

GLOBAL CONNECTIVITY





AIR TRAFFIC STATISTICS BY YEAR



BY MONTH







Note: The sum of the monthly traffic movements reflected on this page may not equal the corresponding figure for FY2009/10 shown on page 28 due to rounding adjustments.



We are proud of the Changi Experience, which has enabled Changi Airport to become the world's most awarded 'Best Airport'. It is an Experience that is underpinned by a firm rooting to Changi's core principles – providing world-class airport facilities, efficient operations and excellent customer service, with an eye on innovative solutions topped with a touch of the pleasantly surprising.

As a testimony to the hard work and effort of all who work at the airport, Changi Airport won a total of 24 Best Airport awards from April 2009 to March 2010. These included Best Airport in the World by Business Traveller (UK) for the 22nd consecutive year, World's Best Airport 2010 by Skytrax for the third time and Top Worldwide Airport by Wanderlust for the eighth time. Since its opening in 1981, Changi has won more than 350 'Best Airport' awards.

Enhancements during the year

During the year, Changi Airport Group (CAG) continued to revitalise and improve Changi's facilities and services, to ensure that passengers who travel through Changi have a seamless, efficient and enjoyable experience.

To simplify processes and to make self check-in more hassle free and user-friendly, Changi Airport launched two new features – the Common Use Self-Service kiosks (CUSS) and the Passenger Reconciliation System (PRS). With CUSS, passengers can use mobile kiosks at the airport for self check-in, saving time and streamlining their airport experience. Airlines using CUSS include Royal Dutch Airlines (KLM), Delta Airlines, Cathay Pacific, Air France and United Airlines. PRS, another time saver, enables automatic validation of self-printed boarding passes with airline systems on a real-time basis. This enables passengers without checkin baggage to skip the check-in counter and proceed straight to Departure Immigration. Cathay Pacific and Singapore Airlines are the first airlines at Changi to offer PRS to their passengers.

During the year, CAG implemented several initiatives to improve the efficiency of ground transportation services at Changi. A new Taxi Management System (TMS) was introduced in December

2009 to optimise the distribution of taxis across the airport. Five TMS information boards display data on the number of taxis queuing at each terminal and the number of flights arriving at each terminal during the immediate 45-minute period. This system enables taxi drivers to better gauge the demand for taxis at Changi's four terminals and help them decide which terminal to go to. The overall result has been a better matching of taxi supply with passenger demand.

In addition, since the beginning of 2010, all the transport needs and enquiries of passengers have been managed at the one-stop Ground Transport Desks located at all the Arrival Halls. These desks provide consolidated information on transport options from Changi Airport, including the MRT, public bus, hotel shuttle as well as regular and limousine taxi services. Service staff at the desk are trained to offer assistance and recommendations to ensure that passengers have a smooth journey beyond the airport.

In the spirit of engaging airport visitors and enhancing their understanding of airport operations, CAG opened the Changi Aviation Gallery in Terminal 2 in February 2010, providing aviation enthusiasts and members of the public with interesting insights about Changi Airport and the history of aviation in Singapore. The gallery is a multi-sensory zone with hands-on interactive displays, covering a spectrum of 'on-the-ground' activities that take place at the airport, such as passenger facilities, aircraft landing and take-off, baggage handling, horticulture, environment-friendly measures, staff working at the airport, and emergency and rescue services. Besides interactive and informational display panels, the gallery provides visitors with a close-up view of the airport tarmac, allowing them to observe aircraft and activities on the tarmac comfortably.

Left page: The new Sunflower Garden at Terminal 2...

Below: ... transforms into a stunning light garden after dusk.





Another enhancement to Changi's leisure facilities during the year was a makeover of the popular Sunflower Garden at Terminal 2's Departure Transit Lounge. Reopened in March 2010, the revamped garden is now a cheerful sunflower garden by day and a magical light-themed garden by night. With unique design features and walkways, the new-look garden is transformed when the sun sets through eye-catching lighting effects and illuminating fixtures including 'firefly' lights which replicate fireflies. An illuminated bamboo walkthrough and lighted seats placed around the garden help visitors to enjoy the visual treat.

Never a dull moment

There is always something exciting going on at Changi Airport. We believe that the perfect airport experience is not just about providing state-of-the-art facilities and efficient operations, but also about delivering an enjoyable and engaging time for visitors. Indeed, during the year, CAG organised a series of events and activities – entertaining and interesting – to inject just the right dose of fun and surprise for visitors at Changi.

Special events & activities

- In July 2009, CAG held a 'Brick Jamboree', a Legobased exhibition, at Terminals 2 and 3. The exhibition featured Lego pieces constructed by certified Legoprofessionals and included a mini competition for young Changi guests to create their very own masterpieces.
- In August 2009, Changi delighted passengers with its special 'Java Mondays with Changi' treat, which saw passengers enjoying free cups of freshly brewed coffee on Monday mornings, to chase away their 'Monday blues'.
- In September 2009, CAG organised 'The Changi Airport Race' – the first-ever jetliner-versus-car race in Asia – to mark and celebrate the Grand Prix season in Singapore. Covered extensively by media worldwide, the Race attracted global attention, and raised awareness

of CAG as a newly corporatised entity among the international aviation community.





Besides the Race, there were other race-related activities held at Changi for passengers and airport visitors to enjoy and participate in including a pit-stop challenge, go-karting and racing consoles.

- Over three weekends in October, November and December 2009, CAG held a car boot sale and flea market at Terminal 3, creating much buzz at the B2 Mall area and the adjacent car park, where the car boot sale was located. The December sale attracted more than 100 cars and flea market stalls, and drew many shoppers who turned up to hunt for quirky finds and bargains.
- Singapore's only indoor Segway circuit arrived at Terminal 3 in December 2009. Located at the Departure Hall, the 80-metre long indoor circuit entertained both adults and kids alike who wanted a thrilling zip around on the motorised transportation device.
- In March 2010, CAG launched Kid's Fun Ride at Terminal 3 car park 3A, which saw part of the car park transformed into a colourful amusement paradise for fun kiddy rides. Comprising an exciting assortment of electronic toy vehicles including giant inflatable animal cars, mini luxury sedans, convertibles, jeeps, as well as F1 race cars, the rides

- have been very popular among families with young children, attracting crowds every weekend.
- In addition to these activities at Changi, the Singapore Airshow 2010 in February saw CAG bringing to the event its signature Butterfly Garden. A smaller version of the original Butterfly Garden located at Terminal 3, the garden at CAG's exhibition booth showcased more than 200 butterflies and a variety of flowers and plants. Many Airshow visitors enjoyed the refreshing tranquillity of a mini nature trail, amidst the hustle and bustle of the Airshow events.

- 1. Students enjoying the interactive information display panels at Changi Aviation Gallery
- 2. CAG's booth at Singapore Airshow 2010
- 3. Young visitor having fun zipping around the Segway circuit at Terminal 3
- 4. Passengers enjoying themselves at Terminal 2's Entertainment Deck
- 5. Flag-off of The Changi Airport Race the first jetliner-versus-car race in Asia



Exciting entertainment

To delight and surprise passengers, Changi Airport held exclusive meet-and-greet sessions with international celebrities for passengers in the airport transit areas. Those who managed to catch in person American pop group Pussycat Dolls (June 2009) and dance-pop sensation Lady Gaga (August 2009) certainly went home with unforgettable memories of Changi. These intimate meetand-greet sessions gave passengers the once-in-a-lifetime opportunity to get up close and personal with the stars for questions and answers, autographs and even a photograph or two. Performances by other entertainers were also organised, such as a series of mini-concerts in October 2009 by American actor Edward Moss in a tribute to the King of Pop, Michael Jackson, as well as an energetic song-anddance fiesta featuring characters and music from High School Musical in December 2009.

Festive celebrations

To give passengers a taste of Singapore's major festive celebrations, CAG brought to the airport terminals the colourful sights and lively ambience of festivals such as Chinese New Year, Christmas, Deepavali and Hari Raya. The Changi horticulture team painstakingly dressed and adorned the terminals with gorgeous festive decorations that were a hot favourite among photography enthusiasts.

Fun and entertaining activities were also held in conjunction with some of these festive occasions, allowing passengers and visitors to truly experience and enjoy the festive spirit. For instance, for Christmas 2009, Changi rolled out 'The Big Christmas' celebrations, featuring 'big' attractions including the Big Musical Ball and the Big Snow Fantasy – a massive inflatable castle measuring about 17 metres wide and eight metres tall – providing a magical experience and hours of fun for the thousands of children who visited Changi during the year-end holidays.





- 1. Michael Jackson tribute by American actor, Edward Moss
- 2. Meet-and-greet with international superstar Lady Gaga
- 3. High School Musical concert
- 4. The Big Christmas Celebration 2009
- 5, 6. Hari Raya and Deepavali horticulture decorations





Transforming service

Service excellence has been a key ingredient of Changi Airport's success and achievements over the years; it will continue to drive Changi's focus going forward. State-ofthe art facilities and engaging activities aside, delivering excellent service remains the topmost priority. CAG has a goal of not just meeting but surpassing the very high standards that passengers have come to expect of Changi.

During the year, CAG embarked on an airport-wide review to identify ways to streamline operational processes and improve efficiency whilst injecting customer focus into the process design. This was conducted together with airport partners including government agencies such as the immigration and customs authorities, ground handlers, contractors and concessionaires.

Indeed, to give itself that added push towards outstanding service quality, CAG is participating in the national GEMS-Up movement – the second phase of the 'Go the Extra Mile for Service' programme in Singapore, which aims to

take service delivery to a higher level. Under this 18-month initiative, CAG will implement transformation projects to enhance operational efficiency, service quality of front-line staff and customer feedback management. The objective is to achieve a service culture change to deliver a consistently positive Changi Experience to passengers at every service touch point.

To spur all members of the Changi community to share its commitment to service excellence, every year, CAG recognises and motivates those who have shown exemplary service. In January 2010, CAG celebrated yet another year of quality service at its Annual Airport Celebration. Held at Terminal 3, the event recognised outstanding contributions by Changi Airport's front-line staff in 2009, with the presentation of 18 Changi Airport Service Awards to individuals and teams in various categories – Changi Airport Service Personality of the Year, Outstanding Service Providers and Outstanding Service Teams.





3. Customer Service Officer at Terminal 3



'Changi Airport Service Personality of the Year' 2009 – Ms Fauziah Mohd Ali

Fauziah is a customer service officer at Changi Airport's information counters. Fauziah, who started work at Changi in 2000, is no stranger to service awards. She is the proud recipient of several honours, including a Changi Airport Service Award (Gold) in 2007 and a Service Excellence Award (Silver) in 2009, which are testimonies of her consistent commitment to service excellence.

In May 2009, Fauziah went the extra mile to assist a passenger, Mr W. Moyo, a speech impaired Zimbabwean student who was stranded in Singapore for five days after missing his flight. Fauziah demonstrated her resourcefulness and initiative by helping Mr Moyo reserve a seat on the next direct flight out of Singapore, negotiating with the travel agent to waive fees as Mr Moyo did not have any money on him initially. She also arranged for his hotel accommodation by explaining the situation to the hotel manager.

Fauziah kept in constant contact with Mr Moyo's family in the US and UK throughout his five days in Singapore, and accompanied him to the bank to withdraw money after his sister had arranged a bank transfer from the UK. All this assistance was rendered after her working hours. Fauziah also invited Mr Moyo to a Mother's Day dinner with her children and friends. When it was time for his flight home, Fauziah sent Mr Moyo off at the airport and subsequently confirmed that he had arrived safely in Zimbabwe.



Together with our retail partners, we share a mission to deliver the best travel retail experience in the world at Changi Airport.

To grow the airport's commercial business, CAG adopts a holistic approach – attracting quality concessionaires to operate at Changi, continuously improving the retail mix and providing support to concessionaires by creating a conducive retail environment at the airport.

To help tenants mitigate the impact of the economic downturn, CAG provided concessionaires with a \$\$63 million assistance package in 2009, which comprised both rental rebates and marketing support. On top of that, monthly promotional events and activities were held to help boost spending, as well as draw footfall to the airport. The support was well-appreciated by Changi's tenants.

Recovery in retail performance

The travel retail industry in general, as well as Changi Airport's retail business began to recover in the second half of 2009 as passenger traffic turned around and registered the first signs of a rebound. This was after a sustained decline in concession sales for the first eight months of 2009 due to the global economic downturn.

Concession sales at Changi registered a steady uptrend from September 2009. In line with the continued recovery of the travel industry and the global economy, CAG observed a visible improvement in retail sentiments in the early months of 2010, as retailers began to display more interest in leasing opportunities and greater optimism about business prospects.

Below: New retail brands at Changi Airport



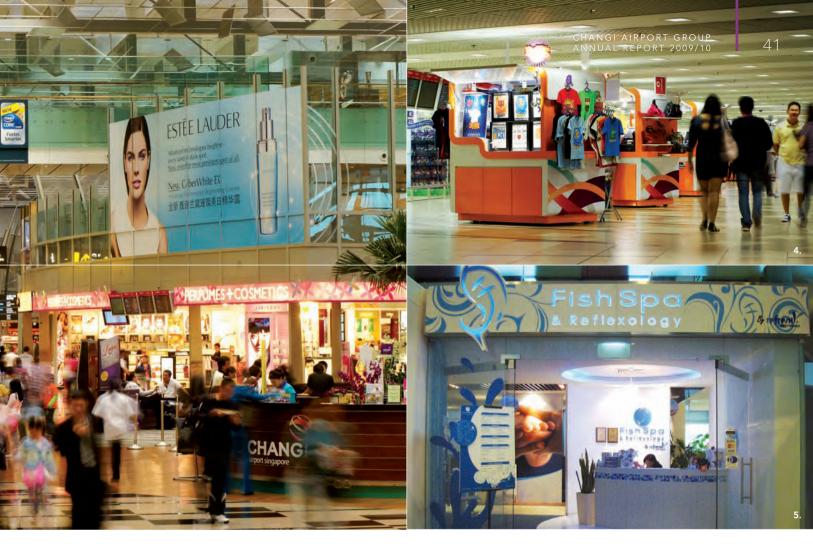


More exciting retail offerings

With over 70,000 square metres in concession space, about 230 retail stores and 110 food & beverage (F&B) outlets, and almost 200 brands spread across its four terminals, Changi Airport remains one of Singapore's largest shopping destinations. Notwithstanding the challenging operating environment, CAG continued to pursue and attract quality concession brand names to Changi, ensuring that the airport continues to have an attractive and optimum retail mix at its terminal malls.

During the year, more than 20 new brands arrived at Changi, including international brands such as Harrods at Terminal 2's Departure Transit Mall and Emporio Armani, Polo Ralph Lauren and Rolex at Terminal 3's Departure Transit Mall. In the public areas, a number of 'new to Changi' brands such as Dome, Quiznos, Ananda Bhavan and Ah Wang's Desserts also started operations during this period. Meanwhile, other new retail brands CAG worked with in the first quarter of 2010, such as Miu Miu, Diva, Paul & Shark, and F&B offerings such as Gusttimo di Roma and Café Dunkin Donuts, have since opened their outlets at Changi.

As part of the upgrading works at Terminal 1, both the public and transit areas at the terminal are being developed to create more room for retail and F&B concessions. Upon completion of the upgrading works, concession space at Terminal 1 will be increased by about 15%, allowing CAG to expand its retail and F&B offering, as well as enhance the passenger flow through the Departure Transit Mall. Part of the retail development at Terminal 1 has been completed, with new brands commencing operations during the year. One of which is Fish Spa and Reflexology, which offers passengers a unique and revitalising experience with its signature doctor fish therapy, as well as a full range of massages, reflexology and other wellness treatments. Other new and exciting brands will continue to be introduced over the next year, providing airport visitors with a fresh and enhanced shopping experience at Terminal 1.



A shopping destination in itself

To grow its retail revenue and maximise the commercial potential of Changi's terminals, CAG's strategy is to develop Changi Airport into a choice shopping destination, not just for travellers, but also for local residents. To this end, CAG implemented a series of initiatives to revitalise the retail offering in Changi's public areas.

A range of pushcarts were introduced at the Terminal 3's B2 Mall in December 2009 to make shopping even more interesting during the festive season. Showcasing an eclectic mix of wares including fashion apparel, accessories and bags, as well as skincare and wellness products, the pushcarts have added more colour, buzz and variety to the existing shops in the basement mall.

Meanwhile, at Terminal 3's 3-Top Mall, CAG introduced the Branded Outlets Store concept in August 2009. Since then, many popular brands including Crocs, Fox, Adidas, Fila, Nine West and Celio have participated with outlet sales, where their apparel and accessories were sold at attractive discounts.

Changi also held several special retail events during the year such as the Changi Book Fair in November 2009. As part of the Christmas festivities at Changi, CAG organised a Christmas bazaar, featuring a good variety of quaint Christmas-themed products including accessories, apparel, chocolates, books and other knick knacks.

- 1. Branded Outlets Store at Terminal 3, 3-Top Mall
- 2. Colourful baubles bearing mystery gifts given out during 'The Big Christmas' shopping promotion
- 3. Busy shopping street at Terminal 3, Departure Transit Mall
- 4. Pushcart stalls at Terminal 3, B2 Mall
- 5. Fish Spa and Reflexology at Terminal 1 offers passengers a revitalising experience with its doctor fish therapy



Concurrently, to encourage visitors to spend more time at the airport to shop and dine, CAG introduced in November 2009 lower parking rates on weekends, with visitors paying just \$\$2.50 for the first three hours of parking. This rate was later extended to weekday evenings.

The various efforts to inject buzz and variety to Changi's landside retail offering boosted daily footfall at Terminal 3 B2 Mall on weekends, which had more than doubled by March 2010 compared to a year earlier.

Creating a conducive retail environment

CAG believes in being a responsible and proactive landlord that takes the initiative in implementing strategies that will maximise the overall sales potential of its terminal malls. This philosophy has been recognised by the industry, with CAG winning for the fifth consecutive time the 'Airport Authority with the Most Supportive Approach to Travel Retail' award at The DFNI Global Awards for Travel Retail Excellence in May 2010.

As part of its efforts to create a conducive retail environment, CAG implemented a sustained campaign of exciting shopping promotions and interesting on-site activities throughout the year, at both the transit and public areas of the airport – all with the objective of boosting spending at Changi's retail shops and drawing more public footfall.

Eight promotional events were held during the year, some of which were tied to key festive celebrations such as 'The Big Christmas' in December 2009 and 'Double Happiness' during the Chinese New Year celebration in February 2010, as well as the 'Celebrate with Changi Airport' promotion which was held in conjunction with the corporatisation of Changi Airport in July 2009.

The 'Let's Do Lunch' promotion held at the public areas from August to October 2009 saw positive response from the lunchtime crowd at the airport as well as patrons from neighbouring business parks. Participating F&B outlets offered attractive S\$10 set meals while parking charges were waived during the lunch period.



In March 2010, CAG launched 'Changi Rewards', a programme which rewards shoppers for spending at Changi, making it even more worthwhile for them to shop and dine at the airport. In just two months following the launch of the programme, more than 12,000 customers signed up and collected their 'Changi Rewards' cards.

On top of these airport-wide initiatives, CAG worked with various tenants to plan and execute outlet-specific promotions, including major retail concessionaires like Nuance-Watsons, DFS, Luxury Venture and F&B operators such as Crystal Jade Shanghai Restaurant.

Through these innovative and exciting promotional activities, CAG hopes to bring value to its visitors by making shopping and dining at Changi not just a fun and enjoyable experience, but importantly, a truly worthwhile and rewarding affair as well. By doing so, it is also providing concessionaires with effective marketing support and helping to create a retail-friendly environment in which they can thrive.

- 1. Retail promotion booth
- 2. 'Changi Rewards' members receive rewards for shopping and dining at Changi
- 3. The 'Let's Do Lunch' promotion offered S\$10 set lunches at the public areas $\,$
- 4. The new Dunkin Donuts at Terminal 3, Departure Transit Mall
- 5. Pasta Waraku at Terminal 2 with its beautifully decorated outlet front
- 6, 7. Dome and Ananda Bhavan, new F&B brands at Changi Airport



A key part of CAG's mission is to grow Singapore as a vibrant air hub by increasing passenger and cargo traffic at Changi Airport, and by strengthening Changi's connectivity. The aim is for Changi to continually strengthen its position as a key international air hub and the world's gateway to Asia Pacific – today and into the future.

Driving traffic and connectivity

In line with the improving global economy and the corresponding recovery in air travel, traffic at Changi Airport saw a healthy rebound in the 12 months ended 31 March 2010, rising 4.6% compared to a year earlier. Following a difficult first half of 2009, the turnaround came in August 2009, after which growth continued steadily through the rest of the financial year.

Changi Airport reported a strong showing of 38.6 million passenger movements for the April 2009 to March 2010 period, an increase of 4.6% year-on-year. For calendar year 2009, 37.2 million passenger movements were registered. A monthly record of 3.83 million passenger movements was registered in December 2009 with a daily all-time high of 140,000 recorded on 19 December 2009.

Traffic growth during the year was led mainly by low cost carriers – which saw a healthy 57.8% increase in the number of passengers carried. Low cost carriers which registered significant growth during the year included the Jetstar Group, Tiger Airways and the AirAsia Group. Regional full service carriers such as SilkAir also saw healthy growth, driven by robust demand for regional air travel. While low cost carriers contributed strongly to passenger growth, full service carriers continued to carry the bulk of passengers at Changi, accounting for almost 80% of total passenger traffic during the period.

Although the aviation industry was only just emerging from the downturn during the year, Changi Airport still fared well on the connectivity front. It continued to expand its air network, registering a record number of 200 city links in December 2009, served by 86 airlines. New passenger city links launched in 2009/10 included Shantou in China, Kuantan, Ipoh and Kuala Terengganu in Malaysia, Krabi and Hat Yai in Thailand, and Semarang in Indonesia.

For the year, the number of flight movements also rose by more than 8% to about 5,000 flights per week. Apart from low cost carriers, new airlines also contributed to this growth. This is partly the result of active marketing efforts which successfully attracted a number of new airlines to Changi during the year, including Firefly of Malaysia, Kingfisher Airlines of India and Batavia Air of Indonesia. In addition, Myanmar Airways began operating its own flights, having previously codeshared all its flights.

Meanwhile, Changi Airport remained the world's busiest A380 hub airport, with the number of A380 flights more than doubling during the year to 140 flights a week, operated by Singapore Airlines and Qantas.

Growing with partners

With Changi's success deeply intertwined with that of the aviation industry, CAG is committed to strengthening its partnership with airlines through good times and bad. CAG firmly believes in working together with its partners to grow the pie at Changi.

In today's dynamic and rapidly changing aviation landscape, CAG's partners face different opportunities and challenges. Hence, a one-size-fits-all partnership approach is no longer effective. Therefore, in January 2010, CAG launched the Changi Airport Growth Initiative (CAGi) – a new strategic incentive package to drive the growth of Changi's connectivity and traffic. Adopting a targeted and nimble approach, CAG will work with partners to understand their unique needs, explore opportunities to further develop their business and operations at Changi, and use differentiated measures to spur growth and support innovation.

Through an effective and optimal mix of targeted and performance-based incentives, CAG encourages airlines and other airport partners, like ground handlers and freight forwarders, to boost passenger and cargo traffic at Changi Airport and strengthen Changi's air traffic network. The initiatives could range from incentivising airlines to enhance Changi's connectivity by starting routes to new destinations, helping new airlines start operations at Changi, rewarding passenger and cargo traffic growth, and supporting airlines and ground handlers to enhance their product and service offerings at Changi.





Shortly after the launch of CAGi, CAG announced its first success story under the scheme, with an air hub deal signed with the Jetstar Group. The agreement will see the Jetstar Group make Changi Airport its largest hub in Asia for both short- and long-haul operations. The airline group will operate its highest number of services in Asia at Changi, and increase existing flight frequencies and destinations from Singapore. In addition, it will base its largest number of A320-family aircraft at Changi and introduce long-haul services using wide body aircraft out of Singapore. Two long-haul destinations – Melbourne and Auckland – have been announced by Jetstar.

By seeking such win-win outcomes with its airline partners, CAG believes that its new approach under CAGi will enhance Changi Airport's value proposition for airlines worldwide and ultimately, boost Changi's overall competitiveness.

As part of CAG's efforts to encourage traffic to and through Singapore, CAG collaborated with Singapore Tourism Board (STB) and Singapore Airlines on a joint marketing campaign in its key overseas markets. A regional marketing campaign was also conducted with STB and SilkAir. During the year, CAG embarked on a strategy to promote inbound passenger traffic and develop new sources of traffic in markets with untapped potential. To this end, CAG has deepened its engagement with travel intermediaries to drive traffic demand to Singapore.

Building the cargo hub

The recovery of the cargo sector has been slower compared to passenger traffic. From April 2009 to March 2010, Changi Airport handled 1.7 million tonnes of cargo, a slight decrease of 2.9% compared to the previous corresponding year. However, encouraging signs of a rebound were reflected in the positive year-on-year growth of airfreight movements since October 2009.

While the economic downturn resulted in a fall in cargo volumes during the year, Changi Airport weathered the storm relatively well, leveraging the strong partnerships that have been forged with cargo partners. CAG stepped up its collaboration with cargo partners to identify new market opportunities and position Changi for future growth. During the year, Changi welcomed new all-cargo carriers including AeroLogic of Germany, Cardig Air of Indonesia, Transmile Air of Malaysia and Martinair of the Netherlands. New physical cargo city links established included Labuan and Kuching in Malaysia, Balikpapan and Padang in Indonesia, and Atlanta in the United States.

CAG introduced various initiatives to help its cargo partners tide over the difficult period of the economic downturn. For instance, the Cargo Incentive Scheme launched in 2009 to support CAG's cargo agents was extended and further enhanced in 2010. The rollout of CAGi signified a change in CAG's approach to partner the cargo community with better customisation and flexibility of incentives to help them achieve their growth plans. These innovative initiatives and the adoption of a proactive partnership approach have been well received by cargo partners.



CAG continues to target and grow new cargo segments. In August 2009, the development of Coolport@Changi – Singapore's first air freight terminal dedicated to perishables cargo handling – was announced by Singapore Airport Terminal Services Limited. The new Coolport@Changi, which opens in the second half of 2010, will further enhance Changi's position as an efficient and reliable hub for perishables trade and transshipment in Asia. The Singapore Freeport, a state-of-the-art storage facility with direct

access to the airport terminal, provides international fine art collectors, auction houses and financial institutions with a secure location to store and trade valuable assets and collections. These two projects provide new value-added services and market opportunities for airlines and cargo agents across Asia Pacific to capture new trade flows.



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Ensuring safe and secure airport operations is a prerequisite of CAG's mission to develop a vibrant air hub in Singapore. To provide passengers with a safe and seamless travelling experience and airport partners with a sustainable and conducive business environment, CAG's Aerodrome Safety, Airport Emergency Service and Aviation Security units work together and with other airport partners to ensure the upholding of safety and security standards in all aspects of Changi's operations.

Aerodrome safety

Following Changi's corporatisation, CAG formed a new Aerodrome Safety unit, which is responsible for the management and implementation of CAG's safety management system and processes, and compliance with safety regulatory requirements.

Following a review to ensure alignment with industryleading practices, CAG has adopted a new systematic approach to manage safety risks effectively by achieving greater harmonisation across operating divisions and integrating risk management and safety assurance processes into operational activities and planning functions. The revised Safety Management System - which clearly articulates CAG's safety policy and objectives, and sets out well-defined safety practices and processes – seeks to minimise risk of harm to passengers, partners, businesses, airport users and employees.

CAG also established a new Internal Safety Audit
Programme to ensure its compliance with all safety
regulatory requirements and international standards, as well
as to drive continuous safety improvements. As a testament
to its safety standards, Changi Airport received yet another
deficiency-free rating from the International Federation
of Air Line Pilots' Association for the year 2009. Since its
inception in 1981, Changi has achieved this rating every
single year.

To enhance runway safety, CAG tested the world's first intelligent vision-based runway FOD (Foreign Object Debris) Detection System, named iFerret. The system operates round-the-clock and is able to detect objects as small as 4mm in diameter on the runway even in low-light conditions. Upon detection of FOD, the system automatically sends an alert to the operator so that pilots can be notified in real time. Concurrently, an airside safety team is despatched to remove the object. This quick identification of FOD through remote visualisation enhances operational safety without affecting runway operations. The iFerret system is at its final phase of operational trial testing before being commissioned for use.

Airport emergency service

CAG's Airport Emergency Service unit is a specialised aircraft rescue and fire fighting unit providing rescue and fire protection, prescribed by the International Civil Aviation Organisation, at Changi and Seletar airports, as well as at Republic of Singapore Air Force airbases. It is also responsible for the oversight of fire safety matters and policies at both airports.

During the year, CAG continued to enhance its emergency preparedness and operational effectiveness through a series of initiatives including a comprehensive programme to educate all stakeholders in the airport community and mutual aid agencies on the various aspects involved in the event of a crisis or emergency at the airports.

Besides promulgating the revised Changi Airport Emergency Plan and Seletar Airport Emergency Plan in the second half of 2009, CAG also organised an Airport Emergency Plan Seminar to educate stakeholders on the new Changi Airport Crisis Management Framework. In conjunction with this seminar, a CAG Airport Emergency Plan video was launched to provide an overview of the Airport Emergency Plan and the roles and responsibilities of all agencies involved in the plan.

Left page: CAG works closely with security authorities and agencies to ensure a safe and secure environment at Changi. Below: Mediacorp TV documentary Unexpected Access featured AES' land and sea rescue training and exercises, giving viewers a better understanding of CAG's airport emergency capabilities.







The work of the Airport Emergency Service was featured on Singapore television in an episode of Unexpected Access (Season 2) which aired in March 2010. This MediaCorp TV documentary took viewers to restricted areas in Changi Airport that are not accessible by members of the public. In the episode, viewers were given a rare behind-the-scenes look at the complex operations that ensure Changi ticks like clockwork, including activities on the airport tarmac and baggage sorting area. Also a first, the Airport Emergency Service's fire-fighting and rescue capabilities on land and sea were featured, providing viewers a rare glimpse of CAG's operational capabilities to mitigate an aviation crisis.

To enhance its operational capabilities and to ensure a young fleet of fire vehicles at the RSAF airbases, CAG commissioned five new fire vehicles during the year to replace the older vehicles at the airbases. Fitted with "power dividers" and computerised fire-fighting display systems, these vehicles are equipped to perform monitor operations whilst on the move, thus enhancing the Airport Emergency Service's fire-fighting capability.

CAG continues to work closely with APD and other government agencies such as the Ministry of Home Affairs (MHA) to raise the quality of security management at Changi Airport and to correspondingly implement initiatives where necessary. For example, during the year, CAG, in close collaboration with APD and MHA, introduced a new passenger screening and identification programme to enhance security at Changi Airport. The programme is based on a risk-management approach to better identify potential threats, providing an added edge in risk mitigation.

To further improve passenger screening measures, CAG and APD also undertook a two-week trial of an explosive trace-detection portal machine in February 2010. The machine can detect non-metallic items hidden on a passenger's body. CAG is in the process of studying the trial results to assess the feasibility of using such screening technology at Changi Airport.





To optimise Changi Airport's long-term growth potential and to meet the needs of airlines and passengers, CAG strives to provide adequate and quality airport infrastructure in a timely and proactive manner. Guided by this philosophy, the Engineering and Development Group regularly reviews Changi's infrastructure and development needs and implements expansion and renewal plans to take Changi Airport to the next lap.

Expansion and upgrading

Budget Terminal expansion

In mid-2009, CAG completed the expansion and upgrading of the Budget Terminal, which had commenced a year earlier. With the completion of the expansion works, the terminal can now handle 7 million passenger movements per annum, up from 2.7 million previously. The number of check-in counters was increased from 18 to 25, and the number of passenger boarding gates from seven to 11. Additional baggage handling equipment was added to handle outbound bags. For the comfort and convenience

of passengers, the canopies at the departure and arrival halls, as well as that along the linkway to the taxi stand, were extended to provide more shelter from the sun and rain.

Other upgrading works to improve comfort included the air-conditioning of the arrival corridor and improvement of acoustics in the terminal. In addition, new facilities and services were introduced, such as a Left Baggage Service and children's play area, as well as more retail outlets.

Terminal 1 upgrading

The upgrading of Terminal 1, which commenced in May 2008, progressed smoothly during the year.

With a 'Tropical City' concept, the new Terminal 1 will see improved passenger flow and an enhanced passenger experience, with a refurbished interior design and finish.

As part of the works, a new departure kerbside canopy is being constructed to span the entire length of the building

- 1. Artist impression of Terminal 1 facade upon completion of the upgrading project
- 2. As part of the Budget Terminal's upgrading works, the kerbside canopy was extended to provide more shelter

façade and extend over the first two lanes of the departure driveway. This will provide shelter from the elements for passengers arriving at the terminal. A new centralised Departure Immigration Hall will also be created to improve passenger flow and navigation. The main terminal building has been extended into the airside by 35 metres, creating more space for new services and facilities, and providing better views of aircraft on the parking bay. To allow for more spacious movement and waiting areas, the main thoroughfare, gate holdrooms and finger piers along the older sections of the terminal will also be widened.

More than half of the renovation works at Terminal 1 have been completed, and many aspects of the upgraded terminal are taking shape. Completed works include the upgrading of several check-in islands; the expansion of gate holdrooms, with improved seating and full length glass facade to allow full view of the apron; the development of part of the new departure transit extension; and a new refreshing retail and F & B experience. The entire Terminal 1 upgrading project is expected to be completed by 2012.



Redevelopment of Seletar Airport

Seletar Airport, Singapore's secondary airport, has been undergoing a major five-year redevelopment project since 2008. The development of the Seletar Aerospace Park, when completed in 2013, will serve a myraid of aviation business activities, such as maintenance, repair and overhaul (MRO) of aircraft, creating a world-class, integrated aerospace community in one location.

CAG has been working closely with JTC Corporation, CAAS and other related government agencies to support this national effort to upgrade Seletar Airport. During the year, CAG was involved in the project management of the extension of Seletar's runway, the construction of a new control tower, taxiways and aircraft parking aprons, as well as the installation of a precision approach lighting and instrumental landing system for the runway. These works are currently in progress.

Improvements and maintenance

CAG revamped its Airport Engineering Operations and Maintenance ISO Quality Manual and Quality Procedure Manual to be in line with the new ISO 9001:2008 standards. In December 2009, it also achieved the ISO 9000 re-certification (zero non-conformances) for its operation and maintenance services for the 12th consecutive year. Overall, in terms of its engineering systems operations and maintenance, CAG successfully met all the key performance indicators required.

- 1. More than half of the Terminal 1 upgrading project has been completed.
- 2. The main building of Terminal 1 will be extended into the airside to create more room for facilities and services.
- 3. The Budget Terminal expansion included improvement of acoustics in the terminal and the introduction of new facilities.





Over the past year, CAG completed several key equipment improvement projects such as the replacement of cooling towers at Terminal 1 and the addition of a cooling tower filtration system at Terminal 2.

To ensure smoother and safer take-offs and landings for aircraft, CAG also completed the resurfacing of both runways at Changi Airport, as well as a significant portion of the taxiways and apron roadways, thus enhancing the ride quality around the tarmac and overall airport safety. Such resurfacing works will enhance the reliability and performance of the runways, taxiways and apron roads, and extend their serviceable lifespan, which is crucial in light of the increasing aircraft traffic volume at Changi Airport.

Planning ahead

In December 2009, CAG obtained CAAS' approval for the first edition of the Changi and Seletar Airport Master Plans. The Master Plans, which outline airport capacity, land use and key development plans for the next five to 15 years, serve as a common reference for CAAS, CAG and other relevant agencies when charting Changi and Seletar Airport's expansion going forward.

In addition, two new teams, namely the Capital Expenditure Management and Real Estate Development teams, were incorporated under the umbrella of Engineering & Master Planning Division. The Capital Expenditure Management team is responsible for the planning, management and optimisation of capital expenditure to support the costeffective development of Changi Airport's infrastructure. The Real Estate Development team oversees strategic business planning for CAG's real estate, so as to support the sustained development of Changi as a world-class air hub and a destination of choice. As part of Changi Airport's Master Plan, the team is carrying out a review to further optimise land use within and around the airport, with a vision of creating a vibrant and cosmopolitan hub for passengers, visitors and airport workers alike.

Artist impressions of Terminal 1 after upgrading:





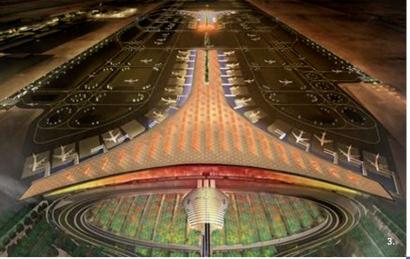
Through its dedicated subsidiary for overseas ventures, Changi Airports International (CAI), CAG exports Changi's brand name and expertise far beyond Singapore's shores. Since its inception, CAI has provided consultancy and management services to over 20 airports in more than 10 countries. At the same time, it has been building a portfolio of quality investments in airports with strong markets and significant development potential. Including its investments, CAI's international portfolio spreads across China, India, the Middle East and Europe and involves some \$\$20 billion worth of projects.

CAI continued to make significant headway during the year in the global arena and secured several prominent projects, further expanding Changi's international footprint.

Investments

In July 2009, CAI acquired a 26% stake in Bengal Aerotropolis Projects Limited. The project, located at Durgapur in India's West Bengal state, is CAI's first investment in an Indian greenfield airport city project. The Durgapur Aerotropolis is India's first aerotropolis project and its first privately owned merchant airport. The aerotropolis involves the setting up of an industrial park, a logistics hub, an information technology park and a township around the privately owned airport. CAI has in place a Technical Service Agreement to support the planning and development of Durgapur Airport, and will enter into an Operations and Management Agreement to assist in the management of the airport once construction is completed.

In February 2010, CAI acquired a 5% stake in Gemina S. p. A., the holding company of Aeroporti di Roma (AdR) for S\$100 million - its largest investment ever and its first in Europe. AdR is the largest airport group in Italy and holds the rights to operate Rome's Leonardo da Vinci Airport, the sixth largest hub in Europe, as well as the smaller Giovan Battista Pastine Airport. CAI will play a key part in the development and expansion of AdR, providing advisory support in master planning, airport operations and commercial development.



- 1. Night view of the apron area at Rome's Leonardo da Vinci Airport
- 2. Departure Hall of Rome's Leonardo da Vinci Airport
- 3. Aerial view of Beijing Capital International Airport
- 4. MOU signing ceremony between CAG and Chongqing Airport Group

Consultancy projects

Following its first commercial consultancy project in 2008, CAI sealed two additional consultancy projects with Chongqing Airport Group in December 2009. The two projects covered a review of Chongqing Airport's passenger transfer operations and proposed improvements to its retail environment.

CAI completed through the course of the year, inter alia, consultancy projects for Nagpur Airport in India and projects for Shenzhen Airport and Chengdu Airport in China. In the case of Chengdu Airport, this was the third time CAI had been engaged by the airport, the previous occasions being in 2004 and 2007.

Airport management

In November 2009, CAI entered the second year of its six-year contract to manage Saudi Arabia's King Fahd International Airport (KFIA), which is located at Dammam in the Eastern Region of the country.



Apart from raising operational efficiency and service levels, CAI also contributed significantly to the increase in air traffic at KFIA. Even though it operates in a catchment area with a number of other airports, KFIA was able to overcome challenges and attracted five new airlines to launch flights to Dammam in the year ended March 2010.





With an increase in the number of its city links, KFIA's international passenger traffic in 2009 grew by some 8% over 2008, better than some of its neighbouring competitors over the same period.

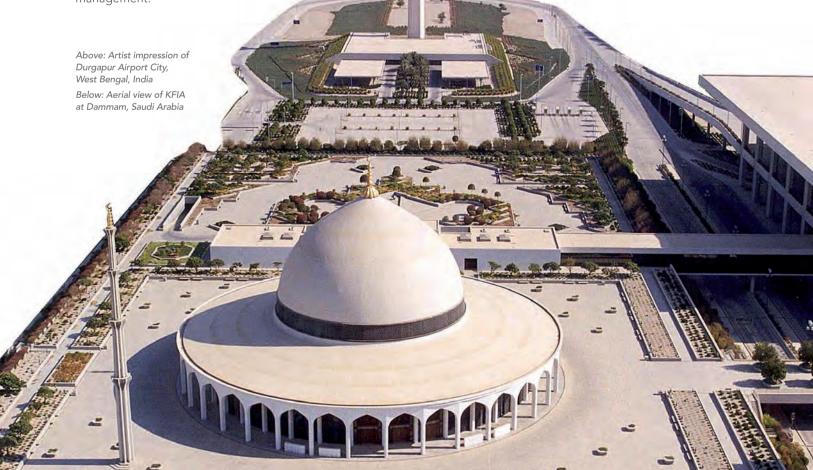
Partnerships

During the year, CAG strengthened its relationship with two airports in China, signing Memorandums of Understanding with Beijing Capital International Airport and Chongqing Airport Group. These partnerships provide a framework for CAG to explore collaborations with the other airports through joint projects and staff exchanges, in areas such as terminal management, route development and commercial management.

Future plans

In the coming years, CAI's objective is to entrench its presence in its current markets of China, India, the Middle East and Europe, either through enhancing its involvement in existing investments or capturing other high-value airport management projects. CAI is institutionalising a strong asset management regime with a focus on achieving its

business objectives and supporting its investment portfolio including Rome and Durgapur. Equally important, CAI will continue to focus on delivering key results under the management contract with KFIA.





At CAG, our people are our greatest assets. We believe that ordinary people working together can achieve exceptional results to deliver the world's best airport experience. This belief drives CAG's talent attraction and retention policies.

As at 31 March 2010, CAG had over 1,100 employees, most of whom were legislatively transferred from the Civil Aviation Authority of Singapore on 1 July 2009. A number of staff were also recruited from the market, including mid-career managers with private sector experience or specialised skills, to augment the team.

As a newly formed commercial entity, CAG's human resource efforts during the year have focused on recruitment to build the new company, and employer branding to raise awareness of CAG. Activities have included reaching out via recruitment fairs and talks, networking sessions and dialogue with polytechnic and university students (including those on postgraduate studies). Such efforts enabled CAG to reach out to potential candidates and the public to share CAG's business profile, its vision and mission, as well as the career opportunities the company offers.

Within CAG, to allow the Human Resource (HR) Division to better understand and support the business strategy and requirements of the new company and its divisions, a business partnership approach has been adopted with dedicated HR officers assigned to individual divisions.

Post-corporatisation, CAG has also embarked on a comprehensive review of its HR philosophy, systems, processes and goals. The objective is to put in place, a competitive compensation and benefits structure that engages and motivates employees as they contribute towards a high-performing organisation.

In terms of talent development, CAG staff have many opportunities to grow and broaden their careers. These may take the form of job rotation to expose capable managers to various aspects of the multi-faceted airport business – including planning and managing the daily operations in the airport terminals, growing the retail and rentable properties business, developing business opportunities with partner airlines and building the company through the corporate support divisions – or through short- or long-term assignments to support one of CAI's consultancy or management projects overseas.



Through a series of learning programmes and training solutions, CAG also aims to promote a culture of learning and development company-wide. Each staff has an individual training roadmap comprising a matrix of targeted training areas covering both generic and jobspecific skill sets.

Underlining the importance of staff engagement, CAG actively communicates with its staff and staff union representative, the Singapore Manual and Mercantile Workers' Union through regular get-togethers held to build relationships and promote understanding of various manpower issues. This new partnership started symbolically with the agreement of the revised remuneration package for Airport Emergency Officers in October 2009 and the signing of the Memorandum of Understanding in February 2010.

Above: CAG's booth at recruitment fair; (right) Staff enjoying activities during a CAG Health Week event Below: Management and staff of Changi Airport Group at To promote staff well-being and strengthen belonging, CAG organised various staff-focused activities throughout the year. These included the CEO's walkabout to various divisions, and management visits during Chinese New Year to offices and work places during which mandarin oranges and pistachio nuts were distributed to wish all staff a prosperous year ahead.

January 2010 saw the CAG Health Week – themed "Healthy can be fun too" – to promote healthy living. The week-long event included health screenings at a subsidised rate as well as workshops and activities like pilates, sushi making and smoothie making. It culminated in a health carnival, with games and food booths, and lucky draws and free yoghurt giveaways. Another health initiative has been the introduction of the monthly CAG Fruit Day, on which each staff receives a packet of fruits, reinforcing the importance of healthy eating.



CAG is a firm believer that, as a corporation with many stakeholders, it has a role in supporting and contributing to the well-being of society. We actively respond to environmental challenges and the needs of the community.

CORPORATE SOCIAL RESPONSIBILITY

Solar photovoltaic system on the Budget Terminal rooftop





Environmental sustainability

At Changi Airport, a broad-based environmental programme is in place to ensure the adoption of environmental best practices and sustainable growth of the airport. Environmentally-friendly initiatives that have been implemented include using treated or recycled water in the terminals, adopting energy-efficient equipment and heat recovery systems, and recycling efforts within the terminals and offices. Intelligent control of lights and air-conditioning has also been put in place to conserve electricity, through measures like dimming lights at airport terminals during off-peak hours, and installing motion sensors in areas such as toilets and offices.



Recycling bins at Changi Airport

In recognition of its sustainability efforts, Changi's Terminal 3 was awarded the Green Mark Gold status in October 2009.

The Green Mark Award – conferred by the Building and Construction Authority – aims to promote the sustainable development of buildings in Singapore. This scheme assesses the environmental impact of new buildings, through its energy efficiency, water efficiency, project development and management, indoor air quality and environmental innovations.

CAG's environmental efforts are driven by its Environmental Working Group, which manages the 'Changi Goes Green' programme and coordinates the implementation of green initiatives in areas such as energy efficiency, waste management and water efficiency. Under this programme, CAG pursues environmentally-friendly strategies via a three-pronged approach:

Collaboration: Working together with airport partners to reduce the environmental impact of the airport's activities. This includes test-bedding and implementing green technologies and initiatives.

Awareness: Building environmental awareness among the airport community of 28,000 workers.

Continual improvement: Pursuing continual improvement in the five areas of energy efficiency, management of emissions, waste management, water management and noise management.

Collaboration

Together with its partners, CAG successfully completed the installation of a 250kW solar photovoltaic (PV) system on the rooftop of the Budget Terminal in March 2010. This system, comprising approximately 2,200 PV panels, converts sunlight into electricity. This provides an alternate source of clean and sustainable energy at the Budget Terminal, supplementing the terminal's main power supply and reducing electricity costs.





Capable of generating about 350,000kwh of energy per year, the solar PV system's energy output is equivalent to about 4% of the Budget Terminal's total energy consumption, translating to approximately \$\$67,000 of energy savings per year. This solar PV project was partially funded by the Economic Development Board under its Clean Energy Research and Test-bedding Programme (CERT). As part of this programme, CAG is working closely with research partner Singapore Polytechnic to provide energy data generated from the solar PV system for research purposes.

Awareness

To highlight the aviation industry's commitment to the environment and to build environmental awareness among the airport community and visitors, CAG and the International Air Transport Association (IATA) jointly organised an environment exhibition at Changi Airport in February 2010. A month-long event that was free and open to the public, the CAG & IATA Environment Exhibition showcased the key elements of IATA's four-pillar strategy on the environment – technology, operations, infrastructure and economic measures – and highlighted CAG's commitment to the sustainable growth of Singapore's aviation sector as part of its 'Changi Goes Green' drive.

On 27 March 2010, CAG participated in Earth Hour for the second year running, doing its part in the fight against climate change. From 8.30 pm to 9.30 pm, all decorative lights within the airport were switched off and non-critical operational lights were dimmed. The one-hour effort throughout Changi's terminals resulted in energy savings equivalent to the total amount of electricity consumed by a typical 4-room HDB apartment over almost three months. Promotional efforts to raise awareness among airport staff, passengers and visitors, and an internal campaign to encourage staff to join in the effort at home, were also carried out.

Continual improvement

CAG has established an Environmental Management System, so as to adopt a more structured approach in the pursuit of its environmental goals. Under this system, CAG will explore practical green initiatives within the airport's operations and corporate settings, and leverage green technologies to improve its environmental performance.

During the year, CAG successfully used recycled concrete aggregate (RCA) as a substitute for natural aggregate in construction works at the airport, specifically for resurfacing part of Changi Airport's perimeter roadways and rehabilitating Changi's aircraft parking bays. Using RCA not only helps to alleviate landfill problems in land-scarce Singapore, it also contributes to the conservation of natural aggregate, a diminishing resource.

In February 2010, CAG completed an internal study on the energy consumption and efficiency of all buildings within its premises. This study provided a good overview of Changi Airport's energy efficiency levels, enabling CAG to better manage Changi's energy needs and to develop accurate benchmarks to measure its energy performance.

^{1, 2.} Terminal 3's arrival baggage claim area before and during Earth Hour

^{3.} IATA's Director-General and CEO, Mr Giovanni Bisignani, at the launch of the CAG & IATA Environment Exhibition in February 2009

^{4.} The CAG & IATA Environment Exhibition at Terminal 3

Community support

As manager of one of Singapore's most famous icons and being an integral part of the country's economic future, CAG is keenly committed to playing its part as a caring corporate citizen, enhancing the lives of those in the community it serves.

In 2009/10, CAG organised various initiatives that provided opportunities for its staff to participate in volunteering and fund-raising activities in support of its adopted charity beneficiary, Rainbow Centre-Margaret Drive School (RCMDS). For instance, CAG's horticulture team provided landscaping works for the RCMDS Graduation Day in November 2009, and funds were raised for RCMDS during the Changi Airport Race in September 2009. In addition, through the more than 30 donation boxes located across Changi Airport, CAG, together with CAAS, jointly raised funds amounting to about \$\$165,000 for RCMDS during the financial year.

THANK YOU FHANK YOU FAN ASMITTANESS FOR YOUR DOMINOSS

CAG has reviewed its Corporate Social Responsibility (CSR) mission as a newly corporatised entity. As a young and dynamic organisation itself, CAG understands and appreciates the potential that youths of today have, and the challenges they face. With this in mind, CAG decided to focus its future CSR efforts on youths-at-risk.

Consistent with this approach, CAG will embark on a partnership with the Children-at-Risk Empowerment Association (CARE) in Singapore, a youth-development agency specialising in helping at-risk youths turn their lives around. Under this partnership, CAG will be organising initiatives that are customised towards the development of youth beneficiaries from CARE, extending opportunities for them to experience the airport business and inspiring them to greater aspirations in life.

In the new financial year, funds collected from donation boxes in Changi Airport will also be contributed to the Community Chest, in support of youth-related organisations under their care, in particular Autism Youth Centre, eGen and Bestari Institute of Technical Education.

Finally, as part of its outreach to the young people in the community, CAG is a participant in the Ministry of Education's 'Learning Journeys' programme. Recognising Changi's unique position as a key national institution, occupying a special place in the hearts and minds of most Singaporeans, 'Learning Journeys' provides an opportunity for students, and even teachers, to get a close-up view of what makes Changi one of the world's best airports. The programme includes a guided tour of the airport, offering a glimpse of its inner workings, and instilling in the students a sense of pride in one of Singapore's most well known achievements – Singapore Changi Airport.

There are more than 30 charity donation boxes located across Changi's terminals.