual outcomes of participants. The solution is to identify a proxy for the counterfactual, usually a group of non-participants whose outcomes are used for comparison purposes. The challenge is to ensure that the outcomes for the proxy is an accurate representation of participants' counterfactual outcomes. Specifically, other than programme participation, are there other reasons for any differences between the outcomes of participants and those of the comparison group (ie selection bias)? There is no foolproof means to remove selection bias; rather, various methods are able to control for it to a greater or lesser degree.

In general, randomisation is considered the best method to estimate the counterfactual outcomes of participants (ie it requires fewer assumptions than alternative approaches). However, it is also a difficult method to implement since it requires direct intervention in the delivery of programmes. Specifically, we would need to randomly assign potential participants into a control group, a practise that is often difficult to do successfully within the context of a case manager client relationship. For this reason, countries often rely on other methods to estimate the impact of employment programmes and services.

Matching on observable characteristics

One common alternative to randomisation is to estimate the counterfactual by constructing a matched group of non-participants who have the same (or similar) characteristics as the participants. The simplest method is to find a non-participant with an identical profile to that of each participant. However, such methods are limited by the probability that two people share the same set of observable characteristics (and is unnecessarily restrictive).[4] The more characteristics included in the match, the less likely that for each participant there is a matching non-participant. As a result, these methods require the arbitrary selection of only a few matching variables.

An alternative approach, used in this analysis, involves a logistic regression model to regress observable characteristics against programme participation. Logistic regression produces an estimate of the probability that a given client is a participant in a programme. It is possible to use this probability (called "the propensity score") to match participants and non-participants based on the similarity of their propensity scores. If the propensity score is properly specified, the participants and matched comparison groups will have a similar observable characteristic profile (eg similar duration, benefit type, age, number of children).

Conditional Independence Assumption

The Conditional Independence Assumption (CIA) states that controlling for differences in observable characteristics between the participant and comparison groups also controls for unobserved differences between the two groups. Estimating the impact by controlling for observable characteristics requires that the CIA hold. If it holds, the only statistically significant difference between the participant and comparison groups will be their participation in the programme. Any resulting estimates would be unbiased. In other words, the only explanation of differences in outcomes between the two groups would be whether they participated in the programme. If the CIA fails, the estimate will be biased. Here differences in outcomes could be due to unobserved differences between participants and their comparisons, as well as the impact of the programme.

The main limitation of this method is that it relies on available and measurable information about people eligible to receive Work and Income Assistance. It is rare that comprehensive information exists about the types of people who participate in the programme or those who could form part of the comparison group. The analysis relies on the information available on MSD's administrative databases. This increases the risk of biased estimates. The second limitation of the CIA is that it is not possible to determine whether it has been violated or to what extent if it has.

Table 25 summarises the variables included in the propensity matching of the comparison group to programme participants. The emphasis is on historical variables and, in particular, the four years prior to the start date.[5]

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[4] Within a randomised control treatment group, the two groups share the same statistical profile, not that each treatment group member has an identical twin in the control group.

[5] Start date refers to the date participants commenced the programme (the actual date is usually three days prior to recorded participation start) or the date the non-participants were selected for inclusion in the comparison group.

Table 25: Observable characteristics included in the propensity matching of the comparison group

Area	Variable	Presentation of variable in the analysis
Demographics	Gender	Female, Male
	Age	Age in years
		Age group (16–<18 yrs,18–<20 yrs, 20–<25 yrs, 25–<30 yrs, 30–<35 yrs, 35–<40 yrs, 40–<45 yrs, 45–<50 yrs, 50–<55 yrs, 55–<60 yrs, 60–<65 yrs)
	Ethnicity	Māori, NZ European, Pacific people, Other, Unspecified
Residency	Migrant	Yes, No
	Current Migrant	Yes, No
	English preferred	Yes, No
	Refugee	Yes, No
	Time in NZ	1–2 yrs, 4–8 yrs, 8–12 yrs, 12+ yrs, New Zealand
Labour market skills	Education	None; NCEA Lvl 1, <80 credits, NCEA Lvl 1, 80+ credits; NCEA Lvl 2; NCEA Lvl 3; Other school qualifications; NCEA Lvl 4; Post-secondary; Degree/prof qualifications
	Numeracy literacy barrier	Yes, No
	Language verbal barrier	Yes, No
	Income in six months prior to benefit commencement	No income, Under $250, $250 to $499, $500 to $749, $750 to $999, Over $1,000
Family status	Client has an identified partner	Yes, No
	Age of youngest child	0–5 yrs, 6–13 yrs, 14+ yrs, No child
	Number of children	Categorical (ie No child, 1 child, 2 children, etc)
Health and disability	Employment barriers identified: Disability, Alcohol and drug, Intellectual, Mental illness, Mobility and agility, Sensory, Unspecified (7 variables)	Yes, No
	Number of current incapacities	0 incapacity, 1 incapacity, 2 incapacities, 3 incapacities, 4 incapacities
	Primary incapacity	Unspecified, No incapacity, Cancer, Intellectual, Schizophrenia, Congenital, Alcohol, Anxiety, Anxiety Depression, Circulatory Not Further Defined (NFD), Circulatory Other, Depression, Diabetes, Drugs, Endocrine Other, Heart Disease, Infectious Parasitic, Mental Other, Nervous Epilepsy, Nervous Other, Non Organic Psychoses NFD, Stress, Nervous Hearing, Nervous Sight, Stroke, Blood Diseases, Mental NFD, Bipolar, Genitourinary, Injury NFD, Injury Other, Musculoskeletal NFD, Respiratory NFD,Vertebral Column, Skin, Digestive, Musculoskeletal Other, Pregnancy Normal, Pregnancy Complications, Arthropathies Osteopathy, Fractures Dislocations, General, Respiratory Chronic obstructive pulmonary disease (COPD), Rheumatism Not Back, Strains Sprains. Respiratory Other
	Current incapacity 1 to 4 (4 variables)	Same as primary incapacity
	Identified incapacity in the previous five years: Unspecified, No incapacity, Cancer, Intellectual, Schizophrenia, Congenital, Alcohol, Anxiety, Anxiety Depression, Circulatory NFD, Circulatory Other, Depression, Diabetes, Drugs, Endocrine Other, Heart Disease, Infectious Parasitic, Mental Other, Nervous Epilepsy, Nervous Other, Non Organic Psychoses NFD, Stress, Nervous Hearing, Nervous Sight, Stroke, Blood Diseases, Mental NFD, Bipolar, Genitourinary, Injury NFD, Injury	Yes, No

Area	Variable	Presentation of variable in the analysis
	Other, Musculoskeletal NFD, Respiratory NFD, Vertebral Column, Skin, Digestive, Musculoskeletal Other, Pregnancy Normal, Pregnancy Complications, Arthropathies Osteopathy, Fractures Dislocations, General, Respiratory COPD, Rheumatism Not Back, Strains Sprains. Respiratory Other	
	Invalid's Benefit reassessment period	Never, 2 years, 5 years, Not indicated, Not applicable
	Medical assessment of time until part time work	Now, <1 month,1-<3 month, 3-<6 months, 6 or more months, Unlikely in the foreseeable future, No indication, Not applicable.
	Medical Assessment of time to selected duties	
	Medical Assessment of time to work planning	
Labour market context	Territorial local authority area	64 categories
	Work and Income region	12 categories
	Quarter of start date	2004Qtr1, 2004Qtr2, 2004Qtr3, etc
Other	Ex-prisoner	Yes, No
	Time since last prison event	No duration, < 3 months, 3-6 months, >6 mths-1 yr, >1-2 years, >2-3 years, >3-4 years, >4-5 years, >5-6 years, >6-8 years, >8-10 years, Over 10 yrs
Independence from Work and Income Assistance	Dependent on Work and Income Assistance in each of the 48 months prior to start date (48 variables)	Yes, No
Benefit information	Current benefit	Unemployment/Independent Youth, Domestic Purposes/Widow's/Emergency, Sickness, Invalid's, Supplementary only, No benefit
	Primary status	Primary, Partner, Single
	Current benefit status	Current, Cancelled, Suspended, Registered, No benefit
	Duration on current benefit	Categorical (<=3 months, >3–6 months, >6–12 months, >1–2 years, >2–4 years, >4–6 years, >6–8 years, >8–10 years, Over 10 yrs, No duration)
	Continuous duration on benefit	Continuous (days)
	Duration off-benefit	Categorical (<=3 months, >3–6 months, >6–12 months, >1–2 years, >2–4 years, >4–6 years, >6–8 years, >8–10 years, Over 10 yrs, On benefit)
		Continuous (days)
	Last benefit	On benefit, Unemployment/, Independent Youth, Domestic Purposes/Widow's/Emergency, Sickness, Invalid's, Supplementary only, No benefit
	Years on main benefit over previous 10 years	Categorical (0 years, <1 year, 1 year, 2 years, …, 10 years)
	OnBenAt18	Yes, No, Too old
	Benefit status in each of the 48 months prior to start date (48 variables)	Unemployment, DPB related, Sickness, Invalid's, NZSuper Vets TRB, Widow's, Youth, No benefit
	Duration on each main benefit group: Unemployment/Independent Youth, Domestic Purposes/Emergency, Widow's, Sickness, Invalid's	Categorical (<=3 months, >3–6 months, >6–12 months, >1–2 years, >2–4 years, >4–6 years, >6–8 years, >8–10 years, Over 10 yrs, No duration)
		Continuous (days)
Register duration	Current register duration (if participated before 2007)	Categorical (<=3 months, >3–6 months, >6–12 months, >1–2 years, >2–4 years, >4–6 years, >6–8 years, >8–10 years, Over 10 years, Unspecified)
		Continuous (days)

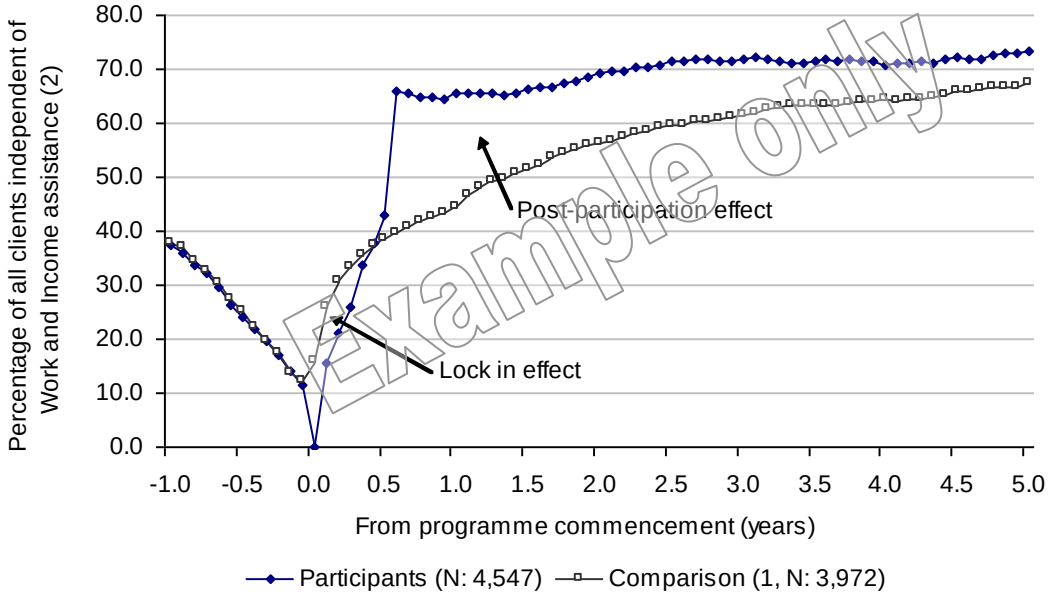
Area	Variable	Presentation of variable in the analysis
Employment programme participation	Current participation in: Into-work support, Job search, Matching and placement, Training, Wage subsidy, Work confidence, Work experience, Other (8 variables)	Yes, No
	Participation in the previous 5 years in: Into-work support, Job search, Matching and placement, Training, Wage subsidy, Work confidence, Work experience, Other (8 variables)	No participation, Under 1 month, 1 to 3 months, 3 to 6 months, 6 months to 1 year, 1 to 2 years
	Programme participation in each of the 48 months prior to start date (48 variables)	Into-work support, Job search, Wage subsidy, Work confidence, Work experience, Training, Matching and placement, Other, No participation
Participation in tertiary study	Received student loans or allowances in each of the 48 months prior to start date (48 variables)	Yes, No
	Proportion of time receiving student loans and allowances in last 5 years or since 2000	Categorical (0 years, <1 year, 1 year, 2 years, …, 5 years)
Part-time work	Average weekly declared earnings in each of the 48 months prior to start date (96 variables)	Categorical (No income, >$0–$80, >$80–$180, >$180–$300, >$300) Continuous (nearest dollar)

Cumulative outcome measure

How clients' outcomes are measured can influence the conclusions about a programme or service's effectiveness. In this report, we present clients' outcomes using a cumulative measure (eg the cumulative proportion of time clients spent Independent of Work and Income Assistance in the first year after starting the programme). An alternative would be to measure the proportion of clients Independent of Work and Income Assistance exactly one year after starting a programme. The problem with the latter "point in time" (or "as at") measure is that it ignores changes in clients' outcomes over time and therefore presents a partial picture.

Figure 6 illustrates the difference between "point in time" and cumulative measures using an example programme. Figure 6 tracks the outcomes of a group of programme participants and a matched comparison group. Taking a "point in time" approach, the impact of the programme varies considerably over time. In the first three months after starting the programme, participants' outcomes are **less** than those of the comparison group, implying a negative impact. However, at one year the situation is reversed, with participants' outcomes exceeding those of the comparison group. From this point, the size of the programme's impact will vary according to the lapse period selected.

Figure 6: Proportion of participants and comparison[1] independent of Work and Income Assistance[2] over time



1: Comparison group is matched to participants based on observed characteristics of participants at programme start.
2: No longer receiving a main benefit (eg Unemployment Benefit) or Work and Income employment assistance (eg wage subsidy).

The cumulative impact measure calculates the total time participants are off-benefit at each lapse period (see Table 26). After six months (lapse period 0.5), the participant and comparison groups had spent about the same amount of time independent of Work and Income Assistance. However, since participants' outcomes exceed the comparison group after this time (see Figure 6), the cumulative impact steadily increases steadily over each successive lapse period.

Lock-in effect and post-participation effect

Related to measuring outcomes cumulatively are the concepts of programme lock-in (or 'locking-in') and post-participation effects. To help understand these two concepts, Figure 6 shows the impact of an example programme on the time participants spend Independent of Work and Income Assistance. The lock-in effect occurs during the time participants are on the programme, and generally means participants are less likely to become independent of Work and Income Assistance. To take up the example programme, participants spend an average of three months on the programme (from lapse period 0 to 0.3 in Figure 6). As the figure shows, during this period there are fewer participants independent of Work and Income Assistance than those of the comparison group.

The post-participation effect is the benefit of the programme. In the example, Figure 6 demonstrates that the programme had a large positive post-participation effect from about six months after commencing the programme. After this point (lapse period 0.6 onwards), the outcomes of participants exceed those of the comparison by a wide margin.

The cumulative impact is the sum of the lock-in and post-participation effects. By definition, for a programme to have a positive cumulative impact the post-participation effect has to exceed the lock-in effect.

Table 26: An example of the impact[a] of an illustrative programme on the cumulative time participants spend independent of Work and Income Assistance[b]

Lapse period (years)	Time spent independent of Work and Income Assistance over each lapse period					
	Participants		Comparison		Impact	
	Weeks	% of lapse period	Weeks	% of lapse period	Weeks	% of comparison
0.5	6.7	26%	8.2	32%	-1.5	-19%
1.0	23.4	46%	18.9	37%	4.5	24%
1.5	40.3	52%	31.4	41%	8.8	28%
2.0	57.6	56%	45.4	44%	12.3	27%
2.5	75.7	59%	60.3	47%	15.4	25%
3.0	94.1	61%	75.9	49%	18.2	24%
3.5	112.5	63%	92.0	51%	20.6	22%
4.0	130.9	64%	108.4	53%	22.5	21%
4.5	149.3	65%	125.0	54%	24.3	19%
5.0	167.9	65%	142.1	55%	25.8	18%

a: Impact estimates are based on matching on observables method.

b: Independent of Work and Income Assistance means a person is no longer receiving a main benefit or participating in Work and Income employment programmes.

Measuring the effectiveness of employment and training programmes

An outline of the measures used are listed below, including how they are constructed, guidance on interpretation and limitations.

Efficiency: cost per participant start

The cost of delivering assistance at an individual participant level (cost per participant start). We use participation starts in the financial year as a measure of the number of participants in the programme and divide this by the total expenditure on the programme or service.

Efficiency measures the cost of delivering the programme at an individual participant level. We use participation starts over the last three financial years and divide this by the total (real) expenditure on the programme for the same three financial years. The product is the average cost per participant start. Using data over three financial years evens out annual fluctuations in either participant starts or expenditure on the programme. All costs are given in 2011 dollars.

There is one exception to this. For Training Opportunities (TOPS), we have calculated cost per participant start using TEC participant start data over the three financial years 2006/07, 2007/08 and 2008/09. We did this because of a long standing problem with MSD under-recording client's participation in TOPs, an issue that became more acute after 2009. At the time of preparing this report we had direct Training Opportunities participation information from TEC for the period until the end of 2009. For this reason we chose to calculate per participant costs for an earlier period. Another reason for choosing this period is that it preceded announcements on the changes to Training Opportunities, which affected participation in the programme over this period.

Results for TOPs calculated using historic TEC participation starts give a more accurate picture of actual costs per participant. There are a number of data quality concerns around MSD participation start data in TOPs including incomplete data collection by training providers; data exchange issues between TEC and MSD; and the impact of policy changes announced mid-2010 to the TOPs programme.

There are, however, several outstanding issues with the cost-per-participant start measure.

Participant starts: we use participation starts rather than individual participants to account for multiple participation spells by a single individual. Participation starts are invariant to the period being considered (eg month or year), while the number of individual participants depends on the period (ie the probability an individual participates more than once in a programme increases with the time interval).

Further, there are different views on what criteria define a programme participation spell. For example, some might want to exclude instances where people only spend a brief period on the programme, or in the case of a wage subsidy, no payment was made. However, the complexity of participation data recording has meant favouring the relatively simple criteria of including all participation starts irrespective of what subsequently happens on the programme. This is consistent with randomised trials where potential participants are allocated to treatment and control groups before they commence the programme. Therefore, even in these randomised trials, not all participants commence or complete the programme.

Finally, participation in employment and training programmes is recorded across several administrative systems within MSD and other agencies. It is technically difficult to arrive at consistent figures on the number of participation starts. This is one reason inconsistencies sometimes arise in the reported number of participation starts.

Overhead costs: based on financial data we can identify the direct costs associated with programmes. For example, the amount of wage subsidy expenditure or amount spent on contracted services. What is less clear is a measure of the internal costs involved in administering these programmes. At present MSD has not estimated the costs involved in administering employment assistance. As a result, the cost per participant start is an underestimate of the true programme cost.

Effectiveness: impact on time in a positive outcome or independent of Work and Income

Effectiveness is based on the impact that the programme has on participants' outcomes. In this analysis, we introduce two outcome measures: combined positive outcomes and time off main benefit.

Combined Positive Outcome is a global measure that attempts to capture all positive outcomes for a given programme. The measure ranks outcomes (including employment programmes themselves) according to their proximity to full-time employment (see Table 27, page 56). For a given programme, the Combined Positive Outcomes measure includes all outcomes that are closer to full-time employment than the evaluated programme. . For example, for Training Opportunities, which is defined as a Training Programme (level 9), the Combined Positive Outcomes measure includes the outcomes identified in levels 1 to 8. In cases where positive outcomes occur at the same time, this period is counted only once.

Independent of Work and Income Assistance is a more direct measure of employment and looks at spells when people are no longer receiving a benefit (eg Unemployment, Domestic Purposes, Sickness or Invalid's) or receiving employment assistance (eg a wage subsidy). Note that people on benefit are not necessarily receiving their full entitlement. For example, benefits are offset for declared earnings as well when payments are suspended for periods of less than eight weeks. For this reason, the measure overstates the time people are receiving some income support through their benefit entitlement.

To determine whether a programme is effective, we have to estimate what outcomes participants would have achieved if they had not participated in the programme (ie the counterfactual). For most employment programmes covered in this analysis, we use a comparison group matched to each group of programme participants. The comparison group has the same observable

characteristics as the participants when they start the programme. Any difference in the outcomes between participants and the comparison group is assumed to be due to the programme. In other words, if participants' outcomes are better than the comparison groups, then the programme has a positive impact and is judged to be effective in increasing participants' outcomes (see page 47 for more detail on how outcome and impact measures were calculated).

Our analysis has not accounted for non-participant impacts. In particular, the size of potential substitution effects of hiring subsidies and job search assistance and displacement effects of self-employment assistance and work experience programmes. These issues are discussed in the relevant sections below.

Cost-effectiveness: cost per impact

Cost-effectiveness is the cost per participant start divided by the additional weeks off-benefit or combined positive outcomes. The measure states how much it costs to increase the time participants spend in the outcome by one week. Based on this measure, the lower a programme's cost per impact the more cost-effective it is. Where programmes have no significant impact or are ineffective, no cost per impact value can be calculated since the programmes are, by definition, not cost-effective.

Cost-benefit: reduction in income support expenditure

Cost-benefit involves placing a dollar value on the impact of employment and training programmes. In this analysis, we take a fiscal perspective (ie government rather than participants or society as a whole). At present, we only have reliable information on income support expenditure. We calculate a return on investment (ROI) by dividing the reduction in income support expenditure by the cost per participant start. A value above $1 indicates the reduction in income support expenditure exceeds the programme cost.

This report's cost-benefit calculation is basic and does not include a number of important components.

Other benefits: alongside a reduction in income support costs, we could also include income tax and tax credits administered by Inland Revenue. Smaller benefits might include reduction in Work and Income administration costs and employment assistance. On the other hand, it is less clear how to include positive outcomes that incur fiscal costs (eg tertiary study) or difficult to value outcomes, such as reduced criminal behaviour or improved health and well being.

Discounting: the reduction in income support expenditure have been discounted by 3.5 per cent per annum based on The Treasury's assumed risk free real rate of return (Treasury, 2010).

Additional costs: as noted earlier, we have not included all costs in programme delivery or substitution and displacement effects that would reduce the overall impact of the programme. For example, if programme participants are more likely to subsequently participate in wage subsidy programmes this would offset the reduction in income support.

Lapse period from participation start

We measure participants' outcomes from when they start a programme. From experience, outcomes measured over relatively short periods (less than two years) do not provide a full picture of the difference a programme makes to participants' outcomes.

Combined Positive Outcomes

The Combined Positive Outcomes measure attempts to capture all positive outcomes for a given programme. It provides a common measure to compare different types of employment and training assistance.

Table 27: Combined Positive Outcome levels

Combined Positive Outcomes level	Outcome	Comments
1	Full-time employment	Cannot be reliably measured using MSD administrative data.
2	Independent of Work and Income Assistance	Proxy measure for people achieving full-time employment.
3	Placement programmes: Self-employment assistance, wage-subsidies, in-work support, training for pre-determined employment, subsidised work experience	These programmes are designed to move people into unsubsidised employment.
4	Tertiary study	Unfunded through Work and Income. Based on receipt of Student Loans or Allowances.
5	Off-benefit	People can be off main benefit, but continue to receive employment assistance (see level 3).
6	Part-time work whilst on benefit	Based on declared earnings from work.
7	Job search programmes	Includes Job Search Service programme.
8	Work experience programmes	Includes Taskforce Green, unsubsidised work placement and Activity in the Community.
9	Training programmes	Funded by Work and Income (eg Training Opportunities and Skills Training).
10	Work confidence programmes	Includes Outward Bound and Limited Services Volunteers.
11	Information services and case management	Includes Careers Advice.
12	Health interventions	Includes PATHS

Main benefit

Main benefits include:

- Domestic Purposes Benefit - Care of Sick or Infirm
- Domestic Purposes Benefit - Sole Parents
- Domestic Purposes Benefit - Women Alone
- Emergency Benefit
- Emergency Maintenance Allowance
- Independent Youth Benefit
- Invalid's Benefit
- Sickness Benefit
- Unemployment Benefit
- Widow's Benefit.

Independent of Work and Income Assistance

'Independent from Work and Income Assistance' means a person is no longer receiving a main benefit (eg Domestic Purposes, Unemployment, Sickness or Invalid's) or participating in a W&I

employment programme. People receiving supplementary income assistance but not on a main benefit are defined as being Independent of Work and Income Assistance.

Independent of Work and Income Assistance is our proxy indicator for full-time employment. However, it has some drawbacks. In particular, there are many reasons people are independent of Work and Income assistance other than employment, and some of these are negative or neutral (eg prison, death and emigration). Our assumption is that any impact on Independence from Work and Income Assistance is primarily through the programme changing the length of time participants are in full-time employment.

Time off main benefit

'Time off main benefit' measures the time a person spends not in receipt of a main benefit – but they can still be receiving supplementary assistance. Off main benefit differs from Independent of Work and Income Assistance in that off main benefit includes people participating in W&I employment programmes.

Tertiary study

We define a person as being in 'tertiary study' where they have either drawn down funding for a student loan or received student allowance payments. The duration of study is defined either by the duration the student loan is active (and reflects the period of study) or when a person receives student allowance payments, whichever is greater. The measure will miss instances where a person undertakes study without recourse to either loan or allowance funding. In addition, the duration of student loan and allowance payments may not always accurately reflect the actual time a person is studying. An obvious example is where a person ends a course prematurely before completion.

Part-time work whilst on benefit

This measure is based on declared earnings from work when a person is receiving a main benefit. All clients receiving a main benefit and in part-time work must regularly declare supplementary income. There is likely to be under-reporting of earnings from work and therefore our measure will underestimate the actual level of part-time work whilst on benefit.

Programme stair-casing

'Stair-casing' is based on the idea of moving people through a logical sequence of programmes to move them into employment. The purpose of the programme stair-casing measure is to provide an indication of whether stair-casing has occurred. The measure uses the same ranking of employment programmes as the Combined Positive Outcomes (see Table 27). Any time spent in programmes at levels closer to full-time employment than the programme being evaluated The measure is indicative only as it does not take into account the sequence of subsequent programmes or the time between programme participation spells.

Repeat participation in the same programme type

Repeat participation in the same programme type shows whether people are repeating a programme. In some instances, this may be appropriate; for example, Training Opportunities and Training Incentive Allowance (TIA) often involve several repeat spells to complete the training or education course.

Income support expenditure

Income support expenditure is based on current Social Welfare Information For Tomorrow Today (SWIFTT) data. Expenditure is net of tax payment for main benefits, offsets for declared earnings or when benefit payments are suspended, but not for offsets to repay debt. If there are retrospective changes to benefit payments these are included in the analysis. Supplementary assistance and third tier assistance includes non-recoverable assistance only. Employment-related expenditure paid through SWIFTT (ie TIA, Transition to Work Assistance and Course Participation Assistance Programme) are excluded from income support expenditure.

Income support expenditure is expressed in real 2011 dollars using the Statistics New Zealand Consumer Price Index. The conversion of nominal to real was based on the following formula:

$$IS_r^q = IS_n^q / CPI^q$$

Where:

IS_r^q =Real income support costs that fall in quarter period q

IS_n^q = Nominal income support costs that fall in quarter period q

CPI^q = Statistics New Zealand Consumer Price Index indexed from Quarter 2 2011.

The SNZ Consumer Price Index was accessed from http://www.stats.govt.nz/infoshare/.

Fiscal cost-benefit analysis

The analysis of the fiscal cost benefit considers only the cost of income support. Other related costs of benefit administration have not been included at this point. In addition, fiscal cost and benefits from other government activities have not been accounted for (eg income tax from increased earnings). Conversely, the fiscal costs only include the direct cost of the programme and service and do not account for any overhead costs involved.

Income support costs are discounted based on lapse period from programme commencement. Therefore, costs and benefits that occur in the long term have a lower net present value than those that occur in the short term. Discount rate reflects the opportunity cost of investing in employment assistance over alternative investments.

$$IS_c^l = \frac{IS_r^l}{1 + DR^{ls+lp*0.5}}$$

Where:

IS_c^l = discounted income support costs at lapse period l

IS_r^l = real income support costs at lapse period l

DR = annual real discount rate

ls = lapse period start

lp = lapse period duration.

The discount rate used in this analysis is 3.5 per cent per annum based on Treasury's assumed real risk-free long-term rate of return (Treasury, 2010).

Participation in employment programmes and services

Table 28: Recorded participation starts for employment programmes and services included in the analysis

Programme type	Programme	2008/2009	2009/2010	2010/2011
	Training Opportunities	18,398	14,406	-
	Training For Work			4,710
	Foundation Focussed Training		663	7,355
Training programmes	Skills Training	3,498	1,528	826
Case Management	Case Management Initiative	1,925	420	115
Health Interventions	PATHS	676	318	179
Information Services	Career Guidance and Counselling	1,659	2,110	548
	Transition To Work Grant	80,735	106,852	100,792
Into Work Support	Seasonal Work Assistance			
	Job Search Assistance	8,198	5,029	2,888
Job Search	Redundancy Support			
Matching	Employment Placement or Assistance Initiative	298	6,590	10,424
Matching Subsidy	Skill Investment Subsidy	6,490	3,380	3,112
	Enterprise Allowance	575	373	142
	Business Training And Advice Grant	776	524	191
Self Employment Assistance Subsidy	Be Your Own Boss	443	601	248
	Self Employment Initiative	764	273	151
	Course Participation Grant	5,322	8,679	8,335
Tertiary Study	Training Incentive Allowance	13,221	6,683	3,539
	Straight 2 Work	2,728	1,852	1,738
	CadetMax		157	299
Training for pre-determined employment	Jobs With A Future	288	250	253
	Local Industry Partnerships	296	390	758
	Vocational Service Employment	9,310	8,561	8,384
Vocational Services	Mainstream Employment Programme	2	30	551
	Limited Service Volunteers	655	1,156	1,789
	Outward Bound	147	163	151
Work Confidence	Work Confidence seminars	4,373	3,053	1,534
	Activity in the Community	460	347	282
	Community Employment	217	10	
Work Experience Community	Cycleways Project		-	-
Work Experience Community Subsidised	Taskforce Green	688	298	365
	Community Max		3,696	1,358
Work Experience Trial	Work Experience Trial	196	346	380
Work Experience Trial Subsidised	Job Ops		6,254	5,560
Migrant Assistance	Migrant Employment Assistance	1	5	20
	Mayors Task Force	59	2	46
Youth programmes	Youth Transition Services	25	199	307

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Cost of employment assistance

The estimation of the cost of delivering employment assistance was based on financial data. However, linking financial information to programmes is not always straight forward. Specifically, for several types of employment assistance are not identified in financial records (ie in house case management activities). Further, even if direct costs are known, the associated overhead costs

are not. We are planning to undertake further work to incorporate these overhead costs in future updates of this analysis.

Table 29: Expenditure on employment programmes and services included in the analysis

Programme type	Programme	2008/2009	2009/2010	2010/2011
Training programmes	Training Opportunities	$89,850,109	$86,021,782	$50,836,050
	Training For Work			$15,191,663
	Foundation Focused Training			$18,203,950
	Skills Training	$9,862,478	$1,013,362	$239,295
Case Management	Case Management Initiative	$2,661,679	$365,006	$352,608
Health Interventions	PATHS	$4,288,640	$3,747,494	$3,128,793
Information Services	Career Guidance and Counselling	$739,263	$1,090,170	$532,458
Into Work Support	Transition To Work Grant	$16,444,841	$21,351,815	$21,727,040
	Seasonal Work Assistance	$181,621	$293,564	$373,189
Job Search	Job Search Assistance	$236,632	$3,135,992	$3,188,368
	Redundancy Support	$106,079	$169,307	$134,485
Matching	Employment Placement or Assistance Initiative		$7,048,044	$13,684,687
Matching Subsidy	Skill Investment Subsidy			$201,463
Self Employment Assistance Subsidy	Enterprise Allowance	$4,596,529	$3,167,498	$1,019,506
	Business Training And Advice Grant	$230,581	$199,787	$72,098
	Be Your Own Boss	$458,663	$986,089	$414,344
	Self Employment Initiative	$848,982		$304,762
Tertiary Study	Course Participation Assistance Programme	$1,013,189	$1,731,086	$1,750,940
	Training Incentive Allowance	$29,559,983	$17,603,061	$9,441,775
Training for pre-determined employment	Straight to Work	$7,676,642	$5,989,017	$6,504,925
	Cadet Max		$364,340	$1,074,772
	Jobs With A Future	$352,364	$1,007,106	$1,609,457
	Local Industry Partnerships	$3,690,228	$1,620,341	$1,835,051
Vocational Services	Vocational Service Employment			$9,615,119
	Mainstream Employment Programme	$2,498,700	$3,619,974	$3,198,260
Work Confidence	Limited Service Volunteers	$1,362,327	$6,200,000	$10,752,889
	Outward Bound	$581,554	$581,554	$540,066
	Work Confidence seminars	$5,197,553	$2,369,891	$1,766,271
Work Experience Community	Activity in the Community	$161,728	$136,964	$113,180
	Community Employment	$7,844,922	$5,395,532	$1,804,329
	Cycleways Project		$196,031	$338,271
Work Experience Community Subsidised	Taskforce Green	$3,280,917	$1,847,579	$1,599,045
	Community Max		$36,362,176	$15,734,841
Work Experience Trial	Work Experience Trial	$339,762	$592,444	$523,378
Work Experience Trial Subsidised	Job Ops		$17,512,865	$20,366,182
Migrant Assistance	Migrant Employment Assistance	$327,187	$824,704	$761,523
Youth programmes	Mayors Task Force	$435,395	$444,079	$470,693
	Youth Transition Services	$10,248,063	$11,524,567	$2,525,486

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Displacement and substitution effects

The two terms are often used interchangeably and some authors reverse the definitions used here. Our definitions are:

- Substitution: programmes that help participants into employment at the expense of non-participants.
- Displacement: where a programme helps improve a firm's competitiveness leading to the loss of employment among competing firms.

Both these effects can offset any benefits of a programme for participants. For this reason displacement and substitution are important in determining the aggregate impact of employment programmes. The problem is that it is difficult to reliably identify how large these effects might be.

Substitution effects are most important for wage subsidy programmes

Of all employment programmes, substitution effects are most important for wage subsidy programmes. For New Zealand this applies to the Skills Investment Subsidy (a temporary hiring subsidy) and, to a lesser extent, subsidised work experience programmes. The argument is that, by definition, hiring subsidies do not create jobs directly; it is not a job creation subsidy. Instead, they help one group of job seekers into employment over other job seekers with the subsidy compensating the employer for taking on the more disadvantaged candidate. Therefore, a large part of the employment gains by participants is at the expense of other job seekers (the substitution effect). A similar but weaker argument can be made for job search programmes where more intensive job search by one group means these participants gain jobs that would have been filled by others.

Further, if a subsidy programme is poorly targeted (ie the subsidy is over compensating the employer) then the firm may use the subsidy to undercut competing firms. Any competitive advantage created by the subsidy increases the likelihood of displacement effects (ie competing firms let staff go or do not hire additional staff they would otherwise have).

The evidence on wage subsides covers a broad range of programme types: from job creation and broadly targeted subsidies, through to targeted hiring subsidies. In general, the evidence shows substantial substitution effects and little evidence for a positive aggregate impact. However, the evidence generally concludes tightly targeted hiring wage subsides, such as those used in New Zealand, are most likely to show an overall positive impact.

Evidence from macroeconomic models

One study examines the macroeconomic impact of different types of employment assistance across 20 OECD countries between 1985 and 1999 (van Ours & Boone, 2004). It concluded that expenditure on subsidised employment assistance did not reduce unemployment. However, the subsidised employment category was quite broad and included job creation and retention subsidies that are widely regarded as ineffective (OECD, 2005), and do not apply to the New Zealand context.

Employer surveys

A 2005 review of studies examining employer's use of wage subsidies (broadly targeted as well as hiring subsidies) indicated that deadweight[6] and displacement effects are substantial,

[6] Here deadweight refers to the situation where an employer would have hired the participant irrespective of the subsidy or at a lower subsidy level.

particularly for broadly targeted programmes (OECD, 2005). Estimates of deadweight ranged from close to zero through to 79 per cent, with deadweight being higher for broadly targeted subsidies. Substitution effects ranged between 21 and 63 per cent. Note that high deadweight would indicate increased risk of displacement occurring since some or the entire subsidy reduces the firm's operating cost.

Evidence from econometric models

The analysis of wage subsidies using econometric models provides mixed results, with studies showing overall positive effects (Jongen, van Gameren, & Graafland, 2003; Yahsive, 2004), ambiguous effects (Vereshchagina, 2002) and negative effects(Brown, Merkl, & Snower, 2006; Jahn & Wagner, 2008; Millard & Mortebseb, 1997; Mortensen & Pissarides, 1999; Mortensen & Pissarides, 2003).

Displacement effects are most important for self-employment assistance

In New Zealand, displacement effects are most likely to occur for Enterprise Allowance. By providing start up capital and temporary wage subsidies, the establishment of the firm may result in competing firms going out of business, reducing staff, or not hiring staff they intended to.

There is little evidence on the aggregate impact of self-employment assistance. One reason for the paucity of evidence would be the small number of participants and low total expenditure on this type of programme (although high on a per participant basis). Nevertheless, displacement effects of self-employment assistance are believed to be high and to vary according to the industry the firm enters into. In particular, industries with tight profit margins and high labour costs are at higher risk of producing significant displacement effects (Hasluck, 1990).

Table 30: Cumulative outcomes of programmes

Programme	Outcome period	Outcome (cumulative over outcome period)[a] Combined positive outcomes	Independent of Work and Income Assistance	Time off main benefit	Tertiary Study	Part-time work while on main benefit	Programme Staircasing	Repeat participation in the same programme type	Income Support Expenditure
Activity in the Community	8.5 yrs	4.8 yrs	3.4 yrs	3.7 yrs	5.2 mths	9.5 mths	5.2 mths	2.3 mths	$66,542
Career Guidance and Counselling	6.0 yrs	4.1 yrs	3.0 yrs	3.2 yrs	4.5 mths	6.0 mths	5.9 mths	1.0 wks	$42,835
Case Management Initiative	5.5 yrs	3.8 yrs	2.8 yrs	3.1 yrs	3.7 mths	4.3 mths	5.7 mths	2.5 wks	$34,875
Community Taskforce	11.0 yrs	6.6 yrs	5.2 yrs	5.4 yrs	6.5 mths	10.5 mths	5.4 mths	1.4 mths	$72,459
CommunityMax	1.5 yrs	7.9 mths	7.9 mths	1.1 yrs	1.4 mths	5.6 days	0.0 days	2.9 wks	$4,005
Course Participation Assistance Programme	3.5 yrs	1.8 yrs	1.7 yrs	1.8 yrs	2.6 mths	2.4 mths	1.2 mths	1.4 wks	$28,546
Employment Placement or Assistance Initiative	2.0 yrs	9.0 mths	9.0 mths	10.8 mths	1.3 mths	1.9 mths	0.0 days	4.2 days	$15,369
Enterprise Allowance	7.5 yrs	5.1 yrs	5.1 yrs	5.7 yrs	3.3 mths	4.0 mths	0.0 days	1.1 wks	$29,537
Health Interventions	2.0 yrs	1.1 yrs	5.2 mths	6.7 mths	1.0 mths	2.4 mths	3.2 mths	2.2 wks	$22,893
In2Wrk	3.0 yrs	1.8 yrs	1.3 yrs	1.6 yrs	3.0 mths	4.2 wks	3.9 wks	3.8 mths	$18,073
Job Ops	1.0 yrs	5.1 mths	5.1 mths	10.0 mths	2.6 wks	3.7 days	0.0 days	4.3 days	$2,212
Job Search Initiatives	6.5 yrs	4.4 yrs	3.8 yrs	4.0 yrs	4.0 mths	3.6 mths	2.0 mths	1.3 mths	$28,741
Limited Services Volunteer	1.5 yrs	10.5 mths	7.1 mths	8.4 mths	1.0 mths	1.5 wks	2.8 mths	5.6 days	$7,912
Motivational Training	9.5 yrs	6.4 yrs	5.3 yrs	5.5 yrs	5.2 mths	5.6 mths	7.3 mths	1.1 wks	$50,444
Outward Bound	7.5 yrs	5.5 yrs	4.4 yrs	4.7 yrs	7.6 mths	3.6 mths	7.2 mths	2.4 wks	$34,837
PATHS	3.0 yrs	1.3 yrs	6.5 mths	8.2 mths	1.4 mths	4.0 mths	4.0 mths	8.2 mths	$33,102
Search4Wrk	3.5 yrs	2.2 yrs	1.7 yrs	2.0 yrs	3.3 mths	1.3 mths	1.0 mths	3.4 mths	$19,238
Skills Investment	2.0 yrs	11.3 mths	11.3 mths	1.4 yrs	1.2 mths	1.3 mths	0.0 days	6.6 days	$9,999
Skills Training	6.5 yrs	4.3 yrs	3.4 yrs	3.6 yrs	4.7 mths	4.4 mths	4.6 mths	1.4 mths	$44,377
Straight to Work	2.5 yrs	1.2 yrs	1.2 yrs	1.4 yrs	2.0 mths	1.8 mths	0.0 days	4.0 days	$17,522
Taskforce Green	7.5 yrs	4.4 yrs	4.4 yrs	5.0 yrs	5.0 mths	5.4 mths	0.0 days	2.1 wks	$36,956
Training Incentive Allowance	4.5 yrs	1.1 yrs	1.0 yrs	1.1 yrs	8.8 mths	8.9 mths	2.8 wks	3.5 mths	$75,848
Training Opportunities	4.0 yrs	2.2 yrs	1.5 yrs	1.7 yrs	3.0 mths	2.9 mths	4.3 mths	2.9 mths	$34,184
Vocational Services Employment	6.0 yrs	3.4 yrs	1.2 yrs	2.0 yrs	2.3 mths	11.5 mths	6.1 mths	1.8 yrs	$53,212
Work and Income Seminar	4.0 yrs	2.6 yrs	1.9 yrs	2.1 yrs	2.8 mths	2.9 mths	4.6 mths	1.0 wks	$26,631
Work Confidence	4.0 yrs	2.5 yrs	1.6 yrs	1.8 yrs	2.7 mths	3.6 mths	4.9 mths	1.9 wks	$35,024
Work Experience	9.0 yrs	6.4 yrs	5.3 yrs	5.7 yrs	4.8 mths	5.3 mths	5.0 mths	1.5 wks	$43,845

a: See technical notes section for an explanation of how each outcome is constructed.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

Table 31: Effect size of programme impact for each outcome

Programme	Effect size of programme impact on each outcome							
	Combined positive outcomes	Independent of Work and Income Assistance	Time off main benefit	Tertiary Study	Part-time work while on main benefit	Programme Staircasing	Repeat participation in the same programme type	Income Support Expenditure
Activity in the Community	* -0.09	* -0.16	* -0.14	* 0.04	* 0.11	* 0.13	* 1.33	* 0.09
Career Guidance and Counselling	0.01	* -0.08	* -0.05	* 0.02	* 0.06	* 0.20	* 0.16	* 0.04
Case Management Initiative	* 0.09	-0.02	* 0.04	-0.01	0.02	* 0.14	* 0.23	* -0.05
Community Taskforce	* -0.05	* -0.12	* -0.10	* 0.06	* 0.12	* 0.15	* 0.92	* 0.06
CommunityMax	* -0.07	* -0.07	* 0.63	* -0.11	* -0.15	0.00	* 0.44	* -0.51
Course Participation Assistance Programme	0.01	-0.01	* 0.02	* 0.03	* 0.03	* 0.13	* 0.08	0.00
Employment Placement or Assistance Initiative	* -0.05	* -0.05	0.03	-0.02	0.02	-0.02	* 0.30	-0.04
Enterprise Allowance	* 0.30	* 0.30	* 0.46	0.02	* -0.14	0.00	* 0.53	* -0.30
Health Interventions	* 0.12	* -0.17	* -0.08	-0.04	0.04	* 0.25	* 0.31	* 0.06
In2Wrk	* -0.19	* -0.31	* -0.21	* 0.03	* 0.04	* 0.11	* 0.35	* 0.14
Job Ops	* -0.24	* -0.24	* 0.68	* -0.21	* -0.17	0.00	* 0.35	* -0.52
Job Search Initiatives	* 0.03	0.00	* 0.02	* -0.02	* 0.02	* 0.06	* 0.10	* -0.04
Limited Services Volunteer	* -0.11	* -0.21	* -0.16	* -0.12	-0.02	* 0.20	0.05	* 0.10
Motivational Training	-0.03	* -0.10	* -0.08	-0.02	0.05	* 0.22	* 0.06	0.02
Outward Bound	0.06	-0.02	0.01	* 0.11	0.01	* 0.19	* 0.29	-0.03
PATHS	0.05	* -0.16	* -0.10	0.03	* 0.12	* 0.22	* 3.32	* 0.12
Search4Wrk	* -0.17	* -0.33	* -0.19	0.00	* 0.06	* 0.14	* 0.30	* 0.12
Skills Investment	* 0.14	* 0.14	* 0.51	* -0.09	* -0.09	0.00	* 0.70	* -0.37
Skills Training	* 0.04	* -0.03	0.00	* 0.02	* 0.02	* 0.13	* 0.24	-0.02
Straight to Work	* 0.13	* 0.13	* 0.17	* -0.08	* 0.03	0.05	* 0.53	* -0.15
Taskforce Green	* 0.11	* 0.11	* 0.26	0.02	-0.02	-0.01	* 0.95	* -0.22
Training Incentive Allowance	* -0.08	* -0.09	* -0.07	* 0.60	* 0.05	* 0.05	* 0.73	* 0.10
Training Opportunities	* -0.10	* -0.16	* -0.13	* -0.03	* 0.06	* 0.05	* 0.85	* 0.04
Vocational Services Employment	* 0.12	* -0.31	-0.04	-0.03	* 0.25	* 0.28	* 0.49	* -0.05
Work and Income Seminar	-0.01	* -0.10	* -0.07	* -0.02	* 0.03	* 0.18	* 0.07	* 0.02
Work Confidence	* 0.03	* -0.11	* -0.04	* -0.02	* 0.04	* 0.19	* 0.32	0.01
Work Experience	0.04	0.02	0.04	-0.08	-0.01	0.09	* 1.55	-0.09

a: See technical notes section for an explanation of how each outcome is constructed.

b: Indicates the size of the programme's impact for each outcome relative to the comparison group's standard deviation. An effect size of less than 0.2 is described as small, 0.5 as medium and over 0.8 as large (based on Cohen, 1969).

*: impact is statistically significant at the 95% confidence interval, ~: impact could not be estimated.

Source: Information Analysis Platform, 2011 (research information, not official MSD statistics).

References

Brown, A., Merkl, C., & Snower, D. (2006). *Comparing the effectiveness of employment subsidies* (Working paper No. 1302). Kiel: Kiel Institute for the World Economy. Retrieved from www.ifw-members.ifw-kiel.de/publications/the-effectiveness-of-employment-subsidies/KAP%201302.pdf

Hasluck, C. (1990). *The displacement effects of the enterprise allowance scheme: A local labour market study*. Warwick: Institute for Employment Research, University of Warwick.

Jahn, E. J., & Wagner, T. (2008). *Do targeted hiring subsidies and profiling techniques reduce unemployment?* (Discussion paper No. 3768). Bonn: IZA Institute for the Study of Labor. Retrieved from http://ftp.iza.org/dp3768.pdf

Jongen, E., van Gameren, E., & Graafland, J. (2003). Exploring the macroeconomic impact of subsidized employment. *De Economist, 151*(1), 81-118.

Millard, S., & Mortebseb, D. (1997). The unemployment and welfare effects of labour market policy: A comparison of the USA and the UK. In D. Snower, & G. De la Dehesa (Eds.), *Unemployment policy* (pp. 545-572). Cambridge:

Mortensen, D., & Pissarides, C. (1999). New developments in models of search in the labour market. In D. Ashenfelter, & D. Card (Eds.), *Handbook of labour economics vol. 3B* (pp. 2567-2627). Amsterdam: Elsevier.

Mortensen, D., & Pissarides, C. (2003). Taxes, subsidies and equilibrium labor market outcomes. In E. Phelps (Ed.), *Designing inclusion: Tools to raise low-end pay and employment in private enterprise* (pp. 44-73). Cambridge: Cambridge University Press.

MSD. (2008). *Youth transition services evaluation final report*. Wellington: Centre for Social Research and Evaluation, Ministry of Social Development.

MSD. (2009). *Sustainable employment annual report: Annex 1 evidence by programme type* (Unpublished internal report. Wellington: Centre for Social Research and Evaluation, Ministry of Social Development.

MSD. (2010). *Efficiency and cost-effectiveness of work and income employment assistance* (Unpublished internal report. Wellington: Centre for Social Research and Evaluation, Ministry of Social Development.

MSD. (2011a). *Evidence on training programmes for the training opportunities review*. Wellington: Centre for Social Research and Evaluation, Ministry of Social Development. Retrieved from www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/evaluation/evidence-on-training-opportunities-and-related-training-programmes/report-2011-evidence-on-training-programmes-for-training-opportunities-review.pdf

MSD. (2011b). *Limited service volunteer programme evaluation report* (Unpublished internal report. Wellington: Centre for Social Research and Evaluation, Ministry of Social Development.

OECD. (2005). *Evaluation of and lessons from wage subsidy programmes in OECD countries*. Paris: Organisation For Economic Co-Operation And Development. Retrieved from http://gw.kli.re.kr/emate-gw/seminar.nsf/allview/1B8BBD6AB94EDB3949257030002850A4

SSC. (2004). *Mainstream programme survey 2004. A study of the long term impact of the mainstream programme – a two year salary subsidy for people with significant disabilities who wish to work in the public sector*. Wellington: State Services Commission.

Treasury. (2010). *Methodology for risk-free discount rates and CPI assumptions for accounting valuation purposes*. Wellington: The New Zealand Treasury. Retrieved from http://www.treasury.govt.nz/publications/guidance/reporting/accounting/discountrates/methodology

van Ours, J., & Boone, J. (2004). *Effective active labor market policies* (Discussion Paper No. No. 1335). Bonn: Institute for the Study of Labor (IZA). Retrieved from http://ftp.iza.org/dp1335.pdf

Vereshchagina, G. (2002). *Unemployment, firm dynamics, and targeted employment subsidies* (Discussion Paper No. 88). Prague: CERGE-EI.

Yahsive, E. (2004). Macroeconomic policy lessons of labour market frictions. *European Economic Review, 48*, 259-284.