



56 Day Great African Trek – Cape Town to Nairobi

Day 1: Cape Town to Cederberg Area (L / D)

Leaving Cape Town, we head north through the wine growing regions. We cross the Piketberg Pass into the rich fruit growing area of Citrusdal. Our first night is spent in a picturesque campsite surrounded by local wine farms. This afternoon we have the opportunity to sample some of the nectar of the gods or to explore the surrounding beautiful Cederberg Mountains.

Day 2: Cederberg Area to Orange River (B / L / D)

From the Cederberg we travel north through the region known as Namaqualand, well known for its prolific display of Namaqua wildflowers that occur each spring. After stopping for supplies in Springbok, we continue on through the desert area of the Richtersveld to the Orange River, the natural land border between South Africa and Namibia, where we camp at a beautiful campsite on the South African bank of the river.

Day 3: Orange River to Fish River Canyon (Namibia) (B / L / D)

This morning we have the option of a half-day canoe trip on the beautiful Orange River, affording us the opportunity of some bird watching or just a scenic and relaxing paddle. After lunch we cross into Namibia where, after a short drive, we reach the Fish River Canyon. At 161 km long, 27 km wide and about 550 m deep, it's the second largest canyon in the world. The outer canyon was formed by tectonic activity, while the erosion of the Fish River formed the inner canyon. A road follows the eastern rim, giving us access to several viewing points from where we can take in the spectacular vistas.

Day 4: Fish River Canyon to Helmeringhausen Area (B / L / D)

After a leisurely morning at the Fish River Canyon, we head north through Namibia's farming area. We stop in Bethanie, a small, former missionary town, for supplies. We head to our overnight camp from where we have the opportunity to star gaze at the magnificent Milky Way.

Day 5: Helmeringhausen Area to Sesriem (B / L / D)

Heading north we enter the Namib-Naukluft Park in one of the oldest deserts in the world. We base ourselves at Sesriem, a great place to experience the Namib and its many moods. A short distance away is Sossusvlei, surrounded by a dramatic sea of sand dunes reputed to be the highest in the world. Magnificent views of the desert can be seen from the top of the dunes, some over 300 m high. We spend the afternoon exploring this amazing area. An optional (and must do) excursion is to walk around the area, learning about the amazing history, geology, flora and fauna from the specialised local guides of Sossus on Foot. They also give us a glimpse into the cultural legacy of the San people. View the sunset from the top of Dune 45 - a truly memorable experience.

Day 6: Sesriem to Swakopmund (Brunch)

After watching the sunrise across this beautiful area we leave the serenity of the dunes and head in a north-westerly direction to meet the Atlantic Ocean at Walvis Bay. Following the coast for some 35 km, we arrive at Namibia's prime holiday resort - Swakopmund where we enjoy 3 nights of rest and relaxation. Accommodation will be in dormitories. Upgrades are possible, but depend on room availability.

Days 7 & 8: Swakopmund (B on both days)

Founded by the Germans in 1892, their colonial influence is still evident today. Swakopmund has a selection of excellent coffee shops, restaurants & bars as well as many arts and crafts shops selling Namibian curios. There are fine beaches to walk along as well as a great museum, aquarium and galleries to visit.

Optional excursions include sky diving, quad biking, sand boarding, scenic desert flights, dolphin cruises, fishing trips, golf, horse riding and more. An activity briefing will be held on arrival in Swakopmund.

Day 9: Swakopmund to Spitzkoppe (B / L / D)

Our departure from Swakopmund takes us to the 'Matterhorn of Namibia' - Spitzkoppe. The 1728 m high rock formation, one of Namibia's most recognised landmarks, is well known as an ancient San sacred site. Explore the surrounding area and its San rock paintings. Tonight we bush camp under the African stars.

Day 10: Spitzkoppe to Cheetah Park (B / L / D)

Today's drive is to the Cheetah Park - a private farm dedicated to conserving Namibia's cheetah population. We get to meet the resident cheetahs, a photo opportunity not to be missed!

Day 11: Cheetah Park to the Etosha National Park (B / L / D)

After stopping briefly in Outjo to get supplies, we head to Etosha. Covering 20 000 km², Etosha is Namibia's premier nature reserve. Situated around the Etosha Pan with a large variety of animal and bird life, the extensive network of gravel roads affords us the opportunity of accessing even the most remote areas of the park. We spend the remainder of the day exploring the park's southern area.

Day 12: Etosha National Park (B / L / D)

Today we make our way 150 km across the park, keeping a look out for Etosha's large herds of desert antelope such as Springbok and the famed Oryx. After a full day of game viewing, we spend the evening relaxing at our camp.

Day 13: Etosha National Park to Rundu (B / L / D)

From Etosha, we head in a north-easterly direction towards the lush Kavango region of northern Namibia. We stop at Rundu for supplies before heading to our spectacular campsite located on the banks of the Kavango River - complete with 'open air' facilities and the occasional hippo grazing on the lawn!

Day 14: Rundu to Maun (Botswana) (B / L / D)

Following the Kavango River, we enter Botswana and travel east along the course of the river to the southern reaches of the Okavango Delta and our destination, Maun. It is from here that we set off to explore the Okavango Delta.

Day 15: Maun to Okavango Delta (OPTIONAL) (B / L / D)

The Delta is a huge expanse of water, which has travelled from the Angolan highlands, spreading out to form the largest inland delta in the world. Studded with exotic islands, The Delta is renowned for its incredible variety of bird life and animals and is unique to Southern Africa.

Here we have the opportunity to take the optional 3 Day / 2 Night Drive In / Mokoro Excursion into the Delta. From Maun we drive north for a couple of hours to reach the mokoro peler's station. Mokoros are traditional dug out canoes manoeuvred through the waterways by local guides who 'pole' them through the reeds. After our guides find us a place to camp, we set off on an afternoon game walk, allowing us to experience The Delta wilderness.

For those who'd prefer not to explore The Delta, you can stay at the lovely campsite relaxing by the swimming pool or challenging each other to a game of volleyball. There is also a crocodile farm nearby that has it's feeding times open to campsite visitors.

Day 16: Okavango Delta (B / L / D)

A day of rest, relaxation and Delta experiences await. Today we have the opportunity to partake in a number of activities including swimming (dependant on area & water levels), game walks, mokoro cruises and even a chance to try our hands at poling our own mokoro!

Day 17: Okavango Delta to Maun (B / L / D)

This morning affords us a final opportunity for a game walk before packing up and setting off back to Maun. We arrive back in the early afternoon and have the chance to complete our picture of the Okavango Delta by taking an optional sunset scenic flight over The Delta.

Day 18: Maun to Chobe National Park (B / L / D)

We travel east and then north to the town of Kasane where we set up camp on the banks of the Chobe River. The Chobe River forms a border between Botswana and Namibia and Zambia. The late afternoon sees us take a

boat cruise along the Chobe River. Elephant, hippo and many bird species can be viewed from the boat while we watch another glorious African sunset. Listen out for the resident hippos!

Day 19: Chobe National Park (B / L / D)

This morning we have the option to do an early morning game drive into Chobe National Park. Chobe is one of Botswana's premier game parks, renowned for its large elephant herds. After our game drive we return to camp for lunch and an afternoon at leisure.

For the adventurous spirits, there is the option for the Chobe National Park Sleep-out - an overnight experience in the Chobe National park. Spend the afternoon in search of wildlife en-route to the set camp within the park where we spend the evening surrounded by the night-time noises of the local wildlife. In the morning we continue our exploration and rejoin the group before heading to our next destination.

Day 20: Chobe National Park to Victoria Falls (Zimbabwe) (Brunch)

Leaving Botswana we enter Zimbabwe and drive to the nearby Victoria Falls. Here in Africa's adventure capital, we set up camp in the town's centrally located campsite. Victoria Falls or Mosi-oa-Tunya (the Smoke that Thunders) is one of the Seven Natural Wonders of the World and it's not difficult to see why. At 1700 m wide and around 100 m high, this is the world's largest sheet of falling water and a memorable sight on any African Safari! The Falls can be viewed from the Victoria Falls National Park, Zimbabwe - a fantastic photo opportunity. The afternoon is spent relaxing at the campsite's swimming pool or exploring the many sights and delights of this town!

Days 21 & 22: Victoria Falls (B on both days)

The next 2 days are spent relaxing or participating in a myriad of Optional Excursions. Some of our fellow passengers will leave us in Vic Falls, to be replaced by new passengers joining us for the next leg of our trek.

Optional excursions include trips into the Zambezi or Hwange National Parks, elephant back safaris, horse back safaris, a visit to the crocodile ranch, boat cruises and golf at The Elephant Hills Resort. Adrenalin junkies can bungee from the Victoria Falls Bridge connecting Zimbabwe and Zambia or abseil down the Batoka Gorge - neither activity is for the faint hearted! All year round, flights in fixed wing, micro light and ultra light aircraft or helicopters provide an aerial perspective over this magnificent World Heritage Site. White water rafting on the Zambezi is world class. Beside the excitement of the Grade 5 rapids, there are the 'floats', where there is time to admire the scenic cliffs and the occasional wildlife on the riverbanks.

Day 23: Victoria Falls to Livingstone (Zambia) (B / L / D)

We leave Zimbabwe and cross the Victoria Falls Bridge and the Zambezi River, entering into Zambia at the town of Livingstone. We have the opportunity to view The Falls from the Mosi-oa-Tunya National Park, Zambia. Another fantastic photo opportunity. The day affords us the opportunity to participate in the activities available in Zambia we weren't able to do on the Zimbabwean side of the Falls. Tonight we have the option of enjoying a sunset dinner cruise on the mighty Zambezi.

Day 24: Livingstone to Lusaka (B / L / D)

An early morning start sees us head north through southern Zambia to our campsite on the outskirts of Zambia's capital city, Lusaka. The campsite is home to some local wildlife including Africa's largest antelope - Eland.

Day 25: Lusaka to Chipata (B / L / D)

From Lusaka we head north east to a beautiful little campsite just 10 km before the Zambia/Malawi border. Here we spend the night before heading into Malawi.

Days 26 to 30: Chipata to Lake Malawi Beaches (Malawi) (B / L / D)

Leaving Zambia we cross into Malawi, the 'Warm Heart of Africa'. We stop off in the capital, Lilongwe, a small city distinctively divided into the old town and the new administrative centre. Malawi is a landlocked country with 20% of its total area made up of beautiful Lake Malawi. We travel the full length of the western side of the lake, stopping off at various bays and inlets over the next 5 days.

Spend the days learning the game of bao from the locals, scour the markets for a bargain or simply relax on the pristine beaches. Malawi's temperate climate allows for swimming in the clear blue fresh-water lake all year round. Explore the beautiful shore where you'll happen upon the local fishermen sorting their catch. Traditional fishing techniques are still practiced and to appreciate their boating skills, try to paddle a dug out canoe yourself! The various beachside campsites along Lake Malawi's shores offer many optional Excursions including a variety of water sports, horse back rides and a visit to the local village and school.

Day 31: Lake Malawi to Iringa (Tanzania) (B / L / D)

After a relaxing 5 days, we leave Malawi, entering Tanzania through the border post at Songwe. Taking in the beauty of the Tukuuyu tea and banana plantations, we head towards Iringa where we spend the night in the beautiful rustic 'Farmhouse' campsite famous for its Amarula Hot Chocolates and its steamy showers!

Day 32: Iringa to Dar es Salaam (B / L / D)

The next morning we make our way to Dar es Salaam. We pass through the Mikumi National Park where it is possible to view a range of wildlife from the roadside, totally impervious to the passing traffic. On arrival in Dar es Salaam, we make our way to our lovely seaside campsite and prepare for our departure to Zanzibar the next morning.

Day 33: Dar es Salaam to Zanzibar (B)

A ferry from Dar es Salaam takes us to the 'Spice Island', where we have the option to spend the next 3 nights. Zanzibar is steeped in history and was one of the major starting points for most East African explorers in their quest for new lands. New passengers may join us to replace those that'll leave us at the end of our excursion to Zanzibar.

PLEASE NOTE: Accommodation and Meals are for your own account whilst on Zanzibar, as it is our experience that passengers prefer to explore the island on their own. The Trip Leader joins you and can arrange your accommodation, while meals can be enjoyed from a wide selection of restaurants. *For those not opting to visit the island of Zanzibar, the next 3 days are spent at leisure at the beach campsite in Dar es Salaam.

Days 34 & 35: Zanzibar

History aside, Zanzibar offers a wealth of experiences for the visitor. Today the quiet streets of the old Stone Town still retain their Arabic influence, from the Medina-like shops to the palaces of the Sultans, who founded their vast empires on the spoils of the slave and ivory trade. The island is famous for its spices and an excursion around a spice plantation is always a fascinating experience. Other options include a trip to the beautiful beaches and giant tortoises of Prison Island, a full day scuba dive in Nungwe or a fishing trip in a traditional dhow. Mopeds are available for hire if you'd like to explore the more remote areas of the island. Zanzibar is a seafood lover's paradise. Numerous restaurants offer a great variety of the freshest catch from the ocean - crayfish being a popular speciality. Alternatively, mingle with the locals for dinner at the Forodhani Gardens seafront market, where delicious, inexpensive seafood is on offer.

Day 36: Zanzibar to Dar es Salaam (D)

Leaving Zanzibar, we return to the mainland and another night in Dar es Salaam.

Day 37: Dar es Salaam to Arusha (B / L / D)

From Dar es Salaam we travel through vast sisal plantations to Arusha. On the way, we pass The Pare and Usambara Mountain ranges before driving through the town of Moshi. Moshi is the base for Mount Kilimanjaro climbing expeditions and weather permitting; we may even catch a glimpse of this magical mountain's snowy summit - a photo opportunity not to be missed! Tonight we stay in a lovely campsite in Meserani on the outskirts of Arusha, before heading out on our Optional Excursions to the Serengeti and Ngorongoro Crater.

Days 38 - 40: Arusha / Optional Ngorongoro Crater / Serengeti Excursion (B / L / D)

Arusha is a pleasant town situated at the base of Mount Meru and is the starting point for the optional excursions to Ngorongoro Crater and Serengeti. We conduct these excursions in locally operated 4WD vehicles, which are adapted for safari use.

For those not opting to visit the Ngorongoro Crater or Serengeti National Park, the next 2 days are spent at leisure enjoying the Meserani reptile park, Masai Cultural Museum and the surrounding villages and craft markets. Alternatively the town of Arusha is close by to explore.

The Optional Ngorongoro/Serengeti excursion takes us via the Masai town of Mtu Wa Mbu (Mosquito River) that lies adjacent to the Lake Manyara National Park and up the Rift Valley Escarpment to the higher lying village of Karatu. Karatu offers magnificent views over the surrounding hills and has many well established wheat farms that add to the picturesque panoramas. We spend the evening at a pleasant campsite in Karatu. The following morning we depart early for the Ngorongoro Conservation area and head into the wildlife rich Ngorongoro Crater. This World Heritage Site boasts some of the best game viewing in Africa - including the elusive Black Rhino.

After our game drive in the Crater, we head down the Crater rim and past the 'Cradle of Mankind' on our way to the Serengeti National Park. We cross the vast plains as we game drive through the southern and central areas

in the park. Tonight we camp in the bushveld surrounded by the sounds of the African wilderness. In the morning, we head off for another game drive and explore the landscape in search of the resident game. With some luck, we may see some of Africa's 'Big 5'!

After our morning drive, we head back across the plains and the lush Crater rim to our truck at Arusha, where we spend the evening musing over our thrilling wildlife experience.

Day 41: Arusha to Namanga (Kenya) (B / L / D)

After a morning spent exploring Arusha's city centre and vibrant craft markets, we head to lunch just outside of town. After lunch, we travel 120 km to the Tanzania / Kenya border. Once the border formalities are complete, we camp at Namanga just over the Kenyan border.

Day 42: Namanga to Nairobi (B)

This morning we travel 180 km north to the capital city, Nairobi. On arrival, we head to the Hotel Boulevard, where we deliver the passengers who'll be ending their trip here, before heading to our campsite for the night.

Day 43: Nairobi to Masai Mara (L / D)

This morning we collect the passengers who'll be joining us on the final leg of our trek. Leaving the hustle and bustle of Nairobi we climb the escarpment to our first stop, a viewpoint overlooking the spectacular Great Rift Valley. Descending into the Rift Valley, we enter Masai land where these habitual pastoralists are often seen tending their cattle from the side of the road. We pass through the town of Narok, before arriving at our campsite, Acacia Camp. Acacia Camp looks on to the Meguarra hills and the stream that meanders by on the bottom end forms a natural border to the Masai Mara National Reserve.

Day 44: Masai Mara (B / L / D)

We spend the day driving through nature as it was intended to be - huge plains, rolling hills and an abundance of game matched nowhere else on earth. We keep an eye open for the Big 5 - elephant, rhino, buffalo, lion & leopard. If travelling between July and October, we may get to witness the impressive herds of over 1 million wildebeest, zebra and Thomson's gazelle in their Annual Migration. Sitting around the camp fire, watching the sun set is the perfect way to finish a day's game viewing in this 'Garden of Eden'.

Day 45: Masai Mara to Kericho (B / L / D)

Leaving the Masai Mara early in the morning, we travel to the scenic tea plantations of Kericho, situated on the edge of the Rift Valley Plateau. We spend the night at a campsite on the edge of a Tea Estate and time permitting, can partake in a tour.

Day 46: Kericho to Kampala (Uganda) (B / L / D)

Today, we cross the border into Uganda where we overnight in the capital city, Kampala. Uganda is a small country of striking physical beauty. Its landscapes vary from the fertile green areas around the northern shores of Lake Victoria to the snow capped Ruwenzori Mountains in the west and the semidesert region in the north. The political instability that has haunted Uganda in the past has actually had the positive effect of leaving the country free of the over commercialism so common in other parts of Africa. The current administration under President Museveni has devoted considerable effort and funds to return Uganda to its former status as one of Africa's most prosperous and, from a tourist's point of view, one of the most appealing and interesting countries to visit.

Days 47 - 50: Kampala to Lake Bunyoni (B / L / D)

After an early morning departure from Kampala we drive west into the depths of Uganda to our base at the tranquil Lake Bunyoni.

Lake Bunyoni, the deepest Crater Lake in Africa and home to a large and varied number of beautiful birds, is the base from which the optional Gorilla trek takes place. Dependant on where trekking permits are available, we trek in the Magahinga or Bwindi National Parks in Uganda, the Virunga National Park in the Democratic Republic of Congo, or the Ruhengeri National Park in Rwanda. The prices of trekking permits fluctuate and may change without prior notice - currently they are priced at US\$500 depending on where we trek. There is a local transport & handling fee of US\$65 to US\$70 per person (this covers the return transfer and the Wildlife Authority's booking fee). For trekking in the DRC or Rwanda, we will also have to purchase an additional visa to enter either country, as well as renewing our Ugandan visa upon re-entry. Please budget accordingly.

Trekking Procedures: The mountain gorilla (Gorilla Gorilla Berengei), of which there are still only about 700 remaining, are one of our closest living relatives. A visit to these gentle giants in their natural environment is a unique and wonderful experience - one you'll never forget. The park rangers monitor the gorillas on a daily basis

and have a fairly good idea of where they are. However, they are free roaming animals, and their sighting cannot be guaranteed. As the gorillas share much of our DNA, anyone with even the slightest cold or transferable illness will not be permitted to trek. Trekking is also only open to people over 16 years old.

Due to the restrictions on the daily numbers of visitors to these incredible animals, we depart from our base in Bunyoni in small groups over 3-4 days, depending on the group size. Winding our way through arguably some of the most picturesque scenery in Africa, we head to the town of Kisoro where we spend the night (Should we be trekking in Rwanda our overnight will be in Ruhengeri). The following morning, after packing our picnic lunch, we are transferred to a ranger's station where the trek commences. Your rangers will lead you through the cultivated lands and then into the dense rain forest and on to a gorilla family. Trekking can take anywhere from 45 minutes to 8 hours and it can be quite strenuous, so a reasonable level of fitness is required. To ensure the gorillas do not get too used to the presence of humans and because they share many of our genes (and therefore able to catch our diseases), the maximum time permitted to spend with them is 1 hour. You will have plenty of time to watch their activity and to take photographs. The rangers will be able to provide you with a background to the family you are visiting. Once your hour is up, you trek back out of the rain forest to your meeting point where you will be transferred back to the Lake Bunyoni campsite.

You needn't feel like you're exploiting these animals. The ever-growing number of tourists trekking them each day play a vital role in their survival. For years they have been ruthlessly hunted for their hands and heads, which have been sold as ashtrays and lampshades! In addition, large numbers have been killed whilst trying to stop poachers stealing the babies for sale to zoos, where they have never lived long. 100% of the gorilla permit cost is used to by the parks authorities to finance patrols that are instrumental in protecting the gorillas from poachers and their lethal snares and on promoting these wonderful animals.

Lake Bunyoni

For those of us awaiting our day of gorilla trekking, the choice is yours, visit a local village or church, hike in the surrounding hills, canoe, go on a bird watching walk, visit the local markets of Kabale or just spend the days relaxing or swimming in this tranquil lake.

Day 51: Lake Bunyoni to Kampala (B / L / D)

After marvelling at the experience of our gorilla encounters and enjoying the peaceful Lake Bunyoni, we begin our drive back to Kampala. We cross the Equator for the second time and stop for the classic 'one foot in each hemisphere' photo opportunity. We overnight in Kampala and have the opportunity to sample its night life!

Day 52: Kampala to Jinja (B / L / D)

Today we have the option of visiting the Ngamba Island Chimpanzee Sanctuary or transferring to Jinja for a selection of adventure activities including white water rafting at the source of the White Nile, quad biking or volunteering at a community project. Spend the afternoon relaxing on the banks of the river, or ticking off the wide variety of water birds in this area.

Day 53: Jinja to Nakuru (Kenya) (B / L / D)

Today we head back to Kenya, stopping for lunch and supplies en route. We overnight in Nakuru, Kenya's 4th largest town and capital of the Rift Valley Province.

Day 54: Lake Nakuru National Park (B / L / D)

This morning we head in to Nakuru Town to stock up on supplies before beginning our exploration of the Lake Nakuru National Park - famous for the thousands of lesser and greater flamingos that flock to this soda lake's edge. The numbers vary depending on the water level, and when it's low, the lake almost turns pink. A truly spectacular sight! The park was established as a sanctuary for black and white rhino, which are often seen. We spend the day searching for these pre-historic looking beasts as well as the elusive leopard, encountering buffalo, giraffe, various antelope and the occasional hippo along the way. We overnight at a bush camp within the Park.

Day 55: Lake Nakuru National Park to Lake Naivasha (B / L / D)

Moving south-east, we head to Lake Naivasha, home to a multitude of bird life, the most magnificent being the African Fish Eagle with his regal cry. At 1880 m, this is the highest of the Rift Valley lakes. Time permitting; we spend the afternoon enjoying optional excursions like Elsamere (former home to Joy & George Adamson of Born Free fame), a boat ride to the Crescent Island Game Sanctuary or a bike ride around Hell's Gate National Park. Tonight is spent in a lovely campsite on the banks of the lake.

Day 56: Lake Naivasha to Nairobi (B)

After breakfast, we head back to Nairobi. On arrival we exchange addresses and part ways, having just experienced a trip of a lifetime!

Optional excursions

Orange River, Half Day Canoeing (Min 4) - US\$ 25
Sossusvlei, Desert Walk (Min 4) - US\$ 35
Swakopmund, Sky Diving - US\$250
Swakopmund, Sand Boarding - US\$ 45
Maun, 3 Day / 2 Night Drive-In/Mokoro Okavango Delta - US\$150
Maun, Scenic Flight over the Okavango Delta - US\$ 70
Chobe National Park, 1 Night Sleep Out - US\$110
Chobe National Park, Game Drive - US\$ 35
Victoria Falls, National Park Entry Fee - US\$ 20
Victoria Falls, White Water Rafting on the Zambezi - US\$ 95
Victoria Falls, Bungee Jump - US\$ 90
Livingstone, Zambezi Sunset Dinner Cruise - US\$ 40
Lake Malawi, Village Walk & Meal - US\$ 10
Lake Malawi, Water Skiing - US\$ 15
Zanzibar, Accommodation - US\$ 20 p/p/p/n
Zanzibar, Stone Town Spice Tour - US\$ 25
Arusha, 3 Day / 2 Night Serengeti/Ngorongoro Crater - US\$380
Masai Mara, Masai Village Cultural Visit - US\$ 5
Uganda, Rwanda or DRC, Gorilla Trek - US\$375 to US\$500
Kampala, Ngamba Island Chimpanzee Sanctuary - US\$ 50
Jinja, White Water Rafting on the Nile - US\$ 95
Jinja, Softpower Community Project - US\$ 25
Lake Naivasha, Elsamere High Tea - US\$ 10
Lake Naivasha, Crescent Island Sanctuary - US\$ 25

(All prices are approximate and are subject to change)