



# THE CARNIVAL INDUSTRY DEVELOPMENT REPORT

An overview

## Abstract

This note provides an overview of the technical reports and the development program prepared for the National Carnival Commission

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May 9, 2014

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## Introduction

This report represents the scientific background analysis and the agreed design and implement policies and strategies of a program aimed at maximizing the potential net gains of the carnival sector, with particular regard to its social benefits as well as its contribution to sustainable growth, employment and trade. The program itself represents an articulation of what the participating stakeholders indicated best represents their interests, along with program outputs, outcomes and impacts, net of applicable costs. Fifty one (51) sessions were held with individual and group leaders, including a representative subset of twenty-one (21) of the Regional Carnival Committees and the NCC Board and its senior staff. These Regional Carnival Committees alone collectively represent areas with approximately 302,792 citizens and 24,360 businesses. Stakeholders also included the NCC, which officially adopted a process of joint decision-making. In that regard, the following should be noted:

- By design, the NCC is already a stakeholder-driven institution.
- The NCC will now put formal processes in place to strengthen its entire joint decision-making system for any significant matter of public policy it must address.
- Consistent with the Rio+20 agreements, this system will emphasize
  - The role of science
  - A proper forum (physical and virtual) and process for full-scale and timely stakeholder participation in collecting and analysing information (facts and opinions) in the early stages of its policy-making and in negotiating final policy choices.
  - An independent technical support and capacity-building process for improved stakeholder participation. General Participatory Learning and Action (PLA) tools are among the most useful for this purpose.
  - A formal process, including relevant forms and other options (telephone for example), for requesting that matters be considered and for acceding or rejecting requests, and for notification of the decision. This covers any legal mandate to consider them.
  - A process for receipt/acceptance of submissions and fair and timely hearing of live submissions, for questioning of persons making submissions, and for recording and archiving of same, and for preparation of minutes of same. This may also include relevant forms.
  - Rules of participation as established by the responsible NCC Committee – and which might themselves require negotiations.
  - A calendar/schedule of hearings (see attached), some legally mandated, complete with
    - Stakeholder to be met
    - Meeting date.
    - Meeting time.
    - Meeting locations and directions to locations.
    - Meeting topics.
    - Meeting agenda.
  - A formal process for the NCC Committee to arrive at the final agreement and decision.

Parliament will have a specific role and the public can be confident that the final design will be put in place quickly and competently and will bring all our people who want to participate into a process of joint analysis, choice of action plans and the formation of appropriate institutions or the strengthening of existing ones for implementation. The stakeholders will therefore be the controllers/owners of both the relevant decisions and the results.

Published records will be the main and most important outputs from the NCC. The NCC will become an example of how the nation is moving to greater democracy.

### ***Carnival Sector and Guiding Goals***

The carnival sector refers to a set of activities that have evolved to produce significant economic value, in the form of national output, employment and trade. At the core of the carnival sector lies six (6) main and well-known industry groups: (i) steelband; (ii) carnival music; (iii) mas; (iv) fete; (v) associated business associations; and (vi) dedicated public administration services provided by the NCC, including the research of the Carnival Institute of Trinidad and Tobago (CITT). Closely related to these are a set of non-dedicated distributive activities, such as restaurants and food distribution, new media, radio; television, advertising, transport services, and telecommunications through which the core industry generates externalities.

The underlying goal of the Government of Trinidad and Tobago is to take full advantage of the possibilities offered by the sector to address poverty reduction, inequality and more secure and sustainable access of citizens to their fundamental rights and freedoms being pursued globally under the Rio+20 agenda and the post-2015 United Nations Development Agenda. In this context, sustainability is achieved through a dynamic process that seeks to create a more viable pool of resources net of use for current purposes. Thus, all resources used, whether physical, social and cultural, or ecological, are improved and thus saved for the future. The Government of Trinidad and Tobago is also interested in using the results of sound industry monitoring to rebrand the nation in the global space. The NCC translates those goals into achievement of at least a 5% growth of the carnival industry in 2014-15, with related growth of employment and beneficial social effects such as poverty reduction and social equality.

The related implementation projects feature initiatives in the following areas:

- i. Awareness Building and Information Sharing
- ii. Measurement of the contribution of carnival & estimation of production and cost functions. This will provide a stronger empirical basis for policy design.
- iii. Improving the science-policy interface using the sector-wide method. Apart from helping to meet commitments under Rio+20, this will improve both the accuracy of interpretation, the quality of the policy and the inclusiveness of the policy process through the joint review process involved. The result will be stronger capacity to address many of the fundamental issues of national development, such as poverty reduction and economic restructuring which are also inputs into the sustainable achievement of all human rights

- iv. Expanding and Exploiting the Carnival Market Potential. The purpose here is to improve market access with devices such as trade promotion and annual carnival trade fairs.
- v. Technical Support, Risk Management and Financing for Carnival Enterprises. Through this process, the research agenda will be upgraded to underwrite improved incubation, risk identification and management, and upgraded financing.
- vi. Developing the Physical Carnival Infrastructure. This component defines and improves the public capital on which the sector relies, with a view to improving the productivity and profitability of resource use while addressing sustainability and environmental challenges.
- vii. Education and Skills Training for the Carnival Industry. Through this effort, the private effort as developing the knowledge and skills of the industry will be complemented with evidence-based education and skills training targeting the carnival sector.
- viii. Health and Safety for the Carnival Industry. This component will respond to the public, private and occupational health concerns of the industry.

## ***Main Issues/Constraints the Program Will Address***

### *The Framework of Interpretation*

The first major issue addressed in the report is the framework of interpretation. Reference is drawn to Chapter I, which provides a general framework of interpretation of the performance of the sectors of the economy and the effects of such performance on the general economic and social outcomes observed. The chapter also provides contextual analysis of the economy of Trinidad and Tobago, the copyright sector and other sectors in, or linked to, the carnival sector. The most general constraint on the performance of any sector is the performance of the economy in which it functions, local and global. The US economy can be used as an indicator of the global trends but it is understood that considerable potential influence also comes from the emerging giants of China, India and Brazil. Estimates are provided for agriculture, mining (energy), manufacturing, and other standard sectors. The elements of the carnival sector are embedded in many of these measured activities, so the sector would have to be measured as a satellite sector, much as the country now does for the energy satellite group reported in the accounts. This is yet to be done, but is needed for sound policy design, so its measurement is a significant activity in the proposed basket of projects. The Central Statistical Office has established no significant capacity to construct the satellite accounts of the carnivals sector, so its upgrade for this purpose is also a significant activity. The basket of programs will provide for continued development and updating of the analysis in Chapter 1 as part of the routine reporting on the carnival sector.

One of the important observations to be made about the carnival sector is the lack of official formal, model-based knowledge of its importance, as measured by its contribution to GNP, employment, and trade. Some starting evidence is available in terms of the contribution of the copyright sector, a significant share of which is accounted for by carnival-related activities. That evidence indicates that copyright accounted for nearly 5% of GDP in 2011, which is more than TT\$4 billion. Both the share and the volume of copyright output has been growing since 2001. Many of the major copyright-yielding activities are properly embedded in carnival. Among these are carnival music and mas, and carnival-related advertising

and media, including new media. However, these carnival industries also have large elements that do not currently exploit the potential for monetizing the intellectual property related output they generate, including fetes, which demand significant amounts of carnival music and other output; the production and tuning of pans, creation of racks and the supply of affiliated services; truck on the road services; among others. The NCC seeks to eliminate this knowledge gap and constraint and specific provisions are made accordingly in the basket of projects described below. The framework for collection and interpretation of the sector data to be routinely collected from establishments and households, and the associated projects is characterized in Chapter 2.

It is broadly known that the carnival satellite sector provides a rich range of opportunities for casual and organized cultural expression, for entertainment, for the creation of intellectual property, and for generating net positive gains in fitness, health and well-being, social inclusion and democracy, and social self-confidence. Further, it is also known that the industry has thrived even in a setting of Dutch Disease. However, this knowledge is too imprecise for policy design. Provisions are made in the basket of programs for proper monitoring of the social outcomes, as measured by multidimensional poverty reduction and growing equity.

Linked to the lack of official data is ignorance of the specific dynamic production functions of the outputs of the carnival sector and their implications for the activities that constitute sound policy. Dynamic economic production functions specify the following:

- (i) The process of generating net revenues over time.
- (ii) The constraining net rate of growth and technological upgrade of the supply of intermediate goods and services used in production, especially of produced raw materials and natural resources, which is a difference between the gross rate of innovation and growth of supply of intermediates and the gross rate of utilization, inclusive of consideration of ongoing competition at home or internationally.
- (iii) The function describing the rate of resource utilization in terms of the method and volume of the production effort with available capital and labour.
- (iv) The constraining net rate of growth of the produced capital stock, public and private, used by the industry, which is to say the net of the rate of innovation and growth of the capital stock and the rate of utilization of the services of the capital stock, inclusive of any ongoing competition with the rest of the world.
- (v) The function describing the cost of utilization of the capital stock, with labour and skills, expressed in terms of the production effort.
- (vi) Applicable timescales.
- (vii) Constraints defining the minimum capital stock, the minimum effort and the minimum use of intermediates that the dynamic production function must satisfy.

Some work has been done on the underlying technical aspects of the production processes of some aspects of the sector have been documented, mainly steelpan production. However, this information has not been translated into dynamic economic production functions needed to shape industrial policy. Further, neither technical nor economic production functions have been specified for most of the other

activities of the industry, in terms the key issues of the activities, timing, scope and scale of output, and the frontier production technologies. In terms of time scales, much of the interpretation is chronological not relative to the rate of flow of output. In particular, it is understood, broadly, that in Trinidad and Tobago, carnival activities are concentrated in the six month period from October of the preceding year to February or March of the following year and culminate in two days of street parades and revelry before the start of the Lenten season. It is also recognized that the investors in the Trinidad and Tobago industry are also major players in a global carnival industry that runs all year round. However, this is not embedded in formal dynamic models of output and net revenue generation as described above. Correspondingly, there have been no studies of the related nature and impact of domestic and international competition, the implications of such competition for optimal operations and public policy, and the required adjustments in the nature of the industry policy process. The NCC seeks to address these knowledge constraints. Chapter 3 to Chapter 9 are a set of technical reports, each of which documents the current state of knowledge about the technological dynamics of steel orchestras, carnival music and mas, and the environment in which they are produced. The reports also identify the main options for future development that should be the focus of policy today. These options are included in the basket of projects in this Aide Memoire.

#### Relatively Weak Science – Policy Interface

The second major constraint on the development of the carnival industry is the inadequacy of the policy process traditionally adopted by the NCC and government, in particular the science-policy interface in existing policymaking. Even though carnival has evolved into a major industrial system, currently policy design is largely conceived as cultural policy and largely ad hoc. Essentially, through the Ministry of Arts and Multiculturalism and the NCC, government defines subventions to enable the annual expression of the country's largest and internationally most prominent cultural expression. Subventions may also be allocated to other ministries, such as Health and Education, to support the roles they play in selected aspect of the carnival industry, such as fetes and 'Kiddies Carnival', or the "Pan in Schools" program. With the evolution into major contributors to value-added, employment and trade it is necessary to bring the industrial aspects of the carnival under the focus of industrial and economic policy. However, traditional policy methods used for other sectors will not tend to work for carnival, because of historical democratization of decision-making in the NCC and because of modern needs to improve the interface between science, policy choices and the active transparent and democratic peer-review process. Currently, policy is made differently:

- (i) Routine information collection plays almost no role.
- (ii) Routine information sharing and communication is not involved as the basis for ensuring socially sensitive and widespread stakeholder participation when arriving at the optimal policies and strategies as well as successful policy implementation.
- (iii) Government is mainly a player in the cultural expression or in the resolution of conflicts when they arise. It therefore lacks the capacity to signal effectively its intent to the stakeholder community, including the public at large.

The NCC is committed to addressing all these issues through an upgraded joint policy process and an upgraded joint-policy initiative will be instituted in order that all voices have an equal chance of being heard. Chapter 1 clarifies the interaction of culture, science and policy in this process, with the science featuring transparent rather than closed peer review through discourse involving stakeholders representing all the data domains. An important set of the projects in the Aide Memoire seeks to strengthen this interface, consistent with national commitments under Rio+20 update of the UN Millennium Declaration (1992). Chapter 1 also documents the required causality analysis to support sound policy. The NCC will move to require that all its allocations to fund interventions for carnival development be supported sound instrumental variable analysis, experimental design, or quasi-experimental incentive design and related analysis.

### Under-exploitation of Market Potential

The third major constraint on sector development is the limited use of the market potential of the frontiers of the industry. Currently, outputs of the carnival industry are sold through three avenues: (i) domestic demand; (ii) tourism inflows; and (iii) carnivals established in the global community. All of the monetization is heavily performance-oriented, driven in this direction by the challenges of piracy and distribution under the control of the international majors. In this regard:

- (i) With respect to domestic demand, government has limited its role to demand for infrequent performance at cultural events such as the annual carnival shows, providing no year round stimulus and no stimulus at all to other activities in the industry, such as the evolving education services that the private sector supplies.
- (ii) Regarding tourism inflows, much of the demand is still from the Caribbean diaspora. There is some limited advertising of carnival, but no activity of the type or scale needed to for a trade promotion initiative.
- (iii) Regarding international demand through the export of services, there are 180 carnivals spawned around the world by the Trinidad and Tobago carnival and related carnivals in the Caribbean. However, of these, all have evolved in the Caribbean diaspora. This provided huge opportunities for the expansion of the industry and for trade creation beyond the national shores. However, the process has effectively left the sector without an adequate process of exporting the sector activities to the rest of the world, especially in particular China, India and Africa all of which are the root cultures of the Caribbean as well as the economies with the fastest growth rates in the modern global economy. Just as important, there is no systematic effort to establish links to and influence on the direction of development of the foreign carnivals through programs developed with the domestic investment community.

To address these issues, two sets of additional projects are included in the Aide Memoire. One set deals with interventions by the state aimed at upgrading existing activities. The other considers the use of carnival (including fetes) as an intermediate in film and in gaming, the latter especially. Chapter 7 is a technical report clarifying why the interventions are good policy.

### Inadequate Risk Management and Financing

The fourth major constraint on sector development is the limited rate of development of risk management mechanisms and financing instruments for the industry in the domestic market as well as the limited role for international investors in the development of capacity, output and markets. Many enterprises in carnival are interested in transforming both their technologies and their product lines but lack the business support systems for this purpose. There exists no national institution dedicated to assisting their technical development, such as exists for agriculture, tourism, manufacturing and other industries. Correspondingly, very little work has gone into the investigation of the technologies of the sector, beyond the stage of folklore about craft activity.

One reason for this general condition is the small or medium size of most of the enterprises in carnival. Vision 2020 notes that many small entrepreneurs, including carnival entrepreneurs, “do not have the knowledge, financial resources or business skills to take their businesses out of the informal sector.” This amounts to recognition that there is a historical tendency for the SMEs to rely heavily on goodwill to generate surplus but to be correspondingly constrained by the absence of adequate indicators and measures of the value of such assets and hence the resource to take advantage of the potential. The issue is especially relevant to carnival industries, which rely heavily on the intellectual property and structural capital components of their goodwill. Most of these establishments hold small supplies of traditional capital, with many forms of their assets doing double duty as personal capital. Many, especially organizers of fetes and steel orchestras, rely on small corporate sponsorships, which also double as methods of advertising for the sponsors.

The following should also be noted:

- (i) Currently, investors in carnival are mainly nationals, albeit some who resided abroad for many years. Many of these have traditionally been informal venture financiers.
- (ii) Very little foreign direct investment is involved, whether as portfolio or direct equity investment in stock.
- (iii) Also, financial capital flows come from government through the NCC or as debt financing from the domestic financial sector in terms of relatively high commercial rates. In the latter case, not much has been done to develop instruments that address the special nature of many of the assets and net capital forms of the industry. In contrast, agriculture benefits from low cost low and grant flows through the Agricultural Development Bank, even though it contributes less than 1% to the national GDP and is in general stagnant as a contributor to industrial transformation. Absence of dedicated development banking facility serving the industry is one of the main constraints on its development. The NCC seeks to address this constraint on industry development.
- (iv) Even though some research is being undertaken, enterprise-wide risk management and incubation services are not pervasive in the sector. Thus, there is inadequate technical support for the development of products and processes.

Some public agencies seek to support the growth of micro, small and medium sized enterprises, but, according to Vision 2020, “generally lack the capacity to undertake this important task of economic

transformation.” A government-owned agency, the Business Development Company Limited (BDC) was established to provide limited loan guarantees through the financial sector. Invest TT has since been created by the Ministry of Trade, Industry and Investment to replace the BDC and a supplier of comprehensive investor facilitation, investment promotion and related support services. The creative industries, including carnival, is among the sectors being targeted by the new institution.

Another government agency, the National Entrepreneurship Development Company Limited (NEDCO), was established in August 2002. It provides small loans, training and general advice to micro businesses; and targets nontraditional small production and services. NEDCO’s function can be described as risk-inclined in their policy of lending to new and existing micro enterprises.<sup>1</sup> However, these initiatives have not proven adequate to address the needs of the Carnival industry. It is therefore necessary to create a process, through which the research agenda will be upgraded to underwrite improved incubation, risk identification and management, and upgraded financing targeted at the Carnival industry.

The Aide Memoire includes projects to address this problem. These projects are complementary to the ones that address the other constraints identified above, and therefore concentrate on capacity-building in the SMEs themselves, on related technical supports, incubation functions, and support for technical and product transformation, and financing.

#### Underdeveloped Carnival Infrastructure – Physical, Educational and Health

The sixth major constraint on sector development is the inadequacy and underdevelopment of the physical, educational, health, ICT and security infrastructure of the industry.

**(i) Physical Infrastructure**

The broad approach to addressing the physical infrastructure constraints is documented in Chapter 9. Traditionally carnival masquerade has evolved in every community, essentially in 53 regional expressions, as parades through the streets. This had its advantages when the carnival was largely culture. With the evolution into large-scale industry, the physical infrastructure of the streets are now quite inadequate, especially in Port of Spain, Arima, Arouca, San Fernando and Tobago.

**(ii) Education Infrastructure**

The education infrastructure of Trinidad and Tobago has only begun to address the needs of the industry in the last 10 years or so. Even then, in the absence of an adequate database of the demand and supply of skills to the industry, much of the education is done in an information vacuum, without relevant skills shortage/surplus studies to motivate targeting of the activities and occupations of the sector.

**(iii) Health Infrastructure**

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<sup>1</sup> Ministry of Trade, 2007. A Green Paper on the Trinidad and Tobago Investment Policy. GOTT., POS. pg. 41.

Like the physical and educational infrastructure, the health infrastructure of carnival has generally been, and largely remains, the underdeveloped national health grid. Chapter 8 documents and specifies relevant initiatives. No specialized public or private health capacities and facilities have evolved to address the many health issues that arise with the development of the sector. This includes the “Truck on the Road” facilities which, although better than no facilities at all, are not inherently designed and developed with or linked to specialized health care and waste-related facilities for the purposes at hand. In the context of the international scope of the carnival industry, significant upgrade is now needed with respect to (i) a mass egress plan for Port of Spain, and other areas where large carnival activities take place; and (ii) a comprehensive health and injury surveillance system.

**(iv) ICT**

The ICT infrastructure within the typical Carnival business and Carnival Association is very weak. Support is needed to upgrade these business/Associations by strengthening the ICT capacity.

**(v) Security**

Poor public education about the rights of people in Carnival. Disarticulated policy

### ***Rationale for Program***

Against the background of the technical models of Chapter 1 through Chapter 9, Chapters 10 and 11 document the general program and the Year 1 implementation program for industry development. The summary rationale for these programs are described here.

*Awareness-building, measurement of the contribution of carnival & estimation of productivity and unit cost functions, and strengthening of the science-policy interface*

Sound policy must rest on a strong empirical and analytical basis, in particular one capable of measuring inputs and resulting outputs, outcomes and impacts on comparative productivity (efficiency), profitability and risk, all in a dynamic setting. Essentially, this type of information must be used to measure the potential and actual growth and development contribution of the carnival sector over time, in comparison to other sectors of the economy and taking into account the challenges of the global economy. It is also necessary to examine the social impact. The process must involve joint causality analysis and transparent peer review for completeness, and this must be a normal part of the joint policy-making with stakeholders. This also means that a strong information sharing and communication system must accompany the systematic collection and analysis of data. Data collected will have to be routinely shared and made available under suitable protocols and costs to scientists interested in research. Much of this will have to be done outside the formalities of the CSO.

Further, the dynamic theory and evidence used in the joint policy process must clarify the key causal relationships involved, with feedback as necessary. Central to this pursuit of key causal relations must be flexible and adaptive model formulation and testing, to abstract and simplify the maze of social and physical interactions that constitute the carnival sector and its impacts on society. The process must be

repeated as new information becomes available. Poor development outcomes are closely associated with policies based on mere intuition and commonsense, which, in contrast to analytical models, typically cannot be studied, replicated and tested. Poor development outcomes are also associated with no routine access to data and non-analytic modeling that cannot be subject to causal and sensitivity analysis.

On policy formulation, the NCC is committed to using the sector-wide approach to information collection, communication and sharing as the basis for ensuring socially sensitive policy development and widespread stakeholder participation when arriving at the optimal policies and strategies as well as successful policy implementation. Apart from helping to meet commitments under Rio+20, this set of approaches will improve both the accuracy of interpretation, the quality of the policy and the inclusiveness of the policy process through the joint review process involved. The result will be stronger capacity to address many of the fundamental issues of national development, such as poverty reduction and economic restructuring which are also inputs into the sustainable achievement of all human rights. The approach will also strengthen the capacity of government to signal effectively its intent to the stakeholder community, including the public at large, and win collaboration in the implementation process.

#### Expanding and Exploiting the Carnival Market Potential

The purpose here is to improve market access with two distinct sets of devices. One set upgrades the existing activities with a view to making them more efficient. Upgraded marketing, and branding through trade promotion and annual carnival trade fairs are among the devices considered here. The efficiency of these activities and their establishments will be measured routinely. **Annex I** clarifies. The second set seeks to open new frontiers. The existing international environment of intellectual property now makes it difficult to maximize gains from the mere creation of intellectual property as the basis of profit and surplus creation. The tendency has been to shift focus to performance-based monetization. However, for new frontiers, other elements of goodwill must be the new focus, and with that more expert use of the consumer-supplier interface that is evident in performance as such. Essentially, the main strategy is to use carnival as an intermediate input, with special focus on its role in gaming, and to a lesser extent film. This would require a program to develop complexes – cineplexes- that are fully designed to exhibit the entire carnival experience in one space and then to create a strong interface with the emerging ICT technologies that allow rapid monetization through gaming and film that are deployed in the complexes. The emphasis on video gaming would also allow for sustainable attraction of the paying customer to a rewards-based experience with the option to monetize the points assembled when playing the game in the carnival complex.

#### Technical Support, Risk Management, Marketing, and Financing for Carnival Enterprises

Through this process, the NCC agenda will be upgraded to underwrite improved incubation, risk identification and management, and upgraded financing of the enterprises in carnival. Left to the current systems available to the enterprises of carnival, the general goals of the Special Interest Groups (TUCO, Pan Trinbago, NCBA), the NCC and the establishments will not be realized – the translation of the known high rates of production of goodwill, and thus the high productivity and profit potential, into high growth

rates that would increase the share of carnival in the national economy. The financial sector has not tended to devise new instruments that address the high-risk businesses. Even though the carnival sector has been expanding rapidly, access to development finance to mitigate high risk has been a critical constraint on the growth of large numbers of firms in many areas of the country, perhaps outside of Woodbrook. A new approach to investment must involve the provision of more risk-inclined financing.<sup>2</sup> Existing initiatives have not delivered – whether NEDCO or the BDC – and the result has been widespread underinvestment in carnival, despite its high growth potential. To address the needs of the Carnival industry, it is therefore necessary to create a process featuring upgraded financing, upgraded marketing and branding supports, and improved incubation and risk management to match the improved risk identification and measurement of credit worthiness in the basket of projects that address data and policy design.

### Developing the Carnival Infrastructure – Physical, Educational, ICT, Security and Health

Carnival as industry is heavily constrained by the inadequacy and underdevelopment of the physical, educational and health and ecological foundations of the industry. The NCC and its stakeholders are committed to addressing this condition, with good reason. Carnival is no longer mere cultural expression. It is now a large sector in the economy. The carrying capacity of the streets has been exceeded for some time now, contributing to the sharp slowdown in growth that has been documented for the copyright sector by the WIPO estimates. The challenge exists in all 53 regional expressions, suggesting that a rational national solution might adequately address the problem. One approach is to simply upgrade the physical infrastructure of the streets which are now quite inadequate, especially in Port of Spain, Arima, Arouca, San Fernando and Tobago. However, the expert views of the engineers of the NCC is that some attempt must be made to move major elements of the carnival to other centers.

With respect to carnival. The education infrastructure is not much different. The education infrastructure of Trinidad and Tobago has only just begun to address the needs of the industry in the last 10 years or so. Even then, in the absence of an adequate database of the demand and supply of skills to the industry, much of the education is done in an information vacuum, without relevant skills shortage/surplus studies to motivate targeting of the activities and occupations of the sector. Most of this challenge will be addressed in basket of programs that address the information for policy and the science-policy interface. The outstanding issue is the need to use exportable education and training as a supply activity in the carnival industry itself. All of the stakeholder groups have been attempting to develop as private suppliers of education, and all have indicated that the work to date provides clear evidence that this is an area of high potential profitability that will also take advantage of their current orientation and practice of exporting services. Steel Orchestras already export much, especially in the carnival season, and without commensurate compensation. They estimate that a significant opportunity exists for monetization of that service.

On health infrastructure, stakeholders seek a variety of public health interventions to address the health infrastructure of carnival. There is evidence of urgent needs to be addressed in the form of specialized

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<sup>2</sup> Ministry of Trade, 2007. A Green Paper on the Trinidad and Tobago Investment Policy. GOTT., POS. pg.40.

public or private health capacities and facilities have evolved to address the many health issues that arise with the development of the sector. The incentives for upgrade of “Truck on the Road” facilities to evolve into private suppliers of specialized health care and waste-related facilities all regulated adequately by the NCC-Public Health link will add a distinctly efficient layer to the current supply grid. Together with the mass egress and health surveillance adjustments these will help to meet the growing need for upgraded services by an increasingly sophisticated and demanding international community of patrons.

### ***Executive Summary and Budget***

The final component of the technical report, the Executive Summary also details the budgetary assumptions used to finalize the program design. It is proposed that at least TT\$360 million be spent on the identified development program over the next 5 years, with approximately TT\$72 million in 2014-2015. Currently, almost all NCC financing is provided by the Government of Trinidad and Tobago. The NCC now proposes that funding will include a significant contribution of loan and grant development financing by the international development partners, including the Caribbean Development Bank and the Inter-American Development Bank. An NCC Grant and Financing Center will be established to support this adjustment of NCC financing.