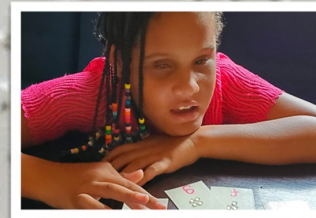




# REPORT

2019



## The Vision

The Belize Council for the Visually Impaired's vision is of a Belize where no one is needlessly blind and those who are irrevocably blind are integrated as equal members in all aspects of society.

## The Mission

The Belize Council for the Visually Impaired is a non-profit organisation committed, through a comprehensive programme, to prevent and cure blindness, restore sight and to rehabilitate and educate people who are blind to enable them to use their talents and abilities to live independent lives.

### **Headquarters:**

National Eye Clinic  
Lions Building  
Princess Margaret Drive  
Belize City

### **Accountant:**

Felix Reyes  
Chartered Accountant  
5760 Meighan Avenue  
Belize City

### **Bankers:**

Belize Bank Ltd  
Albert & Regent Streets  
Belize City

For tax deductions US donations can be sent to:

### **BCVI Foundation**

2800 11th Ave. S., Suite 14  
Great Falls, MT 59405  
USA

**The Belize Council for the Visually Impaired is a Company Limited by Guarantee and is Registered as a Non Government Organization—Certificate No.12/02**

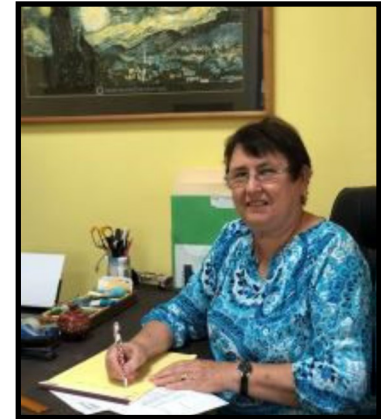
# Contents

4	Message from the Executive President
5	Message from the Executive Director
6	Organisational & Staff Development
9	Staff, Board and Representatives
10	Primary Eye Care
13	Treating Eye Disease
16	Visiting Medical Volunteers
18	Rehabilitation
19	Education for All
20	Summer Camp 2019
22	Financial Sustainability
23	Financial Review 2019
24	Planning for the Future
25	Thanks to our Friends and Supporters



# Message from the Executive President

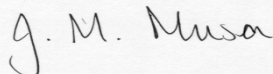
As an NGO founded in 1981 to provide services for adults and children who were blind, BCVI has gradually developed into an organization that provides a truly national comprehensive eye programme. Our services include primary, secondary and tertiary level eye care as well as educational and rehabilitative support to children and adults who are blind and visually impaired.



It is hard to believe that it is 20 years since the then Prime Minister, Said Musa, signed a document in support of Vision 2020: the Right to Sight. The Ceremony took place at the Lions Building in Belize City as BCVI opened its Secondary Eye Care Clinic. This fully-equipped ophthalmological clinic and operating theatre was completed with help from the Belize City Lions Club, and with grants and support from Lions Clubs International Foundation (LCIF), Sightsavers and PAHO and also with the help of many others. Today it provides a vital service in the community as thousands come through our doors each year.

This Vision 2020 initiative was launched in Geneva on 18 February, 1999 as an unprecedented global partnership aiming at reducing avoidable blindness by up to one million people globally by the year 2020. The partnership involved the World Health Organization (WHO), The Task Force of the International Agency for the Prevention of Blindness (consisting of all the major International Eye Care organizations) as well as national governments, NGOs and philanthropic institutions and Individuals. Vision 2020 recognized that if left without concerted action, millions of people would be needlessly blind.

BCVI's eye care programme works along the guidelines of Vision 2020 which sets out to reduce the incidence of the leading causes of avoidable blindness by the year 2020. In Belize, the main causes of blindness are cataract, glaucoma, diabetic retinopathy, refractive errors and childhood blindness. BCVI is the only eye care provider that offers services on a national level, with five clinics strategically located throughout the country. At the end of 2019 we feel we have accomplished much by providing intervention for all the major causes of blindness. I hope you enjoy reading about these activities in this report on 2019 and recognize the valuable role all the volunteers, staff and partners have played, and continue to play, in this endeavor.

  
Joan M Musa  
Executive President  
February 2020

# Message from the Executive Director

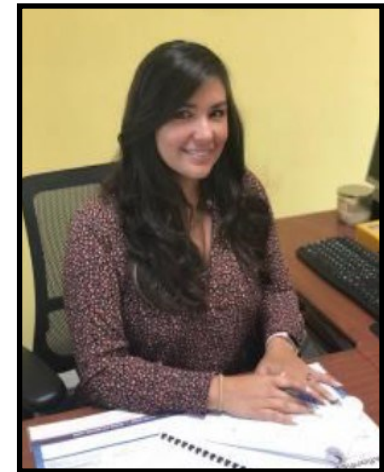
The Belize Council for the Visually Impaired (BCVI) is proud to launch our 2019 Annual Report in which you will see the incredible work done as we aim toward reducing avoidable blindness and helping those who are blind to live independently.

Through daily clinics our Optometrists and Ophthalmologists performed more than 20,000 examinations at our clinics countrywide. More than 5,000 patients received prescription or reading glasses to improve their sight and approximately 300 patients received sight-restoring cataract surgery through our visiting ophthalmic surgeons. Our Rehabilitation Team, although very small, supported more than 80 people who are blind with orientation and mobility training, school books, equipment and adaptive devices.

Now, as we enter 2020, and what should have been a highlighted year in eye health, the organization is at a standstill. Our Team, along with the rest of the country and many of our global citizens, are collectively doing our part to reduce the spread of COVID-19 by closing our doors and staying home.

During this time, BCVI continues to collaborate with the Ministry of Health by offering our building in Dangriga to accommodate patients awaiting their test results, donating essential eye medication to government and National Health Insurance (NHI) pharmacies to enable patient access, and we continue to communicate with rehabilitation clients needing support.

We do not know when BCVI will be able to reopen our doors or when Belize will be able to reopen our borders to welcome the many surgeons willing to provide eye care to our patients. What we do know is that, given the nature of this pandemic and effects it is having on our economy, BCVI's services will remain essential. We will rebuild as our vision remains: A Belize where no one is needlessly blind and where those who are, are integrated as equal members of society.



Carla Ayres Musa  
Executive Director  
April 2020

# Organisational & Staff Development

Over the years, BCVI has truly evolved as a non-governmental and non-profit organization. What started as an arm of the Red Cross offering free services for people who are blind has developed into a national comprehensive service provider, focusing on prevention and treatment of blinding conditions in addition to Rehabilitation and Education of those who are blind. There has been a need to “think like a business” and to increase our self-sustainability through fees for services (i.e. glasses, surgery, etc.). This concept, of an NGO collecting money, is known as a social enterprise and can be a confusing one. However, this is exactly what NGOs are being encouraged to do given today’s economic climate and the shift in the focus for funding. Executive Director Carla Ayres Musa presented this concept at BCVI’s 2019 Annual General Meeting that was held at the British Army Training Support Unit Belize (BATSUB) complex in Ladyville on Friday 26 July. It was a well attended meeting with campers, their families, volunteers and supporters present at which the Board was elected.

We have had a number of staff changes in 2019 which have been quite challenging. We were sorry to lose two of our local optometrists, however we welcomed back optometrist Freddy Nicolson, from the private sector, who is a great addition and is working out of our busiest clinic in Belize City. Although short of optometrists in 2019, we continued to keep all our five Primary Eye Care Clinics fully functioning. We are grateful to the Cuban Medical Brigade who continue to provide optometrists and Leyanis Alvarez is working in the south and supporting our Refractionists Anna Salam in Dangriga and Randy Williams in Punta Gorda. We were fortunate to also have had volunteer optometrist Dr Heather Bae arrive in August as she has filled the gap as Optometrist in Punta Gorda until the end of the year. Heather was in Belize as part of Dr Inder Singal’s support in helping BCVI become more self-sustainable. Dr Singal plans to send Optometrists annually for six months at a time or more.

We were very sad to see Cuban Brigade member Eufemio Galindo depart Belize due to health concerns. Eufemio’s role as Technician at the Optical Lab will hopefully be filled by another member of the Cuban Brigade as he contributed to the timely production of glasses. We appreciate our two very capable technicians continuing without a third team member for the present.

The management and accounting of all BCVI’s many financial transactions are managed by our Finance Officer, Mrs. Carmencita Cruz. In mid July - August 15th, John Dumfries, AFID volunteer was seconded to BCVI to assist with implementing QB Software countrywide. He worked along with Mrs. Cruz and IT officer Mark Mitchell to update the financial management system. Thanks to John we were able to uncover certain security risks with the software we had hoped to switch to in our clinics. While we did not have the resolution we had hoped for in streamlining the overall management, John was helpful in implementing certain measures to assist in streamlining certain functions.



# Organisational & Staff Development

BCVI teamed up with Belize City Lions Club to present a proposal for the expansion of the Belize City Lions Building in which the BCVI clinics are housed. The proposal will benefit both the Primary Eye Care Clinic as well as the Rehabilitation and Education Programme. In August, the Lions Club International Foundation (LCIF) approved the proposal for the expansion of this building that houses the BCVI PEC and SEC clinics as well as a few members of the Rehabilitation and Education Team. The project will allow BCVI to expand the primary and low vision clinic and will also include a rehabilitation resource center and braille production unit. The expansion will mark the first time all services and teams are included in BCVI's main facility. We hope to break ground early 2020.

Long-time friend of BCVI and PAHO's Regional Advisor for Visual Health, Dr Juan Carlos Silva visited with us in July to discuss opportunities for Ophthalmology training in the region. Guatemala was identified as the ideal location for medical school and specialization as well as certification in Optometry. Human Resources have long been the largest area of need for eye care and BCVI. We are extremely fortunate to report that thanks to Dr Inder Singal and the Adarsh Charitable Foundation, three scholarships have been granted: two for Optometrists and one for Medical School with Specialization in Ophthalmology. Daniel Choc and Jahira Vasquez will be studying Optometry in Guatemala while Norma Rios will attend Medical School in Costa Rica with specialization in Ophthalmology. This is a huge commitment from Dr Singal and we really appreciate his generosity through the Adarsh Charitable Foundation. The three recipients have been successful in obtaining placements and will commence their studies in January 2020.

We had many changes among our Ophthalmic Assistants (OA) whose role may differ according to location. They are a vital member of the team and are provided with training and support to be able to function efficiently and effectively. Their role includes managing the clinic and appointments, applying a triage strategy, data entry and dispensing glasses. Each of our clinics has at least one Ophthalmic Assistant functioning in this vital role.

As emergencies seem to be on the rise in all clinics, a session with Optometrists and OAs was held to set procedures that would allow us to treat and/or refer patients according to the capacity of the organization. The session was led by Dr Zory Diaz and resulted in the set standard of care of patients from OA to Optometrist to Ophthalmologist. Although there is much work to be done, the partnership with KMH has had some impact on the efficiency of referrals of emergency eye cases. Our existing building in Dangriga has deteriorated drastically due to age, weather and termites. A new pre-made structure has been purchased and we are awaiting its completion before removing the old structure and replacing it. This should be accomplished early in 2020.



Jahira, Norma and Daniel sign a bond to agree to work with BCVI on completion of their studies.

# Organisational & Staff Development

**Equipment maintenance and upgrades** Now that we have a dedicated maintenance officer, Clifton Borland, we do not have non-functioning equipment taking up much needed space. He ensures that all equipment is maintained for visiting groups in the operating theatre and that all clinics countrywide are fully operational.

Dr Inder Singal was very helpful in contacting Medilex to confirm that our OCT was not functioning and it was not a user issue as they had been insisting. The OCT Machine was then assessed by Medilex and after months of waiting they diagnosed an issue with the power of the laser which cost \$5,000USD to replace. We reached out to parent company ZEISS to acquire this part, and Medilex sent their technician to fix the OCT which is now the only one in operation in the country. The technician also fixed our visual field machine which will assist in tracking the progression of glaucoma in many of our patients.



We were very happy to receive our second ophthalmic chair unit which has been set up in the second lane in the Belize City SEC Clinic. This unit was acquired through Dr Baxter McLendon and James Roberts in the US. It has been extremely helpful in keeping an efficient clinic flow particularly when we have visiting teams.

Executive Director, Carla Ayres Musa attended the European Society of International Ophthalmology (ESIO) Conference in Geneva, Switzerland in November. Organizers of the conference invited BCVI to speak on the NGO perspective in eye care. The guests and presenters were impressed with BCVI's history and were particularly surprised by the development from rehabilitation to eye care as opposed to the other way around which is how most organizations develop their programme. The three-day event was a great opportunity to network and BCVI received an invitation to collaborate with the University of Geneva via an internship programme. App developers focusing on eye health also shared information that may be useful in clinic (to demonstrate disease progression) as well as to improve the lives of people who are blind through artificial intelligence.

As BCVI staff are scattered around the country, we traditionally have a number of get-togethers for meetings, training sessions and socialization. Two successful gatherings were a staff trip over the border to Calderitas, Mexico in August and our annual end-of-year meeting on December 6<sup>th</sup> with all staff members and members of the Executive Board gathering to review the year's activities and enjoy Christmas Lunch together.





# Staff Members, Board Members and Representatives

Elections were held at our Annual General Meeting on 26 July, 2019.  
The Elected Board members 2019-2020 are:

## **EXECUTIVE BOARD**

Executive President	Joan Musa
Vice President	Donovan Reneau
Secretary	Alice Riveroll
Treasurer	Sheena Castillo
Legal Advisor	Dolores Balderamos Garcia

## **EXECUTIVE MEMBERS**

Kamela Palma  
Regina Fonseca  
Sharon Pollack  
Dr Natalia Rodriguez

At the end of 2019 BCVI had a total of 34 staff to carry out all its activities countrywide.

## **MANAGEMENT AND SUPPORT STAFF**

Carla Ayres Musa - Executive Director  
Mark Mitchell - IT Officer  
Clifton Borland - Equipment Maintenance Officer  
Carmencita Cruz - Finance Officer  
Karina Samuda - Executive Officer  
Carol Martinez - Custodian  
Trevor Estrada - Messenger/Driver

## **REHABILITATION**

Sagrario Clarke - Itinerant Teacher, Northern Districts  
Inga Sandoval - RFO, Belize City and District  
Victor Chan - RFO Assistant  
Norma Rios - RFO Assistant  
Arjenis Ruiz - RFO Assistant

## **OPTICAL LABORATORY**

Sheena Castillo - Lab Operations Manager  
Merryl Hernandez - Lab Administrative Officer  
Rudy Cocom - Senior Optical Technician  
Shakeel Flowers - Optical Technician

## **PRIMARY EYE CARE**

Jackie Graham Hemsley - Primary Eye Care Manager  
Elvia Bonilla - Optometrist, Belize City  
Freddy Nicholson - Optometrist, Belize City  
Rita Witzil - Optometrist, Orange Walk, Corozal, San Pedro  
Leyanis Alvarez - Optometrist, South  
Anna Salam - Refractionist, Stann Creek  
Randolph Williams - Refractionist, Toledo  
Michelle Young - Ophthalmic Assistant, Belize City  
Elia Slusher - Ophthalmic Assistant, Orange Walk  
Daniel Choc - Ophthalmic Assistant, Toledo  
Celia Flores - Ophthalmic Assistant, Cayo  
Magali Sabido - Screener/Grader, Orange Walk & Corozal  
Jahira Vasquez - Screener, Belize City

## **SECONDARY EYE CARE**

Dr Zoraida Diaz - Ophthalmologist  
Caroline Usher - Nurse in Charge  
Nauget Buckley - Practical Nurse  
Lysette Pren- Ophthalmic Assistant  
Mara Burgess - Ophthalmic Assistant

# Primary Eye Care

BCVI operates five Primary Eye Care Clinics strategically located around the country. At each, an optometrist performs a complete eye examination including a refraction test to check if the vision will improve with glasses. Assisted by an ophthalmic assistant, the patient can select from a variety of frames to suit their pocket. The prescription lenses are accurately made up at our glasses production unit and dispensed back to the patient at their local clinic. Our aim is to ensure that all those needing glasses receive them at a cost they can easily afford.



## Orange Walk, Corozal and San Pedro

Examinations	2615
Prescription glasses	968
Readers issued	156
Referred to Ophthalmologist	230

## Belize

Examinations	5526
Prescription glasses	2375
Readers issued	653
Referred to Ophthalmologist	426

## Cayo

Examinations	1420
Prescription glasses	440
Readers issued	253
Referred to Ophthalmologist	96

## Stann Creek

Examinations	3265
Prescription glasses	735
Readers issued	371
Referred to Ophthalmologist	147

## Toledo

Examinations	2447
Prescription glasses	432
Readers issued	321
Referred to Ophthalmologist	145

**Country wide a total of 15,273 examinations were performed:**

**Children – 2656**  
**Female – 9371**

**Adults – 12617**  
**Male – 5902**

# Primary Eye Care

Despite the many staff changes we were able to keep all five PEC clinics open. Access to our PEC clinics have always been free however, we have decided to implement a \$10.00 consultation fee that would be implemented at all Primary Eye Care Clinics throughout the country including outreach in Corozal. This will lead to an increase in our self-sustainability thereby allowing BCVI to help many more patients in need. Patients not able to pay the fee will not be turned away and all other outreach clinics will remain free.

A group of students from Defiance College along with Administrators Mary Ann Studer and Rena Rager visited Orange Walk North in December. The group screened more than 400 students at 7 schools and referred those needing further assessments (43 total) to Optometrist Freddy Nicholson and OA Magali Sabido who tested for glasses and referred to the Ophthalmologist, as needed. The group also kindly made a donation to the cost of producing the glasses.

Five outreach clinics were conducted at various schools in the Cayo district through the efforts of BCVI and Grace and Holy Trinity Church and Dr Kinloch Nelson. Pre-screenings were done by members of the volunteer group and students with low visual acuity were referred to the optometrist. Refractions were conducted on all referred students. Over 800 students were screened and 68 are receiving glasses thanks to the donation from the group.

All clinics are now equipped with either a stationary or handheld fundus camera. These devices are being used as diagnostic tools at the primary level by Ophthalmic Assistants and have proven to be extremely helpful in cases where there is no full-time Optometrist, such as at Belmopan.

Data entry (Belize Health Information System - BHIS) continues to be an area in which we must improve – particularly with regards to referrals. It has been identified that referrals from the primary eye care clinics and within the secondary eye care programme are missing in the system. This means that patients needing follow-up and/or treatment may not be receiving it. IT Officer Mark Mitchell and Ophthalmic Assistant Mara Burgess (SEC) will be meeting with Joan and Carla Musa to discuss the way forward.

Project Smile who visit St Mary's Dental Clinic in Belize City annually, also did visual acuity screening and referred 30 patients to BCVI who needed further evaluation. The majority needed glasses for which the group was able to provide payment. Initiatives like this are much appreciated as it is difficult for BCVI staff to allocate time to vision screening in schools.



Randy Williams testing at his PG clinic



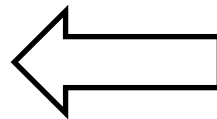
Pre-screened children from St. Mary's school waiting for their eye test

# Primary Eye Care

In an effort to continue improving our services, over the last few years BCVI has been monitoring patient satisfaction and uptake of glasses in the primary eye care programme. As a result, we have noticed the increased requests for Progressive lenses particularly among middle-aged professionals seeking improved vision for distance and reading. Thanks to our partners Help the World See, BCVI's Optometrists, Refractionists, Ophthalmic Assistants and Lab Team received training from Adrian Tatarakis and Dr Akar Kalra. PEC Manager Jackie Hemsley and Carla Ayres Musa also attended the one-day training. The pilot will be implemented in Belize City where Optometrist Freddy Nicholson has experience in prescribing Progressives. Freddy and Heather have already worked along with Rudy (Senior Lab Technician) to produce a few pairs for a handful of existing patients.



Adrian Tatarakis and Freddy Nicholson demonstrate the importance of accurate measurements in progressive lenses.



Lab technicians Shakeel Flowers and Rudy Cocom model new frames from the latest selection provided through Help the World See.

The efficiency of the optical lab is crucial to the success of the timely provision of eye glasses. The

Administrative team continues to work closely with the Lab team to strengthen the inventory and ordering process for lenses, frames, supplies and medication. We have more or less eliminated hold ups in production due to shortages in stock and we are happy to report that we are able to supply the most commonly used drops at all our clinics thereby ensuring patients can access their medication in one visit.

Dr Heather Bae, an Optometrist from the US, provided five months of eye care at clinics in Belize City and through outreach. Dr Bae was recruited by Dr Inder Singal to provide support in our primary eye care clinics. With her training and skills as an OD, Heather has been extremely helpful in filling the gaps in service in different areas. She also provided support in Belmopan, Orange Walk, Belize City, Dangriga and Punta Gorda.



Dr Heather Bae performs a refraction for a child in Toledo.

# Treating Eye Diseases and Vision Loss

In Belize, BCVI continues to target the five leading causes of blindness prevalent in the Caribbean and we are reducing the loss of vision due to cataract, glaucoma, childhood blindness, refractive errors, and diabetic retinopathy. BCVI provides Secondary Eye Care with ophthalmological treatment at its main referral center, situated in the Lion's Building in Belize City, and also at our district clinics. We have been providing surgical and medical eye care for over 20 years and with the help of volunteers, National Health Insurance (NHI), the Government of Belize, Lions, the donation of supplies, and a small fee for services, we are able to make this service sustainable.

We are grateful to Dr. Zoraida Perez-Diaz who provides medical eye care throughout the year at SEC. In 2019 she performed **3514** examinations and a further **909** examinations were done by volunteer ophthalmologists who provide specialist care for all types of treatment on a short term basis. In addition to these examinations approximately 1,000 more were done at our district clinics. At these clinics the patients are diagnosed, treated, prescribed medications or are given a date for elective surgery.

We have covered the extensive care provided by visiting volunteer ophthalmologists in our calendar following this section. We are happy to report a new specialty for oculoplastics that we have introduced with Dr Dilip Thomas and Dr Baxter McLendon. We have also introduced a basic range of low cost medications (eye drops) as it was becoming increasingly difficult for patients to source drops at their local pharmacies.

Although due to retire, Nurse Caroline Usher, Nurse in Charge of BCVI's Secondary Eye Care Clinic, has renewed her contract for one more year. In preparation for her departure the Ministry of Health and Ministry of Public Service have contracted Nurse Teona Ruiz to train with Nurse Usher starting in January 2020. Nurse Ruiz, a senior registered nurse has Operating Theatre and Management experience which are both vital for the position of Charge Nurse. She will receive on the job training from Nurse Usher in 2020. This gives us the three nurses supplied by government which was agreed on in our Memorandum of Understanding.

**At the districts, clinics conducted by the visiting ophthalmologists, a total of 911 patient visits were recorded for all eye conditions referred and prescreened. All needing further treatment not available at the district clinic e.g. cataract or pterygium surgery, are referred in to Belize City and assisted to access treatment including provision of transportation and accommodation.**



# Treating Eye Diseases and Vision Loss

In treating the major causes of blindness we accomplished the following in 2019:

**Cataract** continues to be the leading cause of blindness in Belize. We are happy to see an increase in the number of surgeries in 2019 to 285. One of our focuses remains on increasing the numbers of patient uptake, through education, to increase the cataract surgical rate. We are also encouraging a higher volume of surgery per surgeon as this is more efficient and cost effective especially when bringing in patients from the south of the country. Special mention should be made of Dr Edgar Ogaldez who along with Dr McLendon's assistance can do over 90 small incision surgery in two days. Our cataract surgical assessment tool tracks the patients and records their vision post operatively and shows a consistent marked improvement for nearly all our patients. We are now expanding its use to ensure patients have post operative refraction and receive the necessary correction if needed to obtain the optimum visual outcome. **Glaucoma** is

the



Dr David Boes has been coming for over ten years and performs very successful phaco emulsification cataract surgery.



Dr Baxter McLendon has been travelling around the country since 2008 providing eye care at all our clinics.

leading cause of irreversible blindness in Belize, and people at high risk are encouraged to come in for an early assessment. Glaucoma usually presents with an elevated pressure in the eye along with changes to the optic disc and a reduced field of vision. Unfortunately, the majority of patients visit our facilities when vision has been lost and cannot be restored. In 2019 there were 1043 patient visits for Glaucoma at the SEC with many more being seen at the district clinics. Eye drops are the usual method of treatment and we have been providing those to enable patients easier access to treatments especially for those living in rural areas. The ophthalmologists and nurses stress the importance of continuous use of drops and the monitoring of intra ocular pressure, funduscopy and visual fields. The use of Laser treatment has been introduced as a more effective means of treatment for those to whom it is more appropriately indicated. After monitoring the patient post-laser treatment, if it has been successful in maintaining a low intraocular pressure, there may not be a need or less need for the use of drops. At the SEC 29 patients had laser for glaucoma.

# Treating Eye Diseases and Vision Loss

Our dedicated **Diabetic Retinopathy Programme** has been integrated into our regular clinics. Each clinic has either a stationary fundus camera or portable fundus cameras for outreach work. In addition, the optometrists all do fundus examinations on all patients attending their clinics. Increasingly this is the time that the patient may learn they have diabetic changes in the eye stressing the importance of this integrated approach and continuous patient education. As we had sufficient staff in the first quarter, BCVI conducted a Pilot Project for DR in the Northern Region. Thanks to a donated handheld retinal camera, Camera Operator and Grader Lysette Pren travelled to various villages to screen patients and refer those needing treatment. For example in this first quarter of the year, 402 patients were screened, with 74 to return in one year to monitor minimal changes and 77 with DR were referred for immediate evaluation with the Ophthalmologist. An important finding is that through the diabetic eye screenings held at Corozal and Orange Walk, 56 patients were referred for treatment with Dr Singal in March. Only 20 patients followed-up for their appointments. A total of 11 received laser treatment and the remaining 9 were advised to follow-up for NPDR changes or vitrectomy. This stresses the need for individual patient education.

**Retinopathy of Prematurity (ROP)** which affects premature babies in their first weeks of life in the Neonatal Intensive Care Unit (NICU) continues to be a concern. However, BCVI has come a long way in the fight of this preventable cause of blindness in the most vulnerable patients.

In February 2019 Dr Millicent Peterseim, Pediatric Ophthalmologist, and Dr Rick Saunders, ROP specialist, visited BCVI for two days to evaluate and make recommendations through meetings and rounds with staff at the Karl Heusner Memorial Hospital (KMH). This is the central referral facility for premature babies for the entire country. Labor and Delivery personnel from the district hospitals also attended through the interest and organization of Dr Natalie Largaespada, Head of the country's Maternal and Child Health programme. Dr Saunders gave a well-received presentation on the importance of identifying potential problems by screening and continued monitoring of the infants. He also introduced treatment using Avastin to Dr Diaz and conducted rounds in the Neonatal Intensive Care Unit (NICU) alongside Dr Diaz. BCVI will follow up by discussing the existing ROP Programme and potential for development and production of protocols and guidelines, with the KMH staff.

BCVI continues to provide screening for babies in the NICU fitting the at risk criteria for ROP. We are happy to report that since Dra Zory Diaz has started visiting the NICU on a weekly basis, the numbers of children being identified with ROP has decreased. Dra Diaz examined 20 babies in the KMH NICU in 2019, 3 of whom are being monitored for ROP. The NICU staff select the appropriate time and identify the babies at risk to be examined and we are grateful for their cooperation under the guidance of Dr Elsie Constanza and Nurse Williams who lead the team.



Dr Zory Diaz, Dr Rick Saunders and Nurse Naugeat Buckley at BCVI's SEC Clinic.

# 2019 Calendar of Volunteer Ophthalmologists & Optometrists

## OPHTHALMOLOGISTS

**January 26th - February 2nd: Dr Michael Wong and team** - conducted clinics and cataract surgery at SEC. He examined 63 patients and performed 38 cataract surgeries.

**February 4th - 8th: Drs Lally & Jackson (Storm Eye Institute)** - conducted clinics and cataract surgery at SEC. They performed 8 cataract surgeries.

**February 13th - 15th: Dr Millicent Peterseim & Dr Rick Saunders** - provided training in Retinopathy of Prematurity to BCVI staff and staff at the Neonatal Intensive Care Unit (NICU) of KMHM as well as Labor and Delivery personnel from the district hospitals. Dr Saunders also introduced treatment using Avastin to Dr Diaz and conducted rounds in the NICU alongside Dr Diaz.

**March 4th - 8th: Dr Rudy Churner & Dr Ed Hurst** - conducted clinics and cataract surgery at SEC. They examined 22 patients and did 15 cataract surgeries.

**March 7th - 29th, May 13th - June 5th, August 29th - September 20th: Dr Baxter McLendon** - Visited three times in 2019; conducted clinics at SEC where he examined a total of 139 patients and an additional 446 patients were examined at our district clinics. On the first two visits he did a total of 35 pterygium surgeries. He treated a number of patients needing laser surgery. On his second visit he also assisted Dr Dilip Thomas, oculoplastic surgeon who he had introduced to BCVI. On his visit in September he assisted Dr Edgar Ogaldez and they examined 76 patients preselected by Dr Diaz and with support from Dr McLendon and the team, Dr Ogaldez performed 75 cataract surgeries in 3 days.

**March 14th - 16th: Dr Inder Singal** - Held clinics and did laser treatment in SEC, Orange Walk, Stann Creek and Punta Gorda. In total he examined 215 patients and performed laser treatment on 81 patients.

**March 24th - 30th: Dr Nutaitis & Johnson (SEI)** - Performed exams and cataract surgery at SEC. They examined 22 patients and did 11 cataract surgeries.

**April 22nd - 26th (Easter Monday): Dr Katherine Johnson & team** from Alaska conducted clinics in Stann Creek (eye and medical). At the primary level the team examined 100 students; 44 were refracted and 1 referred for further care. At the secondary level, Dr. Johnson examined 222 patients in Stann Creek and performed laser treatment for 33 patients (Glaucoma, DR and YAG); she also did 12 cataract surgeries at the SEC in Belize City for patients seen by her at the Stann Creek clinics.

**May 3rd - May 10th: Dr Magrath & Warren (SEI)** - conducted clinics and cataract surgery at SEC. They examined 21 patients and performed 9 cataract surgeries.

**May 16th - 19th: Dr Dilip Thomas**, oculoplastic surgeon visited BCVI for 3 Days for clinic and surgery. He examined 40 patients and did 13 oculoplastic surgeries.

**May 25th - June 1st: Dr David Boes** - He conducted clinics and cataract surgery at SEC. Dr Boes examined 66 patients at the SEC and did 38 cataract surgeries alongside the BCVI team and his Nurse Nancy Mayernik.

**June 23rd - 27th: Courtney Kraus (World Pediatric Project)** held pediatric clinics and performed surgery at SEC. Dr Kraus and the WPP Team examined 25 children identified and referred by BCVI optometrists. Dr Kraus and her team did 6 cataract and 16 strabismus surgeries.

**July 24th - 27th: Krishna Gaddipati** - On his first medical visit to BCVI, Dr Gaddipati examined 10 patients and did 9 cataract surgeries. His wife and daughters assisted at Summer Camp. The family intends to make return visits. On this visit they were accompanied by Sarah Dawe.



**August 5th: Dr Scott Lee (Oculoplastic)** Spent 1 day with BCVI examining 6 patients and performing 3 oculoplastic surgeries.

**September 13th - 16th: Dr Edgar Ogaldez** - Ogaldez examined 76 patients preselected by Dr Diaz and with support from Dr McLendon, Dr Singal and the team, performed 75 cataract surgeries in 3 days.

**November 4th - 16th: Dr Lennox Webb** - Long-time friend of BCVI, Dr Lennox Webb visited in November during which he provided support at the SEC Clinic, our District Clinics as well as on Outreach. Dr Webb worked along with our optometrists and refractionists to provide comprehensive primary and secondary eye care exams for hundreds of people throughout the country.

**November 4th - 8th: Dr John Ghobrial** - We welcomed back Dr Ghobrial who examined 70 patients and performed 23 cataract surgeries.

**November 27th - 30th: Dr Inder Singal (Retinal Specialist)** - returned to Belize and examined 139 patients in Belize City, Orange Walk, and Southern Region (Punta Gorda and Dangriga). He provided laser treatments for over 100 patients.

**December 2nd-4th: Dr Thomas Whittaker** - provided ophthalmology services for patients in the Toledo District and made several referrals for patients needing cataract surgery. He has expressed interest in supporting the Toledo clinic through continued learning and donating equipment.

**December 12th - 21st: Dr David Boes**- examined 98 patients and did 37 cataract surgeries during his second visit of 2019! We are truly thankful for his support over the past 10 years!



Dr Lennox Webb examining a patient at an outreach clinic

## OPTOMETRISTS

**February 9th - 16th: Dr Kinloch Nelson & Grace Holy Trinity** - provided screening for 881 students at schools in the Cayo District. The BCVI team refracted those needing further examinations which resulted with 68 glasses being made by BCVI for the children that were paid for by the Grace Holy Trinity group. Two children were referred to the SEC for further evaluation.

**March 24th - 30th: Amigos/VOSH Pacific** - Provided screening and refractions in the north. They screened 456 people in Corozal District and issued 197 prescriptions (15 covered by NHI) and distributed reading glasses.

**June 24th - 28th: Dr Michael Baughan & Sally Baughan** provided screening and refractions in Toledo. Dr Baughan and the team screened 339 patients in the Toledo District, issued 180 prescriptions, dispensed 186 reading glasses and referred 43 patients to secondary eye care.

**August - Dec 2019: Heather Bae (Optometrist)** provided 5 months of eye care at clinics in Belize City (2nd lane) and outreach. Through Dr Singal, Dr Bae was recruited to provide support in our primary eye care clinics. With her training and skills as an OD Heather has been extremely helpful in filling the gaps in service in different areas. She provided support in Belmopan, Orange Walk, Belize City, Dangriga and Punta Gorda.

# Rehabilitation

Countrywide, the RFOs supported a total of 89 clients throughout the year. Our focus was placed on children in school as well as patients who are newly identified as blind or as having severely low vision. After our Cayo Rehabilitation Field Officer (RFO) resigned in mid 2019, BCVI remained with only two RFOs to cover the entire country. We continued to deliver services by district with Mrs. Sagrario Clarke covering the two Northern Districts of Corozal and Orange Walk as well as San Pedro and Ms. Inga Sandoval was responsible for the Belize District. Together they assisted clients in the Cayo and Toledo Districts and along with rehabilitation assistants Norma Rios, Arjenis Ruiz and Victor Chan, provided continued support to clients countrywide.

Since 1989 BCVI has collected information on people attending their clinics and have not responded to treatment and therefore have been classified by an ophthalmologist as irreversibly blind. BCVI has over the years collated this information and manages the country's only database of people who are blind. This list totals more than 14,000 children and adults at present who have been identified through our Secondary Eye Care clinic in Belize City, as well as specialist visits to our district clinics. In 2019, Dr. Diaz and our visiting Ophthalmologists identified a total of 32 newly blind patients, 6 of which are considered Low Vision. The majority of these patients live in the Northern Region and are above the age of 50. There are 6 patients under the age of 20 with only one patient (2 years old) diagnosed as blind due to Retinopathy of Prematurity. The most common cause of blindness among this new group is Glaucoma (13) followed by Diabetic Retinopathy (5).

Staff training remains a top priority as both RFOs are fairly new to the organization and, along with the rehabilitation assistants, are in need of formal training in rehabilitation and education services for people who are blind. Without an option in-country, BCVI was happy to hear from Sheila Jamieson from The Atlantic Provinces Special Education Authority (APSEA), Canada. Sheila found BCVI while researching for organizations she could support. Our team is grateful for the online web-based training sessions which included topics ranging from a History on Special Education to Orientation and Mobility for people who are blind. The nine-month training course utilized supporting documents as well as group assignments to reinforce lessons.

Our Low Vision Clinics have not been as consistent as we would have liked. However, with the return of Optometrist Freddy Nicholson (who was trained in Low Vision whilst previously at BCVI) we were able to conduct one clinic in October and one in December and plan to maintain quarterly clinics going forward. BCVI's RFOs continue to work with our clients in search of Job Placement opportunities. With the increasing popularity in call centers, this will be one of the areas we explore in 2020. In the meantime, a few clients have been set up with their own businesses in food sales and even sewing cell phone cases. Jacobo Freisen who has been working at a poultry factory since 2018, has recently been promoted and is getting further training with support from Mrs. Clarke.



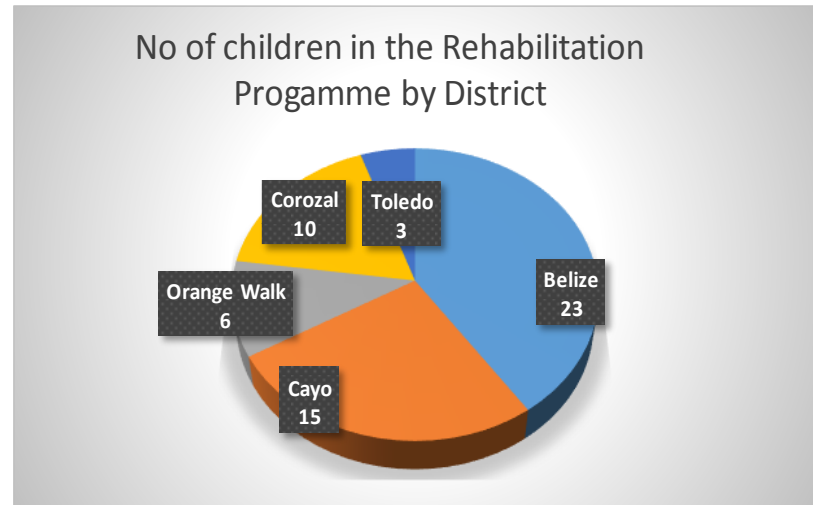
Jacobo at the Chicken Factory

# Education for All

The majority of BCVI's active clients are between 1-16 years old, and they are selected as they will have the most years to adapt to their blindness and much support is provided through home and school visits. We have a total of 57 children in the Rehabilitation Programme and with only two RFOs at present the work is divided by districts. We hope in the future to be able to replace our RFO for the Cayo District as the 15 children receiving our support are transitioning to High School.

BCVI continues to prepare all school books and assignments, and assists teachers with adaptive devices. In 2019, two of our students took national examinations and two graduated from high school. Of the two completing High School one is now attending 6<sup>th</sup> form and the other has started at the University of Belize. There is a continued expectation of our RFOs to function as teachers, which is the role of Ministry of Education's NARCIE. Our focus in 2020 needs to remain on providing support to enable children to function in school and not on teaching the material.

The responsibility of Braille and Book Production has been centralized at the BCVI Headquarters, with Victor, Norma and Arjenis, our Rehab Assistants who support some students. There is a noticeable improvement in the turnover of books/ materials for students. Book Production commenced in February and at the end of the year, a total of 17 books were produced either through embossing (printed Braille) or electronically (text to speech). BCVI also received and distributed an additional 14 Braille Books.



RFO Inga Sandoval assisting a student in school

# Summer Camp

For the first time in our history BCVI's Summer Camp was held at the British Army Training Support Unit Belize (BATSUB) compound. A total of 26 children attended camp along with a guardian or parent which gave us a total of 62 attendees. Campers slept in quarters with bunk beds giving it a true camp-like atmosphere. There were large bathrooms provided for males and females. Meals and snacks were prepared by the Belize Defense Force (BDF).



The air-conditioned hall offered for daily classes was large enough to accommodate the whole group with divisions for relevant age-related sections. Each year the organization of classes and activities improves. All educational activities are guided by the students' Individualized Plans which are prepared prior to the two-weeks event. This year we had 11 volunteers assisting the RFOs and parents. Sarah Dawe as well as Sarah Gadipatti and her daughters visited from the US and provided art and music classes to children during the camp.

BCVI  
PLAY,  
LEARN  
& DISCOVER  
ANNUAL SUMMER CAMP  
July 14th - 26th  
Supporting children  
who are blind or visually impaired  
TO MAKE SUMMER CAMP POSSIBLE VISIT  
BCVI.ORG/HELP

The spacious grounds also offered many opportunities to improve on orientation and mobility skills. Educational activities continued throughout the camp with the teaching of Braille and laptop skills.

Parent support and mental-emotional support for our clients is a growing need. This year, group sessions were organized so that parents could seek advice and guidance from parent Milagro Garel and Carla. It was agreed that the support would continue via a WhatsApp parent group which was set up during Summer Camp. We also hosted Mind Health Connect, an NGO providing resources for mental and emotional support and counselling for children and families. Information was shared with parents in the event additional help is needed.





The field trip to Goff's Caye which was made possible by Sea Charters of Belize, CZMAI, the BTB and Alex Gamero was a huge success and the campers were excited to have President Joan Musa and Director Carla Ayres Musa joining them for the day.



Art classes were conducted by "Auntie Katie" and the Belize Audubon Society provided a wonderfully interactive session on wildlife in Belize including how to identify birds based on their calls.

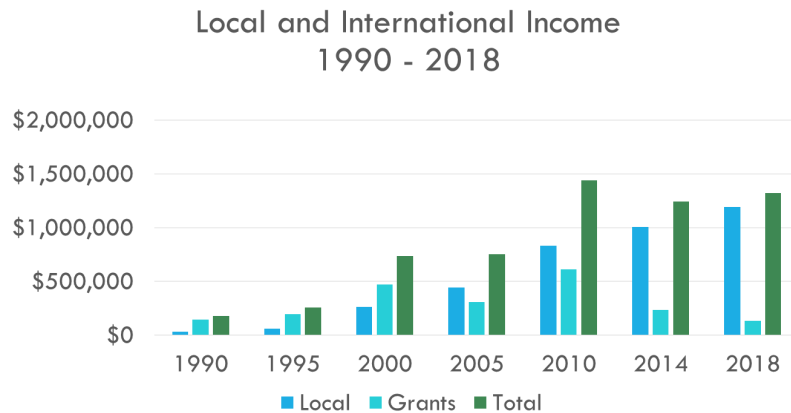
Karaoke night was a great addition to our nightly events as the campers, volunteers and staff joined in.



# Financial Sustainability

BCVI started life in 1981 as a voluntary committee providing services for blind people. As this was the beginning of the Decade of Disabilities, there was a lot of international interest and grants were more accessible. By 1990 we had already opened district offices and introduced some primary care services.

The following chart shows the transition from the dependency of BCVI's operations on International Grants to local self sustainability over the last 30 years.



Our main International Funders were Sight Savers International (SSI) who along with the Caribbean Council for the Blind were instrumental in the setting up of BCVI. In 2007 SSI announced they would be gradually winding down their support to the Caribbean Region. The chart shows that on their complete exit in 2014, although there was a slight dip in our overall income the local income had increased significantly.

In 2019 our income and expenditure balanced and only 5% of our income was from an overseas grant that was specifically given towards staff scholarships for professional qualifications in optometry and ophthalmology.

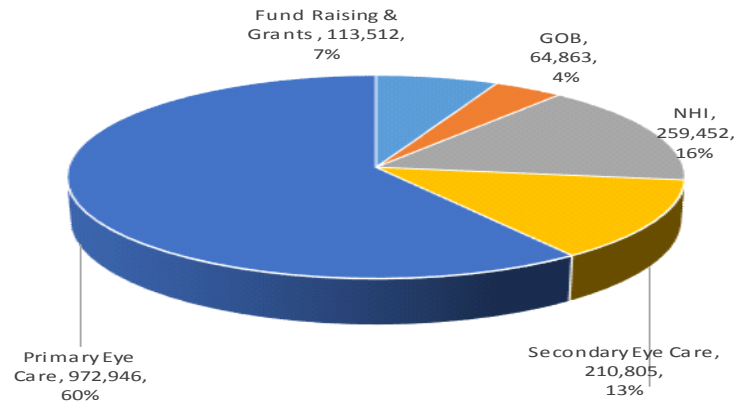
## Significant events in the development of BCVI

- ◇ 1993 - The Optical Lab was set up to make low cost glasses
- ◇ 1998 - The first Summer Camp was held for children with visual impairment
- ◇ 2002 - BCVI introduced cataract surgery with the employment of a full time optometrist
- ◇ 2005 - Three Belizean optometrists returned from training in Cuba
- ◇ 2008 - Volunteer Ophthalmologists provided short term care
- ◇ 2012 - Administration staff moved to Lions Building due to fire at the Red Cross
- ◇ 2019 - BCVI is self sustainable in its day to day operations



# 2019 – Financial Review

**Total Income \$1,621,578**  
Not including in kind contributions

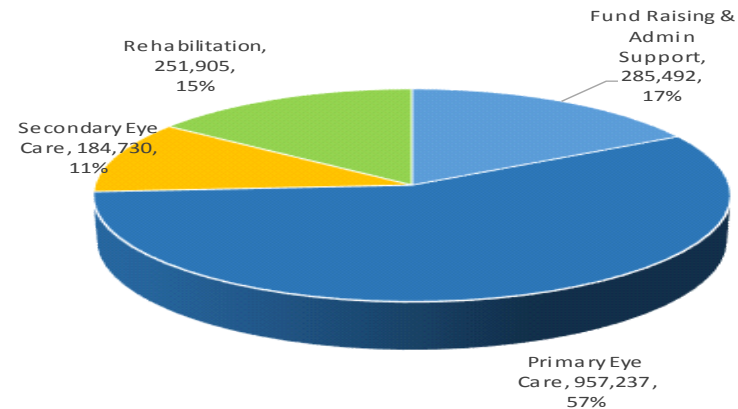


We are very happy to be able to report that our expenditure for our recurrent costs was kept within our budget estimate for 2019.

We were also able to raise the needed monies to cover the recurrent costs for the provision of all our regular services. This includes all the salary and administrative costs. Our goal was to increase our income of 2018 to enable us to balance our budget. We achieved this by raising an additional \$300,000, which was our deficit last year. This was the result of seeing more people which in turn increased our income from our fees for services.

Our expenditure only increased by \$100,000 thus significantly reducing the gap between income and expenditure. Although our expenditure stayed stable we are pleased to report that this was not done through any

**Total Expenditure \$1,679,364**  
Not including capital expenditure



reduction in services. In fact we assisted more people with visual problems in all areas of our programme through filling some vacant staff positions and supporting extra activities.

This is the first year we have been completely self sustainable and have not had to rely on any grants to cover day to day running costs.

BCVI continues to rely on specialist volunteers but this year a grant from the Adarsh Charitable Foundation provided three Scholarships for medical training. This is the only grant received this year.

# Planning for the future

At the time of completing this Annual Report for 2019, we are already experiencing the many changes to our personal and professional lives that the global COVID-19 pandemic has caused, and will continue to cause, for some time to come. However, we had some plans well established and once we reopen our doors we will continue with them as we strive to reestablish our service and reach back to the level of care we had achieved.

Construction for our new building in Dangriga had already begun at the end of 2019 and was completed in March 2020. However, as we completed the move and started clinics we had to close all our facilities in order to conform with the National Emergency requirements. When approached by the Ministry of Health for the use of this building, situated in the compound of the Southern Regional Hospital in Dangriga, to accommodate patients awaiting their COVID-19 test results, we did not hesitate to make it available.

The approved Belize City building expansion was scheduled to begin by early 2020. Preliminary work with the Belize City Lions Club has been completed by opening a bank account for the funds from the Lions Clubs International Foundation, a contractor selected and plans approved by the Building Authority. It may be difficult to start immediately until restrictions begin to be lifted because we are located in the compound of the Karl Heusner Memorial Hospital which houses the only intensive care unit in the country. There may have to be restricted access for months to come at this facility where all the Belize District team members are stationed and acts as the referral center for the entire country of Belize.

This renovation will also improve patient flow in the Primary and Low Vision Clinic which have both seen an increase in need and demand. This has necessitated us hiring two full

time optometrists and ophthalmic assistants to meet the demand.

As well as looking at infrastructure going forward, we want to enhance the quality of our services through Human Resource Development. The new addition will allow for the coordination of the Rehabilitation and Education Programme to take place from one location. Further training for the Rehabilitation Field Officers will be built on those sessions concluded by Sheila Jamieson from The Atlantic Provinces Special Education Authority (APSEA) in Canada, who has a Master's Degree in Training Teachers of the Blind. She has expressed an interest in visiting BCVI in 2020 to provide support during our Annual Summer Camp, however this may have to be delayed a year as it will not be possible to organize a Summer Camp for 2020. We are also in communication with our former Rehabilitation Coordinator, Joan Samuels, to visit for three weeks in the summer of 2020 to provide further training. However, this will also need to be deferred to a later date. We also hope to work together with these experts to update the Curriculum Plus for children in schools.

Based on the staff feedback, the next Summer Camp (probably 2021) will most likely be held at Stella Maris School which is a better option due to its central location and proximity to BCVI's Main Office. We will also consider having the camp in the first two weeks of August to accommodate the large number of high-schoolers who will be unavailable due to classes in July.

The year 2019 was an exceptionally good year and we had many plans going into 2020. However, we are confident that when it is appropriate we will be able to reopen. We will do this on a gradual basis with a well structured plan that will allow for improvements at every level.



# Thank You!

Ministry of Health  
Ministry of Human Development  
National Health Insurance (NHI)  
Help The World See  
Lions Club International Foundation (LCIF)  
Lions Clubs of Belize  
SEE International  
ALCON  
Cuban Medical Brigade  
Thomas Angel  
Dr David Boes  
Dr Baxter McLendon  
Rick Soller  
Dr Lennox Webb  
Dr Inder Singal  
Adarsh Charitable Foundation  
Chou Ta-Kuan Foundation  
Dr Kinloch Nelson and Grace and Holy Trinity  
World Paediatric Project (WPP)  
Defiance College  
Appliance World Ltd.  
Cisco Construction Ltd.  
Fultec Systems Ltd.  
Habet & Habet Ltd.  
Fabrigas Belize Ltd  
James Brodie & Co. Ltd  
Douglas & Mayra Singh  
MNM Hardware & Service Station  
Belize Dry Cleaners  
Anita Zetina

Belize Global Services  
Universal Customs Brokers Agencies  
BTALCO  
Prosser Fertilizer  
Brother's Habet  
BTB  
Contemporary Electronic Systems  
BEL  
BWS  
Bradley's Imports  
Smart!  
Atlantic Bank Ltd.  
BRC Printing  
BNE  
Belize Diesel & Equipment Co  
Social Security Board  
Belize Bank Ltd.  
Medina's Construction  
Heritage Bank Ltd.  
Southside Meats  
Madisco  
Bowen & Bowen  
Grace Kennedy  
ADM Belize Mills  
Ramada Princess Hotel  
BDF  
BATSUB  
Oasis  
CGI  
Publics Supermarket  
Gillett's Meats OW



Lions Clubs International  
**FOUNDATION**



Ladyville Baptist Church  
Caribbean Chicken  
Joe's Meat Shop  
Quality Poultry Products  
Premier Charters & Tours  
CZMAI  
Tutsi Nimbus (Ms Azalia)  
San Estevan Lions Club  
Joseph & Taylor  
Dave's AC World  
La Popular Bakery OW  
One Mall OW  
Lydia's Gift Shop OW  
Marcel Cordona  
Mr. Alex Gamero  
Sea Charters of Belize  
Karla & Sydney Turton  
Peninsula Korean Baptist Church  
Gerda & Paul Judicke  
Selinsgrove Rotary Club

# BCVI Contact Information

## Belize City

### Main Office, Administration and Rehabilitation

Princess Margaret Drive

P. O. Box 525

Belize City

Ph.: 501 223 2636

Email: [bcvibze@gmail.com](mailto:bcvibze@gmail.com)

### Primary and Secondary Eye Clinics

Eye examinations, prescribing and dispensing glasses, treatment and surgery

Lions Building (next to KMH)

Princess Margaret Drive, Belize City

Ph.: 501 223 2636

## Regional Offices

### Orange Walk & Corozal

Red Cross Building

Orange Walk Town

Ph.: 501 322 0227

### Stann Creek

Southern Regional Hospital

Dangriga

Ph.: 501 522 0452

### Toledo

BCVI Building

Punta Gorda Hospital

Ph.: 501 722 2005



BCVI



BELIZE COUNCIL FOR THE VISUALLY IMPAIRED BCVI