# INTRODUCTION

*Indicators of a Sustainable Community* documents Newcastle's performance against key social, environmental and economic characteristics.

Using a broad range of indicators enables community members to monitor success in creating and managing a more sustainable city.

The report explains the background and history of the project, and presents eight steps used to identify and refine the preferred indicators. Most of the document is devoted to reporting on actual performance against chosen indicators for the past five years.

Recommendations are made as to how the project should progress in the second and subsequent stages.



ver the past decade Newcastle City Council has been actively involved in developing innovative responses to the challenge of sustainability. Sustainability incorporates economic, social and environmental attributes of the City as they affect the quality of life of community members.

This project, to develop and report on Indicators of a Sustainable Community, has evolved from the sustainable management and community involvement objectives of Council and constitutes a critical stage in the process of clarifying, articulating and measuring the quality of life in Newcastle. The project affords an opportunity to encourage participation from a wide range of community stakeholders whose activities contribute to achieving an improved quality of life in the city.

To facilitate this project Newcastle City Council formed a collaborative partnership with The Australia Institute to identify and report on a range of indicators of community sustainability measuring social, environmental and economic aspects of life in the city.

Up to date information on the indicators will enable interested persons to monitor progress over time on how Newcastle is performing in comparison to similar regions in Australia and internationally.

The challenge for policy makers and others involved in improving the quality of life in Newcastle will be to review these indicators over time and integrate them into management and decision making processes within the City.

# The COLLABORATIVE PARTNERS

#### The Australia Institute

The Australia Institute is an independent non-profit public policy research centre based in Canberra. It carries out research and policy analysis and participates in public debates on economic, environmental and social issues. It undertakes research commissioned by philanthropic trusts, governments, businesses, unions and community organisations. Dr Clive Hamilton, Director of the Institute, is known for developing a Genuine Progress Indicator for Australia. This index incorporates a range of social, environmental and economic parameters to more accurately reflect the true cost of progress. This project provides an opportunity to apply this concept at a local level.

#### Newcastle City Council and the Community

Newcastle City Council has been a leader in translating sustainability for local government. In addition to adopting an innovative Environmental Management Plan, Council has demonstrated commitments to youth, social impact assessment and economic development.

In 1997 Council hosted the international Pathways to Sustainability Conference to showcase the vital role of local governments in developing sustainable communities. The Newcastle Declaration, adopted at the conference was presented in New York to a five-year review session on Local Authority initiatives (LA 21) developed at the 1992 Rio Earth summit.

Council commenced its process of developing community indicators in 1998 through two community workshops which aimed to highlight "treasured" aspects of community life. The current process, to identify sustainable community indicators, is based on a framework that allows the measurement of progress against Councils' Strategic Directions Statement.

Newcastle City Council consults regularly with its community on a broad range of issues. The Strategic Directions Statement summarises these consultations and identifies a number of important themes that Newcastle citizens perceive as important to address. The Strategic Directions Statement has been used as the foundation for this collaborative project with The Australia Institute.

A working group representing a range of community organisations guided the development of this project.

# What are COMMUNITY INDICATORS?

Community indicators are measuring systems developed, maintained and researched by community members. They provide communities with the economic, social and environmental information they require to inform them how they are progressing towards becoming a sustainable community.

Community indicator projects are under way around the world where communities want to take measures locally to promote 'healthy cities' and 'sustainable communities' to improve the quality of life for local residents and to ensure a secure future for their children.







The development and promotion of new indicators is needed because the more traditional indicators of national well being are inadequate, and in some cases give the wrong signals, particularly with regard to local conditions. If a city measures its success by housing starts, new roads and tourism numbers, it might end up with urban sprawl, traffic pollution, a degraded environment and loss of neighbourliness.

At a state and national policy level, the preoccupation with economic growth has resulted in social and environmental decline. The Australia Institute has produced an alternative to Gross Domestic Product (GDP) called the Genuine Progress Indicator that incorporates a number of factors left out of GDP. When factors such as the costs of unemployment, crime, traffic congestion and air pollution are included, national well being appears to have been static or declining since the 1970s.

# What other COMMUNITY INDICATORS PROCESSES are underway in the HUNTER?

As a follow-up to the original Pathways conference, the Hunter Regional Organisation of Councils (HROC) has received a grant from the Commonwealth Government to advance the "Pathways to Sustainability" initiative within the region. One component of their proposal is to develop and report on regional indicators of sustainability. Working groups of key government agencies charged with documenting specific social, economic or environmental changes, were formed to identify likely indicators.

The Lower Hunter and Central Coast Regional Environmental Management Strategy have received National Heritage Trust funding to integrate State of the Environment (SOE) reporting across the seven Lower Hunter and Central Coast Councils. A primary goal of this project is to better use SOE information in the corporate management of the councils.

The New South Wales Department of Urban Affairs and Planning is developing community indicators of sustainability with the five local government areas in the Upper Hunter region. This process uses community workshops to identify linkages and strategies for the future. Indicators emerge from this interactive planning process.

This project has worked closely with these groups to ensure all of these processes benefit from the information and innovation being developed elsewhere within the region.

# How have NEWCASTLE'S INDICATORS been DEVELOPED?

The process used in the development of Newcastle's **Indicators of a Sustainable Community** parallels processes used in other communities. (See the 'Community Indicators Handbook' by Tyler Norris Associates, Redefining Progress and Sustainable Seattle, 1997)

#### Steps in developing Indicators of a Sustainable Community

INDICATORS<br/>of aThe figure on the previous page shows the eight steps used to develop the Newcastle IndicatorsINDICATORS<br/>of aof a Sustainable Community project. These steps are not linear and include opportunities for<br/>review, evaluation and improvement.SustainableCommunity

#### Figure 1 Flow Chart



#### Step 1: Form a working group

The work of the project has centered on a team of people drawn from across the Newcastle community – from business and economic development organisations, unions, community service groups, resident coalitions, environmental groups, the Hunter Valley Research Foundation, Council and the University. A list of working group members is attached as Appendix 1.

The breadth of working group membership has ensured the indicators developed are relevant, useful and practical. The time and contribution

of working group members, meeting once every three weeks for over six months, has been the key to the success of the project.

#### Step 2: Clarify the purpose The first major task of the working group was to clarify the purpose of the project, the role of the group and potential applications for the indicators. The project was seen by the group as an opportunity to clarify and make community values and attitudes more explicit, to develop tools to communicate values, to educate the community and foster ownership. It was in this initial discussion that the title of the project was altered from 'Community Indicators to Indicators of a Sustainable Community'.

The Working Group established the outcomes of this project should:

- provide a balanced set of practical indicators, with a mix of positive and negative attributes;
- establish responsibility for reporting, tracking changes, evaluating progress, independent auditing;
- include, engage, and affect the broader community (recognising gaps in social development, excluded groups, dominant groups, and conflicting agendas).

The group recognised that bringing about change in community and societal behaviour is a longterm process, requiring challenging status quo at all scales of political policy/debate. Consequently the process would need to strike a mix between extracting measurable elements from a complex, interrelated system and *not* over-simplifying (and thereby understating) the complexity of sustainability issues. Step 3: Identify shared values and a vision for the community One of the objectives of the process was to attempt to ensure that, where feasible, the indicators developed and applied by the working group reflect the outcomes of earlier community consultations as compiled by Council into a Strategic Directions Statement (1998). The four key issues developed in the Statement through values and goals are:

- Identity
- Community
- Economy
- Environment.

These key issues were used by the working group to identify characteristics of community life in Newcastle to be measured. In addition the requirement to consider needs of future generations was incorporated. A review of the aspects 'treasured' by the community as identified in 1998 also informed this step.

Step 4: Develop a set of community characteristics for measurement This step required the working group to develop a list of community characteristics to reflect the breadth of issues within the community that should be measured to indicate the well being of a sustainable community.

The working group grappled with fundamental issues about the nature of a sustainable community identifying that progress against one characteristic could be counter-productive to improving performance on another dimension.

These interlinkages were considered best dealt with by measuring and reporting on each element, enabling community members to draw comparisons for their own purposes.

These characteristics were reviewed by applying the following criteria:

#### Does / Is this characteristic.....

- Connect with visions and values (and include aspects of all 4 key issues)?
- Relevant and valuable to the community?
- Valid (Does it logically measure the 'Key Issue?', Is it a "fair" measure of that aspect?)
- Measurable?
- Understandable & explainable?
- Able to make linkages & relationships?
- Creative and action oriented? (Does it show us where we want to go??)
- Able to be communicated?
- Inclusive (to entire community) where possible –particularly with regard to elements of key issues in community and identity?
- Able to challenge status quo (and demonstrate status quo may be in an unsustainable downward direction)?

Through this process the working group members found that despite wanting to measure certain characteristics, there was a lack of available information at a local level or established indicators that could be collected.

Overall the working group identified 27 important characteristics of community life in Newcastle (Table 1) for further testing in the next step, technical review.

#### table 1

# CHARACTERISTICS OF A SUSTAINABLE COMMUNITY FOR NEWCASTLE [As listed in feedback form]

#### IMPORTANT THINGS TO MEASURE

Acceptance of cultural diversity	Participation in community environmental activities
Air quality	Participation in history, heritage and cultural identity
	activities
Amount of local economic activity	Perception of safety
Appropriate transport networks	Progress towards reconciliation
Availability of appropriate housing for all	Quality of the built environment
Availability of enjoyable, meaningful	Quality of open space
activities	
Cleanliness of beaches	Resource consumption (energy, water, materials and
	waste levels)
Cleanliness of streets, waterways and	Range of appropriate educational opportunities for all
land	
Community participation in	Sense of confidence in the future
decision-making	
Conservation of local native plants and	Social support networks
animals	
Contaminated land	Sense of pride in Newcastle
Diversity of employment/industry sectors	Thriving, diverse arts & cultural sector
Health status (mental, physical &	Unemployment levels
emotional)	
Income levels	

Step 5: Consult with community	A key aspect of this project has been community involvement, not only through the working group but also with the broader community. The working group developed and implemented the community involvement strategy outlined in Appendix 2.				
	This strategy provided the wider community with the opportunity to share its visions for the future and to discuss the merits of the proposed characteristics for measuring a sustainable community. This was important because it allowed the characteristics recommended by				
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the working group to be challenged by a wider group of people living and working in Newcastle.

The primary objectives of the community involvement strategy were to interest, inform and excite members of the community about the project and to invite people to participate and build ownership in the process. By asking for community feedback, it was possible to ensure that the community characteristics proposed for measurement were considered relevant and that nothing of importance had been missed.

The Council arranged publicity through a poster and a media launch. Local TV, newspaper and the ABC radio program presented the project well.

The response of young people was obtained through the cooperation of the Newcastle District INDICATORS 6
Sustainable Community Social Science Teachers Association. The Newcastle and Hunter Business Chamber ran several articles in its newsletter and members of the working group liaised with other community groups of which they are members. Council officers briefed community and advisory committees at their regular meetings.

#### **Reference Group**

Attendees from the 1998 community indicators workshops and those who had responded to an invitation on the feedback form, were asked to join a reference group.

The group met twice and served as a pilot group for the public launch of the characteristics and as a review body of the final draft set of specific indicators for each characteristic. The project benefited greatly from the voluntary input of these community members.

#### Community feedback on characteristics

Community feedback to the proposed characteristics was sought; initially through the reference group and a feedback form.

The feedback form was distributed to the community through various means including council's community committees, reference group members, and through libraries, schools and the university.

The full feedback form and detailed analysis are included in Appendix 3. Over 340 responses were returned with over half from young people aged\_between 14 and 18 years.

In general, people appeared to understand the document and the proposed characteristics. There were no outstanding gaps identified that needed to be included.

Data gathered from responses was tabulated, with the rank of importance for each of the characteristics being recorded by age group. This has allowed identification of trends in different age groups. Table 2 lists the highest-ranking characteristics overall.

It is important to note this was not a random survey and as such the responses are indicative only of these respondents' preferences. However the feedback provided useful input to the next stage of the process, the technical review.

#### Table 2

#### Highest ranking characteristics from public feedback

TOP RANKING CHARACTERISTICS - from public feedback
Cleanliness of beaches
Cleanliness of streets, waterways and land
Air quality
Range of appropriate educational opportunities for all
Appropriate transport networks
Resource consumption
Quality of open space
Health status (mental, physical & emotional)
Unemployment levels
Conservation of local native plans and animals

#### INTRODUCTION & BACKGROUND

#### Step 6: Perform a technical review to identify proposed indicators to measure the characteristics, including reviewing existing data reporting

While the community feedback process was under way, the working group members formed sectoral task groups to undertake a technical assessment of possible indicators for each of the characteristics.

Sectoral task groups were used in this phase as many of the working group members had expertise in a particular field and consequently were aware of both the theory and practice in their specific field.

Working group members suggested existing information sources which compile data on local conditions, such as State of the Environment reports, state and federal government reports, Council surveys, community profiles, industry data, and local databases. Newcastle is particularly lucky in this regard with regular analysis of a range of

issues undertaken by the Hunter Valley Research Foundation.

Outside expert input at this stage was also essential to ensure the results of the process were credible and covered the objectives of all parties. The assistance of other government agencies and comparability with HROC's regional indicator process assisted in refining the proposed list of indicators.

During this process many of the available social statistics were assessed as being weak in determining "well being." The need to develop more qualitative perceptual data, which requires a process of testing and examination of cost effectiveness, has shown that the development of indicators needs to be an ongoing process. Thus the concept of a second stage of this project is to road test and apply perceptual tests for important contributors to community trust such as **acceptance of cultural diversity**.

The final test for the indicators to be included in Stage 1 was to apply a 'filter' by multi sectoral teams from the Working Group to ensure each indicator was relevant, measurable and a valid measure of the characteristic. (The filter is included as Appendix 4).

Step 7: Compile data on selected indicators, publish and promote the report Presenting the results of the whole process to the public was a pivotal stage of the ongoing project. The Stage 1 report is based on community indicator formats used elsewhere. Each indicator is presented on a separate page. It includes a definition, rationale, limitation of the data and, most importantly a desired outcome for performance. For example: how would we as a community define progress against this indicator? Information for the past five years has been presented where available in graphs or tables.

Stage 1 has compiled an initial set of indicators for further development and supplementation in further stages.

Step 8: Further development and refinement of indicators; including provisions for regular updates on the indicators in Stage 2 Step 8 highlights the beginning of an ongoing process to:

- Provide regular updates on the indicators and
- Further develop and refine "Indicators of a Sustainable Community"

The fundamental ongoing role of a community indicator project is to provide regular feedback to the community on progress against the identified indicators. Newcastle City Council will work with other government agencies, HROC, the Hunter Valley Research Foundation, business and environmental groups to ensure these indicators are

available in an efficient, timely and cost effective manner. Ideally, at the end of Stage 2, additional resources will be made available by a range of community monitoring agencies to assist in reporting data that can be utilised as additional indicators of a sustainable community.

As this project has evolved, it has also become obvious that Stage 2 is required to further develop and refine appropriate indicators. The technical review process narrowed the list of 27 characteristics to 14 for inclusion in this first report. This selection process, based both on community feedback and the filtering process, found that many useful indicators are not measured or have been measured in an ad hoc fashion. Appendix 5 lists characteristics and potential indicators that are currently difficult to measure or unavailable. Further work will be conducted to determine whether these indicators can be included in future reports.

The issue of cause and effect between the indicator, the characteristic and relevant management strategies is underdeveloped. Specific aspects such as improving water quality, to be included in Stage 2, will address this linkage. This issue needs to be addressed in Stage 2 if the indicators are to reach their potential of providing information on Newcastle which is then applied directly as an influence on policy development or work programs.

In Stage 2 clearly articulated goals, which specify what the community wants to achieve with regard to each characteristic, will be developed to provide a framework for evaluation and the benchmarking of progress. This will ensure cost effectiveness and ongoing relevancy to policy development and implementation. The stakeholders will be able to use the indicators to lobby Council and other relevant agencies in order to achieve improved outcomes.

It is possible that the overall objective of conveying the breadth of community issues may suggest that one or several of the current indicators be replaced over time. This will ensure that the community is challenged across social, environmental and economic perspectives to continue progress towards a sustainable community for Newcastle.

## Where to FROM HERE?

This report is an important milestone in communicating the challenge of developing workable responses to improve Newcastle as a sustainable community. Council plans to use this report to fine tune its endeavours to nurture a sustainable community in Newcastle. Specific interest groups, such as cyclists and those lobbying for affordable housing or clean beaches, will also be able to use this reporting framework to monitor the progress of their particular interests.

The ongoing process of compiling annual reports and developing Stage 2 indicators will refine this initial report in line with emergent community preferences.

# SUMMARY OF RESULTS FOR STAGE 1 CHARACTERISTICS

DEFINITION	Cleanliness of beaches has two components, bathing water quality and the cleanliness of the beaches from litter.	'Quality of community spaces' includes attributes of community perception as well limited quantitative information.	Two indicators are used to measure air quality in Newcastle PM10 PM10	
DESIRED OUTCOME	Total compliance with public health standards (NHMRC) for	<ul> <li>Increase community satisfaction with quality and availability of open space. (HRVF survey)</li> <li>Increase community satisfaction with the cleanliness of Newcastle's streets and commercial areas. (HRVF survey)</li> </ul>	<ul> <li>More acceptable Regional Pollution Index</li> <li>Reduce levels of PM10.</li> </ul>	
PERFORMANCE				
CHARACTERISTIC	CLEANLINESS OF BEACHES	QUALITY OF COMMUNITY SPACES	air quality	
	<b>^</b>	<b>^</b>	$\wedge$	

# Performance Legend

Denotes performance moving in the direction of a sustainable outcome

No observable trend in performance in terms of the desired outcome

Denotes performance moving away from sustainable outcome

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Denotes insufficient data compiled; therefore trends cannot be determined

# Performance Legend

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Denotes insufficient data compiled; therefore trends cannot be determined

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DEFINITION	Measuring how fear of crime impacts on people's decisions to participate in activities outside the home indicates the community's perception of safety.	The aspect of income levels that is critical to a sustainable community is the difference between the 'haves' and the 'have nots'. This comparison is made by contrasting the income of the top 20% of households to the bottom 20%.	Increase diversity of employment by industry The degree to which employment is spread across all industry sectors, compared to another region that is known to have greater industry diversity measured by employment.
DESIRED OUTCOME	Improve community perception of safety. (HRVF survey)	<ul> <li>Reduce the income disparity between the top and bottom 20% of household incomes</li> </ul>	<ul> <li>Increase diversity of employment by industry</li> </ul>
PERFORMANCE		<b>1</b>	
CHARACTERISTIC	PERCEPTION OF SAFETY	INCOME LEVELS	DIVERSITY OF EMPLOYMENT/ INDUSTRY SECTORS
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#### INDICATORS of a Sustainable Community

# INAUGURAL REPORT ON INDICATORS OF A SUSTAINABLE COMMUNITY

In this inaugural report, performance against available selected indicators for the 14 initial characteristics has been compiled. The report on each characteristic includes a definition, a rationale for its inclusion and, importantly, the desired outcome for performance for the indicators(s).

Where available, data has been reported for the last five years. This enables trends in that period to be shown graphically.

## EXPLANATION OF SURVEY DATA

any of the perceptual indicators in this report are drawn from three sources:

- The Community Attitudes Towards Services Provided by Newcastle City Council Survey (NCC Survey)
  - The Hunter Valley Research Foundation's Regional Quality of Life Survey (HVRF Regional Survey)
- Newcastle City specific results from the Hunter Valley Research Foundation's Regional Quality of Life Survey (HVRF regional survey / NCC specific results)

The Council survey was initiated in 1993 to assess community attitudes towards the services provided by Council and to allow for community attitudes to be taken into account in planning.

The survey is undertaken annually by the Hunter Valley Research Foundation. 500 randomly selected residents in the Newcastle Local Government Area are presented with a series of statements during a telephone interview.

The Regional Survey talks to 300 residents of the Hunter region.

Responses to surveys are recorded on a scale on 1 to 5, with 5 being strongly agree and 1 being strongly disagree. The average score is indicated by a boxed arrow, thus:



The figures reported in this document represent the average score given to a particular statement by the people surveyed.

This figure is referred to as the agreement score, with a higher score representing greater agreement with the statement. Because the scale is between 1 and 5, even a change of 0.1 may be an important indicator of a trend in the data.

#### INAUGURAL REPORT ON INDICATORS OF A SUSTAINABLE COMMUNITY

# CLEANLINESS OF BEACHES

#### Definition:

Cleanliness of beaches has two components, bathing water quality and the cleanliness of the beaches from litter. In this initial report the quality of water is assessed against bathing water standards for primary contact recreation. Stage 2 will examine approaches to measuring other attributes of beach cleanliness.

#### Rationale:

The "beach" has been rated as one of the most valuable attributes of the City by the Newcastle community in a number of surveys. The beaches of Newcastle also play an important economic role in attracting tourists as well as supporting a beach culture that includes surfing and other leisure and amenity related industries.

The cleanliness of beaches is important to these values. Water quality is routinely monitored at all Newcastle Beaches (Stockton, Nobbys, Newcastle, Bar, Merewether, Burwood North and Burwood South).

In addition, other indicators of beach cleanliness will be explored as part of Stage 2 of this project.



#### **Desired Outcome:**

• Achieve 100% compliance with the public health standards (NHMRC) for primary contact recreational water on all Newcastle beaches.

#### Indicator:

Percentage compliance of Newcastle beaches for faecal coliform and faecal enterococci (secondary indicator) levels recommended by NHMRC as safe for primary contact recreational waters.

	Faecal Coliforms		Faeca	l enter	ococci	
Site	96/97	97/98	98/99	96/97	97/98	98/99
South Stockton	100%	100%	100%	100%	100%	100%
Nobbys	100%	100%	100%	100%	100%	100%
Newcastle	100%	100%	100%	100%	100%	100%
Bar	100%	100%	100%	100%	76%	100%
Merewether	100%	100%	100%	100%	84%	92%
Burwood North	100%	100%	100%	100%	100%	100%
Burwood South	100%	100%	100%	100%	100%	96%

All beaches achieved 100% compliance with faecal coliforms. The faecal enterococci results have been charted, over.



#### **Results:**

Faecal Enterococci: 100% compliance for Stockton, Nobbys, Newcastle and Burwood North. Bar Beach's compliance fell to 76% in 97/98; Merewether to 84% in 97/98 and 92% in 98/99; and Burwood South to 96% in 98/99.

#### Explanation of the Indicator:

The data is collected by Hunter Water Corporation every six days and the results sent to the EPA. The percentage compliance tables published in the Beachwatch reports are made up of the 'Summer' data – from October to April inclusive, the period of most frequent recreational use.

Waters are considered unsuitable for swimming (primary contact recreational) if :



- the mean faecal coliform density exceeds 150 colony forming units (cfu)/100mL for five samples taken at regular intervals not exceeding one month, or
- the second highest sample contains equal to or greater than 600cfu/100mL for five samples taken at regular intervals not exceeding one month. (Explanation of methodology in introduction of EPA Beachwatch annual report 1998-99)
- median faecal enterococci density exceeds 35 cfu/100mL for five samples taken at regular intervals not exceeding one month,
- the second highest sample contains equal to or greater than 100 cfu/100mL for five samples taken at regular intervals not exceeding one month.

#### Remarks:

Although faecal coliforms are considered the primary organisms for indicating the presence of faecal contamination in water used for recreation, enterococci may be better indicators of pollution of marine waters due to their tolerance of high temperatures and salt concentrations. Some debate remains among experts about the usefulness and accuracy of these measures for indicators of water quality.

#### Stage 2

There is no measure of the amount of 'visual' cleanliness or amenity of the beaches. This is being considered as part of the ongoing component of this project.

#### INDICATORS of a Sustainable Community

#### INAUGURAL REPORT ON INDICATORS OF A SUSTAINABLE COMMUNITY

# QUALITY OF COMMUNITY SPACES

#### Definition

'Quality of community spaces' includes attributes of community perception as well as limited quantitative information. Perceptions of the quality and availability of open space and the general appearance of the City's streets are gained from the NCC Survey. Actual volumes of rubbish collected from the City during the Clean Up Australia campaign are recorded annually.

#### Rationale:

The quality of open space and the cleanliness of the City have been rated as important to the community and help to define the image of Newcastle.

The cleanliness of the City's waterways and beaches has also been identified as a characteristic of a sustainable Newcastle community and will be subject to future investigation as part of this project.

#### Desired Outcome:

- Improve community satisfaction with quality and availability of open space.
- Improve community satisfaction with the cleanliness of Newcastle's streets and commercial areas.
- Future inclusion of policy directions on waterways to be devised in conjunction with currentmanagement planning processes.





#### Indicator:

#### 1. Results from the NCC Survey questions:

Question	Agreement Score			
	May 1996	June 1997	June 1998	June 1999
There is enough good quality open space	3.8	3.6	3.7	3.6
Newcastle's streets and commercial areas	not asked	not asked	3.4	3.1
are clean				



Source: NCC survey

#### **Results:**

In 1996 there was high agreement with the statement; "There is enough good quality open space". Since then the agreement score has dropped very slightly and stabilised, so satisfaction is not increasing, nor is it clearly decreasing.

There was above average agreement with the statement "Newcastle's streets and commercial areas are clean" in 1998, but this agreement lowered in 1999. Note: Data from two consecutive years is not enough to establish a trend. This result is simply an observation of the difference between the two years data.

#### Supporting Data:

Volume of rubbish collected on Clean Up Australia day.					
Year	No. sites	No. volunteers	No. bags filled		
1998	20	566	1000		
1999	24	441	703		
2000	23	720	1265		

Source: NCC Community Development Division



The volume of rubbish figures relate only to rubbish collected on the day. Schools, businesses and community groups also collect rubbish in the week/s beforehand, but data on the actual volumes is less reliable and it crosses LGA boundaries.

These figures provide quantitative data on the cleanliness of public spaces, which may be included at a later stage to balance the perceptual results.

#### Stage 2:

In Stage 2 of the project, Council's current work on urban stormwater and coastal and estuary management planning will develop key indicators for waterways that link directly to management strategies. They will be reviewed for inclusion in future community indicator reports. Also it is planned to investigate more quantitative measures of street cleanliness.



# AIR QUALITY

#### Definition:

Two indicators are used to measure air quality of Newcastle over time: Fine particles suspended in the air measured as PM10 in accordance with the National Environment Protection Measure and the Regional Pollution Index determined by the NSW Environment Protection Authority as a composite of daily readings of fine particles, ozone, nitric oxide and nitrogen dioxide levels in the air.

#### Rationale:

Newcastle has had an historical problem with particulates from industry. Recent medical research confirms that fine particulates represent a significant health risk to urban communities. The monitoring of PM10 will enable fine particulate levels to be monitored in accordance with the National Environmental Protection Measures released by the Federal Government in 1998 and allow comparison with other urban communities in Australia.

The Environment Protection Authority produces a regional pollution index (RPI) from a composite of the measurement of fine particles, ozone, nitric oxide and nitrogen dioxide levels in the air. The RPI is a measure of air chemistry that has important implications for urban design and transport planning policy.

#### Desired Outcome:

- More acceptable Regional Pollution Index.
- Reduce levels of PM10

#### Indicator:

Regional Pollution Index readings

	1996/97	1997/98	1998/99	
Beresfield	High: 5	5	2	
	Medium: 57	93	47	
Newcastle	High: 7	8	6	
	Medium: 44	64	35	
Wallsend	High: 5	5	5	
	Medium: 42	67	54	

#### Explanation of the RPI Indicator:

The RPI is calculated using fine particles, ozone, nitric oxide and nitrogen dioxide levels in the air. The EPA's Metropolitan Air Quality Study (MAQS) maintains three monitoring sites in Newcastle: Inner Newcastle, Wallsend and Beresfield. The RPI is reported as a composite of these sites, according to the following scale:

Low – RPI from 0 to 24 Medium – RPI from 25 to 49

High – RPI of 50 or higher

RPI readings are made twice daily. As the majority of readings were "low", only "high and "medium" readings are included.

#### **Results:**

RPI: As there is currently no compliance level, the RPI can only be reported in general terms. Considering there are approximately 700 readings taken per year, the number of high readings is very low (ranging from 2 at Beresfield in 98/99 to 8 at Newcastle in 97/98), with no trend observable over the three year record. The medium readings range from 35 at Newcastle in 98/99 to 93 at Beresfield in 97/98. 1997/98 has the highest number of medium readings, with the latest year slightly better than the first. Single natural events like bushfires can increase the RPI significantly.

PM10 Readings



Source: EPA Air Quality Quarterly Report

#### **Results:**

Apart from two high recordings in 1995 - January (98) and September (161), readings are in line with proposed national standard.

#### Explanation of the PM10 Indicator:

PM10 is a measure of particles in the air with a diameter of 10 micrometers or less (100 micrometers in a centimetre). EPA measures PM10 levels at three monitoring stations located within Newcastle Local Government Area – Newcastle, Beresfield and Wallsend using the TEOM method.

One site only has been used for this report for clarity of presentation. The Newcastle site was considered to fairly represent the LGA for this data.

The National Environmental Protection Council is developing guidelines and protocols for reporting on National Environmental Protection Measures (NEPMs), including one for PM10. The proposed NEPM is 50  $\mu$ g/m3 within a montoring period of one day with 5 exceedances per year. In the future reporting on PM10 will be altered in response to these recommendations.

# RANGE OF APPROPRIATE EDUCATIONAL OPPORTUNITIES FOR ALL

#### Definition:

This characteristic aims to capture the wider meaning of education by measuring the number of students who enter year 11 as compared to the number who started 7 (on a cohort basis) and the number of people undertaking informal courses through adult education providers.

University and TAFE courses completed by Newcastle residents will be included at a later stage. Matching acquired skills with those required in the community, and assessing the effectiveness of the courses offered are further refinements of this characteristic planned for Stage 2.

#### Rationale:

Education and the opportunity for life-long learning are fundamental needs for a sustainable community. The skills and knowledge of the community contribute highly to both its social and economic strengths.

The educational level attained by young people is one aspect of this characteristic. Increasingly persons are challenged with changing employment prospects and the need for additional skill development. These indicators have been selected to give insight into participation in educational opportunities.

#### Desired Outcome:

- Increase retention rate of students entering year 7 into year 11
- Increase enrolments in adult education courses.

#### Indicator:

22

- The number of students entering year 11 as a proportion of year 7 enrolments (This information was unavailable prior to completion of this report).
- The number of people enrolled in NSW Board of Adult and Community Education (ACE) courses.









Source :NSW Adult and Community Education Enrolment Statistics 1998.

#### **Results:**

Enrolments in adult education courses have increased over the three year period.

#### Remarks :

The second indicator has two main limitations, but the use of these figures can be justified by the detail that is provided and the commitment to annual reporting by ACE.

• The first major limitation of this indicator is that it only counts people enrolled on courses at the centres shown above. There may be many other providers of post-secondary education not included in this indicator. But by selecting these two centres, trends will be able to be identified over time.

• The second limitation of this data is that it does not recognise that some of the people enrolled in these courses come from areas outside the Newcastle Local Government Area.

#### Stage 2:

Stage 2 will examine the feasibility of reporting on the number of Newcastle permanent residents who study at university and TAFE. Workable approaches for assessing the effectiveness of the courses offered will also be investigated in Stage 2.

# UNEMPLOYMENT LEVELS

#### Definition:

The unemployment levels measure those people who wish to participate in the paid labour force and cannot find a job. It is recognised that this measure does not include the contribution made to a community by those gainfully employed without renumeration in the domestic, health and social support sectors.

#### Rationale:

Unemployment is a highly inter-related characteristic of any community. Levels of unemployment illustrate not only the health of the local economy but also are linked to social issues such as health and social support networks. Comparability with other localities enables policy makers to better understand potential community stresses.

#### Desired Outcome:

• Reduce unemployment levels, across all age groups.

#### Indicator:



YEAR	NEWCASTLE	AUSTRALIA	
1995	11.0	8.4	
1996	11.2	8.3	
1997	11.9	8.6	
1998	10.7	7.9	
1999	9.4	7.3	

Source: ABS Labour Force Survey

#### Results:

The unemployment rate has dropped from 11% in 95 to 9.4% in 99, notwithstanding a high of 11.9% in 97. Unemployment in Newcastle is still significantly higher than national figures.

#### Explanation of the Indicator:

The Newcastle Statistical District by ABS definition equates to the five Lower Hunter LGAs – Newcastle, Lake Macquarie, Maitland, Port Stephens and Cessnock. The population of Newcastle is approximately a third of this district.

More accurate figures are only available once every five years through the census. The data is generated monthly, but is not conventionally averaged to produce an annual figure due to seasonal changes. For this graph the employment figures for May each year were chosen as it was considered one of the more stable months for employment.

#### Supporting Data:

To enable full analysis of unemployment, data would need to be available on groups within the labour force – like youth, non-European cultural groups and over 50 year olds. Currently, age groupings can be defined, but the small sample size often means the error factor is too great in some underemployed groupings to be statistically useful. The Youth unemployment rates, graphed below, indicate how much higher the number is in this age category, and how an overall figure cannot reflect these sub-group employment difficulties.





The Social Plan Survey (2000) found availability of preferred work type, job satisfaction and job security were relatively lower among the respondents in the Jesmond planning district. The availability of preferred work type received a lower agreement rating from the 20-24 year age group, although job satisfaction was relatively constant across all age groups. A strong age correlation was found in regard to job security - increasing age revealed increasing uncertainty about job security (with the exception of the 65+ age group).

#### Stage 2:

The concept of over-employment will be explored. That is, while significant numbers of people are under-employed, many in employment are obliged to work much longer than the normal full-time hours, often without extra remuneration, in order to retain their position.

# APPROPRIATE TRANSPORT NETWORKS

#### Definition:

Appropriate transport networks include effective public transport pedestrian and cycle networks. This characteristic focusses on the appropriateness of transport options as a viable alternative to the private motor vehicle.

#### Rationale:

Transport networks enable accessibility, linking people to goods, services and employment and delivering products to markets. Transport is a fundamental characteristic for a city to measure, as it contributes to social cohesion, social service delivery, economic viability and a range of environmental considerations.

The concept of networks was selected because networks link critical transport modes. Good public transport systems require integration within the network and with pedestrian and cycle systems to create an effective transport network.

The concept of providing appropriate transport networks is a fundamental objective of the Newcastle Urban Strategy (1998).

#### Desired Outcome:

- Increase number of persons using public transport
- Increase satisfaction with public transport and cycleways

## Indicator:

	Deccondere	14/i+h	Nowoodla	Duc	Convioon	1000
•	Passenders	with	newcastie	BUS	Services	- 000

Fare type	96/97	97/98	98/99	
Adult	1656	1672	1690	
Concession	2836	2783		
Pensioner	3723	3738	5980	
Students	4832	4838	5330	
Total	13047	13031	13000	

Source: Newcastle Bus & Ferry Services

#### **D.** Results from the NCC Survey questions:

Question	Agreemen	t Score		
	May 1996	June 1997	June 1998	June 1999
There is enough public transport	3.4	3.4	3.3	3.4
There are enough cycleways	3.0	3.0	2.8	2.8

#### Results:

Use of public transport: Over the three years of data available, there has been a small but consistent drop in the number of people using public transport.

Satisfaction with public transport is static at mid range. Satisfaction with cycleways is slightly lower and has dropped from 3.0 in 1996 to 2.8 in 1999.







#### Supporting Data:

The Social Plan Survey (2000) found that with the exception of the 16 – 19 year age groups all other age groups and districts are not high users of public transport, with an overall average of a quarter of all trips on being conducted on public transport. People were more likely to use public transport if they lived in Hamilton, Mayfield or Jesmond.

#### Stage 2:

The policy directions of the NSW State Government and the Newcastle City Council are to improve air quality and community interaction by integrating land use and transport. Newcastle's Urban Strategy advances these objectives by specifying urban villages, transit-oriented development and easy pedestrian access for future urban growth.

Measures to be developed later in Stage 2 that will report on the achievement of these broader policy directions and provide information on community sustainability in Newcastle include information on:

- Reducing Vehicle Kilometres Travelled (VKT) per capita
- Increasing the proportion of trips undertaken by public transport, walking and cycling
- Increasing the density of population and employment in designated urban villages.

# CONSERVATION OF LOCAL NATIVE PLANTS AND ANIMALS

#### Definition

Conservation of local native plants and animals will be measured indirectly by examining the area of the city set aside in official reserves or controlled under management agreements. The health and consequent productivity of the Hunter River estuary will be reflected by the annual school prawn catch.

#### Rationale:

The urban and industrial development of Newcastle has resulted in the loss of extensive areas of bushlands and wetlands. However the City retains important urban bushland areas and extensive wetlands, in the Hunter Estuary, that are home to endangered species of birds, animals and plants. The Wetlands of the Hunter Estuary are protected under international agreement as a migratory bird habitat.

Significant land is being dedicated by the community, Council and government agencies to protect and restore habitat in the City as a means of protecting local native plants and animals.

In Seattle the community has identified the annual salmon catch as an important characteristic of recreational, environmental and economic activity. Here in Newcastle this is analogous to tracking the annual catch of Hunter River school prawns.

#### Desired outcome:

- Increase areas of natural habitat per person in the reserve system
- Increase Hunter River school prawn catch

#### Indicator:

The area in hectares of native bushland held in reserve or protected under management agreement as a ratio per head of population. The area of land zoned 'urban bushland' and 'wetlands' is unchanged since 1996 at 3% for the former and 19.5% for the latter, while the population has increased, creating a ratio thus;

	96	97	98	99
Area of bushlands /wetlands	4900	4900	4900	4900
Population	137265	138215	139171	
Hectares per person	0.0356	0.0354	0.0352	

Source: population projections from DUAP, area figures from NCC SoE 1999

#### Result:

The decrease in hectares per person over the three recorded years is not statistically significant.

• The annual catch of Hunter River school prawns as a measure of the health of the City's catchments and estuary.







Source: NSW Dept Fisheries Statistical Catch Database

#### **Results:**

The school prawn catch has increased between 93 and 98, peaking in 95/96.



#### Remarks on Prawn catch Indicator:

In addition to reflecting the general health and productivity of the Hunter estuary, the annual Hunter River school prawn catch may be influenced by a number of climatic and management factors. The nature and timing of rainfall further up in the catchment may affect the availability of school prawns within the estuary. Management factors, which could alter yield, include the number of licensed fishermen, permitted catch and methods as well as the commencement date and length of the prawn season.

#### INAUGURAL REPORT ON INDICATORS OF A SUSTAINABLE COMMUNITY

# **RESOURCE CONSUMPTION**

#### Definition:

Three primary elements of the consumption of resources will be measured - water, energy and waste. Together they form a picture of resource consumption in Newcastle.

#### Rationale:

Potable water supply for urban communities is a finite resource. Its provision incurs a significant social, economic and environmental cost through the construction of storage, treatment and conveyance infrastructure. Significant efforts are being made by Council and the Hunter Water Corporation to improve efficiencies with main water consumption and the reuse of treated effluent.



Council's Green House Action Plan (draft) promotes the use of energy generated from renewable resources and targets emission reductions from activities that generate greenhouse gas emissions through planning, education and regulation.

Greenhouse gas emissions can be determined from a factor of energy consumption according to the Co2 equivalent for Kilowatt hours of electricity consumed.

Communities throughout Australia are aiming to reduce the amount of waste being disposed to landfill. Newcastle Council's target is to divert 60% of waste from landfill by 2000 and all waste from landfill by 2010.

#### **Desired Outcome:**

Reduce per person

- consumption of water and discharge of treated sewage, through reuse
- consumption of non-renewable energy and emission of greenhouse gases
- D. disposal of waste to landfill

#### Indicator:

• The amount of potable water consumed by the Newcastle community, the amount of wastewater discharged and the amount of wastewater re-used or recycled, as a ratio per person.

	'96	·97	<b>'98</b>	'99
Population	137265	138215	139171	
Water consumed (MI)	61490	64076	66003	62374
Per person	0.447	0.463	0.474	
Wastewater discharged per person			27205MI	
Wastewater recycled per person			55MI	

Source: Hunter Water Corporation, population projections from DUAP

#### Results:

Insufficient data

• The amount of non-renewable energy consumed by the Newcastle community.

	1995	98/99	99/00
Non-renewable energy consumption	330GWh	373 GWh	
Renewable energy consumption		2.4GWh	
Greenhouse gas emissions	303,912t CO <sub>2</sub>	340,876t CO <sub>2</sub>	
Consumption per person	0.0024GWh	0.0026GWh	

Source: NCC SoE 98/99

#### **Results:**

Consumption of energy has increased, but more data is required to establish a trend.

• Volume of waste disposed to landfill at Summerhill Waste Management facility.

Waste Type (tonnes)	96/97	97/98	98/99	
Mixed	116,494	95,242	95,450	
Building & Demolition	41,923	68,364	74,617	
TOTAL to landfill	158,417	163,606	170,067	
Total per person	1.15t	1.18t	1.22t	

Source: NCC SoE report 1998/99

#### **Results:**

Waste to landfill has increased over the three years of records.

Explanation of the Energy Indicator:

Electricity consumption has been used to represent all forms of energy as it is the most widely used source, and currently has the most reliable data.

#### Remarks on Waste:

Building and demolition waste has been used as clean fill in a disused mine site at Summerhill. As this option ceases, this type of waste will be diverted and recycled if it is sorted – eg concrete to crushing plant, or go directly into landfill cells if it remains unsorted from other demolition waste.

#### Stage 2



In this first report, only the energy consumed as electricity is included. Over the next year investigations of the energy associated with the consumption of petroleum (including) diesel and natural gas will compile a broader picture of energy consumption in the city.

Currently only about 20% of all consumption is accounted for in these three readily measurable commodities. Other important elements of resource consumption such as building products, food and clothing may be included in the future if Newcastle pursues the development of an ecological footprint analysis.

# AVAILABILITY OF APPROPRIATE HOUSING FOR ALL

#### Definition

The "appropriateness" of housing is a combination of different factors. Each of these is heavily dependent on affordability – both to build and buy. This characteristic will be reported on by measuring the cost of basic housing to households on lower incomes.

### Rationale:

Housing costs constitute one of the largest items of household expenditure and should not be disproportionate to income levels. Housing is considered a basic need, which if not provided, can lead to significant social problems.

Newcastle City Council is presently exploring options for maintaining its current stock of affordable housing, and encouraging new types of affordable housing.

Working group discussions also explored the concept of 'appropriate' in terms of location, cost, size of dwelling and tenure. These aspects are examined in detail in Council's Housing Strategy.

### Desired Outcome:

Increase % of households able to afford appropriate housing

### Indicator:

Department of Housing Rental Assistance Applicants:



Source: Dept of Housing

#### Results:

The data indicates an increasing level of housing stress among renters from 1996 peaking in the  $1^{st}$  quarter of 1999, with a slight recovery in the latest quarter.









#### Supporting Data:

ABS Census Housing stress indicator – in 1996, 56% of low income renting households were in housing stress. This is the 5<sup>th</sup> highest in the Lower Hunter and the Central Coast. It is higher than Lake Macquarie, Maitland and Cessnock Local Government Areas, and less than the Port Stephens Local Government Area.

#### Explanation of the Indicators:

The ABS Housing Stress indicator measures those in housing stress, i.e. paying more than 30% of their income in rent or mortgage repayments at the time of the census.



Department of Housing Rental Assistance program indicates trends in housing stress for renters during the inter-censual period by measuring those applying for and accepted under the various Rent Start programs. Assistance under this program is only available to those on low incomes.



#### Remarks:

The Census Housing Stress indicator is the most accurate in that it correlates rent and income. However, as it is only measured once every five years, it becomes less useful as the inter-censual period increases. Consequently, both indicators are reported.

# COMMUNITY PARTICIPATION IN DECISION MAKING

#### Definition:

Community participation in decision making measures whether Newcastle residents believe they have the opportunity to influence decisions that affect them as individuals and their community. Stage 2 will consider actual opportunities for community participation in decision making available to the citizens of Newcastle.

#### Rationale:

It is important that people feel they have the opportunity to participate in decisions relating to their community. More community participation in decision making creates increased community ownership and pride.

Council is committed to encouraging community participation in its planning activities to achieve the best possible outcomes for Newcastle's future. It has a number of community advisory committees that help to guide Council decision-making.

#### **Desired Outcome:**

Increase perception of opportunities for community involvement in decision making

#### Indicator:

Results from Newcastle respondents to the HVRF regional survey :



The opportunity exists for me to be involved in making decisions about my community agreement score for 1999, 3.2.

Source: HVRF regional survey / NCC specific results December 1999

#### **Results:**

This is the first time this indicator has been compiled. It is therefore not possible to compare it to previous years. However it has been collected on a regional basis. The Newcastle results are identical to the results for the Hunter region

#### Supporting Data:

Council includes a question in its annual survey about satisfaction with community involvement in decision making. Average responses to this question over the past five years are:

Question	Agreement	Score			
	Jun 95	May 96	June 97	June 98	June 99
How satisfied are you with community involvement in council decision making	2.8	3.0	2.7	2.8	2.6

Source: NCC Survey



This data is indicating a downward trend. Newcastle City Council found through the Social Plan that approximately one in five respondents had participated in some form of Council's consultation during the preceding 12 months. Levels of participation across planning districts ranged from one in ten people in the Wallsend and North West districts to one in four people in the South, Lambton and Hamilton districts. The 20 – 24 and 65 & over groups were seen to have the lowest levels of participation.

Slightly more than half of those who had not participated stated this was the case because of lack of interest or motivation and 20 per cent said that they were not aware of the process. Almost half of the 20 – 24 year age group indicated a lack of awareness.

#### Stage 2:

Actual opportunities for participation in decision making will be investigated.

# SOCIAL SUPPORT NETWORKS

#### Definition:

Access to social support networks measures how confident Newcastle citizens feel that when there is a problem, they will be able to draw on other people's assistance to solve it.

#### Rationale:

Social capital theory states that a measure of community well being is how well the community works together to solve problems, rather than leaving it for someone else, or the system to resolve. If people feel they are part of a healthy community they will feel confident that the community will work together to solve its problems.

#### **Desired Outcome:**

• Increase in proportion of persons who feel that help is available in a crisis.

#### Indicator:

Results for Newcastle respondents to the HVRF regional survey :



If there was a problem in my community, people would get together to solve it. Agreement score 3.3

Source: HRVF regional survey / NCC specific results December 1999

#### **Results:**

This is the first time this indicator has been compiled. It is therefore not possible to compare it to previous years. However it has been collected on a regional basis. The Newcastle results are identical to the results for the Hunter region.

#### Supporting Data:

The Social Plan Survey (2000) explored issues relating to membership in

voluntary community organisations, which is another means of measuring people's sense of connectedness. The survey found that 26.2% of the Newcastle population participate in voluntary community organisations. They worked an average of 14.2 hours per month. Women were slightly more likely to participate in voluntary activities and work longer hours then men. The 50 - 64 year age group had the highest level of activity in voluntary work.

## PERCEPTION OF SAFETY

#### Definition:

Measuring how fear of crime affects people's participation in activities outside the home indicates the community's perception of safety. Additional statistics measuring levels of safety in Newcastle will be investigated in Stage 2.

#### Rationale:

The more confident people feel that they will be safe participating in activities outside the home, the more likely they are to be active citizens involved in a range of community and consumer activities.

Newcastle City Council has a range of policies, action plans and services that aim to decrease the fear of crime. These range from improving lighting, and encouraging new modes of public transport, incorporating safety by design principles into all planning documents and requiring Development Applications to give consideration to crime prevention strategies. All Council divisions are involved with safety considerations.

#### **Desired Outcome:**

Improve public perceptions of safety.

#### Indicator:

Results from Newcastle respondents to the HRVF Rgional Survey



I feel safe at all times: Agreement score 1999 – 2.9.Source: HRVF regional survey / NCC specific results December 1999

#### **Results:**

This is the first time this data has been collated at a local level and it is therefore not possible to see a trend. However the regional score for the same questions was 3.7 indicating that the people in Newcastle are more concerned about their safety than people in other parts of the Hunter region.

#### Remarks:

These indicators only give the perception of safety within the community, they do not relate to any crime statistics for the area.

INDICATORS of a Sustainable Community

#### Supporting Data:

1. Results from the NCC survey question: **Public areas in Newcastle are safe** agreement score 1998 - 2.5 and 1999 - 2.5



#### **Results:**

Same result both years – less than general agreement that public areas in Newcastle are safe. The Social Plan Survey (2000) found that overall respondents had a high level of perceived safety in their homes and in their place of work/study.

Car parks, Inner city parks and Newcastle's West End were seen to be less than moderately safe. Across the planning districts the perceived level of safety at each of the locations was relatively similar, the main variation being the lower levels of perceived safety by Inner City residents. An age relationship exists in regard to safety, with the under 25's feeling more confident than the other age groups in most locations.

#### Stage 2:

In Stage 2 quantitative measures that illustrate aspects of safety will be investigated for inclusion in future reports.

## INCOME LEVELS

#### Definition:

The aspect of income levels that is critical to a sustainable community is the difference between the 'haves' and the 'have nots'. This comparison is made by contrasting the income of the top 20% of households to the bottom 20%.

#### Rationale:

It is well documented that the greater the income disparity, the more disadvantaged the 'have nots' are likely to be, resulting in more health and social problems than would occur if there was more equality between incomes.

Newcastle City Council works closely with the community to identify the needs of those on low incomes and the gaps in existing services. Council is active in working with government and non-government agencies to help low income earners. Council also aims to improve the economic base of Newcastle to provide more employment opportunities.

#### Desired outcome:

• Reduction in the disparity between the top and bottom 20%

#### Indicator:



In 1996, the bottom 20% of households in the Newcastle LGA stated an income of less than \$299/ week. The top 20% of households stated an income equal to or greater than \$1000/week. These figures exclude 8.8% of households whose income was not stated, or only partially stated.

Source: HVRF - ABS Census data

#### Result:

This is the first time this indicator has been compiled and is therefore not comparable to previous years.

#### Explanation of the Indicator:

Due to the changing criteria for measuring income from one census to the next, and the difficulty of taking CPI into account, data from the 1996 census only has been analysed. For 1991 the annual household figures were broken down into particular categories that do not equate to those for 1996, when household income was measured on a weekly basis only, and broken down into different brackets.

#### Supporting Data:

The Social Plan Survey (2000) found that there was a high level of agreement that people were able to afford their day to day needs. Perceived levels of ability to afford day to day needs were above average in the Inner City and Lambton districts, and below average in the Jesmond and Industrial districts. No significant variation around this statement was found across age and gender groups. The survey also explored if the participants felt they were better off, the same, or worse off than they were three years ago. Respondents indicated that they were about the same as three years ago. The 20 - 24 and 25 - 34 year age groups felt that they were marginally worse off.

#### Remarks:

The World Health Organisation (WHO) examines income disparity by looking at the top and bottom 20%. Hopefully the 2001 census will allow ready comparisons with 1996 income data.

# DIVERSITY OF EMPLOYMENT/ INDUSTRY SECTORS

#### Definition:

The degree to which employment is spread across all industry sectors, compared to another region that is known to have greater industry diversity measured by employment.

#### Rationale:

Just as a healthy environment is determined by sufficient biological diversity, so a sustainable economy is considered to be one that is not heavily reliant on one industry sector for ongoing employment. The Sydney Major Statistical Region is known to employ across a greater diversity of industries than Newcastle. The diversity index measures the difference in the range of employment by industry between two regions, with an index of zero indicating no difference and therefore a healthy range of job types for the Newcastle work force.

#### **Desired Outcome:**

Increase diversity of employment by industry in Newcastle.

#### Indicator:

The diversity index for industry in the Newcastle Statistical Division (NSD), benchmarked against the Sydney Major Statistical Region and the whole of Australia.

Year	Ncl/Sydney	Ncl/Australia
1995	0.147	0.104
1996	0.127	0.099
1997	0.164	0.127
1998	0.128	0.115
1999	0.173	0.134

Source: ABS Labour Force Data

#### **Results:**

No consistent trend over the five years. Newcastle's industry diversity by employment is closer to that of the whole of Australia than to Sydney's diversity.

#### Explanation of the Indicator:

This indicator has been calculated based upon the total number of employees in each industry. The index is calculated using the following formula (from **Australian Urban Environmental Indicators 1983** Department of Home Affairs and Environment)

Industry Diversity Index = 0.5  $S_{10}^{10} |a_{xy} - b_{xy}|$ 

where  $a_{xy} = proportion$  of establishments in industry Y in year X in Newcastle  $b_{xy} = proportion$  of establishments in industry Y in year X in the Sydney Region.

#### Remarks:

This index provides a measure of the degree of similarity of the industry structures of two areas. As the index approaches zero the two areas are increasingly similar, with an index of zero meaning that the two areas have identical employment by industry structures. The index appears to respond to influences of a seasonal nature – not trending consistently up or down.

INDICATORS

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# RECOMMENDATIONS OF THE WORKING GROUP

o assist Newcastle City Council in developing the project further the Working Group had adopted the following recommendations:

- Newcastle City Council should continue to sponsor the process of developing reporting indicators of a sustainable community.
- Stage 2 is vital to ensure all important characteristics are reported on fully. For example additional elements of resource consumption need to be quantified to expand the present list which reflects only approximately 20% of all consumption.
- Collaboration in this process with the Hunter Valley Research Foundation and/or the Hunter Regional Organisation of Councils should be fostered. Potential cooperative approaches include ensuring comparability of indicators, information and cost sharing.
- Further refinement of the indicators and inclusion of the indicators through goals and benchmarks will enable comparability to other communities.
- The availability of data sets should be refined to support analysis and reporting by the council and the community
- Opportunities to use the indicators in redefining Newcastle's image as a model sustainable community that is equitable and environmentally, economic and socially sustainable, should be actively pursued.
- Demonstrate Council's commitment to sustainability by recognising the indicators of a sustainable community as another platform for expression.
- Future reports on the indicators, expanded to include comparative analysis should be available electronically through the Internet. In addition to analysis there is an opportunity to link the indicators to specialist papers that illustrate best practice examples from around the world.

# appendix 1 working group

# WORKING GROUP MEMBERS

NAME	ORGANISATION
Rosalie Cogger	Civic Association; Resident Group Coalition
Ed Duc	Cornucopia Architects
Bernard Griffin	Trades Hall Council
Michael Murray	Hunter Regional Development Organisation
Peter O'Connell	Hunter Valley Research Foundation
Glenn Albrecht	University of Newcastle
John Campbell	Ecohome – Community Environment Group
David Crofts	Director City Planning NCC
lan McKenzie	Councillor - Newcastle City Council
Frank Cosgrove	Newcastle City Council
Therese Postma	Newcastle City Council
Stacey Anderson	Newcastle City Council
Leanne Graham	Newcastle City Council
Col Sandeman	Newcastle City Council
Penny Crofts	Social Impact Assessment Panel; University of Newcastle
Deb King	Newcastle City Council
Carolyn Cameron	Cameron Strategies
Trish Blair	Newcastle City Council
John Walmsley	Social Strategy Advisory Committee

# appendix 2 community engagement strategies for indicator development

Groups / Strategies	Media	Letter of invite	NCC's quarterly	Working groups	NCC co-ord	Feedback form	Briefing Paper	Library /NCC	Model copy for group's	Reference Group
		/intro	newsletter	members	inators			Public	newsletter	
				networking						
Residents										į,
groups										
Community										i,
service groups										
Education								posters		į,
groups										
Environment										į į
groups										
Business									[focus on	į į
groups									business]	
Council's										į į
advisory										
'groups' <sup>1</sup>										
Previous										ą
Participants										
Community						library		posters		
in general										

<sup>1</sup> Council's advisory committees include Social Impact Advisory Committee, Social Strategy Development Committee,

Environment Council, Environment Protection and Pollution Advisory Committee, Arts & Cultural Development, Access Committee & Youth Forum

# Appendix 3 community feedback form responses

The distribution of the feedback forms was not undertaken as a random survey. The following avenues were used to disseminate the forms:

- personally delivered or posted to all high schools via the social science head teachers years 10 and 11 specifically targeted.
- Hand delivered to the Tighes Hill TAFE campus.
- Hand delivered to various departments and student groups at Newcastle University.
- Distributed by coordinators of sub-councils, panels and community forums within the NCC network.
- Available at the Council administration centre and all libraries.
- Posted to local businesses via the Newcastle and Hunter Business Chamber

Overall 340 forms were returned. Due to colour coding the following breakdown of the source of the returned forms was determined:

- 60 from businesses, Council administration centre and public libraries.
- 90 from NCC coordinators networks
- 190 from schools, University and TAFE

The strong response from the schools is probably more a product of the systematic method of distribution and collection than of any overwhelming interest in the issues. However, the youth responses were fairly consistent within that group and in the most popular issues, consistent with the opinions of all other age groups.

#### Importance ranking

Preliminary analysis of the data showed that very few respondents included rankings of *one* or *two* for any of the characteristics. Therefore it is inappropriate to merely report the proportion of people for each rank. This method did not provide sufficient definition because the majority of respondents identified most or all of the characteristics as being important (scoring them as either 4 or 5).

To allow a greater level of definition in the data a weighted score for each characteristic was created. All the responses rating the importance of a characteristic as one were given a weight of one, those rated as two were given a weighting of two etc. This meant that a total score of each of the characteristics could be created for each age group, with the most important characteristics having the highest total score.

The rank of the characteristics on the weighted score list, results of the filter, availability of data and the sector/s (economic, social, environmental) that the characteristic was measured were all taken into account in the final selection stage. The final selection of important characteristics to measure included 14 aspects of life in Newcastle.

This selection process meant that the aspects of life in Newcastle that were selected for measurement were important to a wide range of people from the community, able to be accurately determined and useful to a range of authorities.



Things to Measure

# Appendix 4 indicator filter

#### IMPORTANT CHARACTERISTIC

#### Indicator:

QUESTIONS	4/6	COMMENTS
Is it valid (does it logically measure		
the "thing")?		
Is the indicator likely to be relevant &		
valuable to the community?		
Is the indicator likely to give us an early		
warning about a dangerous or		
irreversible problem		
Is the indicator likely to really measure		
progress to achieving our goal		
Is the indicator likely to give us information		
about the future		
Is the indicator likely to link to other		
indicators in a clear way		
Does the indicator tell us about the whole		
community or does it affect a small part		
Can the indicator be presented in a way that		
it can be understood by the average person?		
Can the indicator be represented as a		
picture, graph or on a map		
Is it able to be acted upon by the community		
and/or Council?		
Is the indicator comparable		
Can this indicator be easily measured		
Can we measure it again and have confidence		
in the results		
Is the indicator able to show trends over time		
Will it be expensive or difficult to measure		
What are this indicators main limitations		

Note: All items from the earlier 'proposed criteria' list have been incorporated, except "able to challenge the status quo" which applies to the progressive outcomes of the project.

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# Appendix 5 future stages - additional characteristics

Characteristic	proposed measure or indicator	current limitations to be addressed
Water Quality	Combination of physical & chemical	Development of measures via
	assessment with biological tests	stormwater plan & coastal & coastal
	through link with plans of	& estuary mngt
	management	
Thriving, diverse Arts &	No. of productions, exhibitions,	
Cultural sector	events originating within the LGA	
Participation in history,	Community Survey Q: "there are	
heritage & cultural	enough arts/recreational/	
identity activities	entertainment opportunities	
Acceptance of Cultural	None identified yet	
diversity		
Sense of Confidence	Financial measure in SSAC survey;	
in the future	sense of hope of youth	
Quality of built		
environment		
Availability of enjoyable		
meaningful activities		
Progress towards		Further research with Guraki
Reconciliation		Committee required
Sense of Pride in	Quality of Life survey	
Newcastle	Q:"How close do you feel to your	
	neighbourhood/community	
	Suggested survey Q:	
	"How proud do you feel about	
	living in Newcastle."	
Health Status		A product of income disparity,
		unemployment, Housing stress, etc
Participation in community		
environmental activities		
Amount of local economic		
activity		