

# Free similarities and differences in airport sustainability plans essay example

[Engineering](#), [Aviation](#)



## **Abstract**

The Federal Aviation administration requirements for the development of strong sustainability plans in the airports in the United States of America caught enormous attention from the airports. The pilot program was scheduled to accommodate only 10 airports but with the number of interested parties increasing, the project took over 20 airports. Selected sustainability plans from the airports taking part in the program suggest that the pilot program in many of the airports took a similar shape while it slightly differed in some of the airports. Environmental conservation, economic development, involvement of staff in decision making and practical administration were some of the ideas to be addressed in the plans.

The Federal Aviation Administration status report indicated that there was rising need for the sustainability of the airports to be improved in order to create healthier and better environments in the airports. Taking the airports together, the sustainability plans aimed at the same goals while taking care of the fact that costs minimization in the plans was mandatory. The federal aviation regulations required that all the airports taking part in the plan have clean and affordable environments, which formed part of the plan. The initial number of airports that took part in the pilot program was 10 before the list was increased to 24. The Minneapolis-St. Paul International Airport, Tampa International Airport, and Renton Municipal Airport plans had many things that resembled each other in nature and implementation plans (Pollalis, 2012). This paper looks at the similar and different points in the plans with the view of determining how effectively the plans accomplished the overall goal of the sustainability plans in the country.

The sustainability plans had many things in common. First, all the three plans aimed at reducing the environmental effects of the airports especially on the local people. A notable point was that the locals in the regions where the airports were located all complained of noise as a result of the landing, take-offs, and cargo operations at the airports (Kearins & Fryer, 2011).. Noise pollution was rather a huge problem for most of the airports. However, the aircraft naturally had a loud sound and its control was practically tricky for the managements at the airports. However this was part of the environmental sustainability plans, hence the aircrafts decided upon locating their landing points far from residential areas. Accurate scheduling of the planes was also deliberated to lower any surprises on the people's comforts. In all the plans as well, the airports agreed to adopt the voluntary Airport Low Emissions Program (VALE) and The Noise Compatibility Program as the two programs that would help them lower the environmental effects of the airports (Kearins & Fryer, 2011). The two programs would enhance the environmental advantages of the airports and the sustainability master plan goal attainment.

A clean environment was also part of thee deliberations of the plan for the three airports. All the reports noted that the airports were not dirty to warrant this, but measures to ensure they did not become dirty were necessary. Points for disposal of wastes in the airports were to be increased in order for them to facilitate the cleanliness of the facilities (Smith, 2012). The environmental work force in each of the airports would also be boosted through increasing the size of the work force as a way of ensuring that the environment inside the airports would remain clean. This effectively works

with the theory of interdisciplinary collaboration in aviation management. The other deliberation plan for the three airports was maintaining a high level of economic growth. Most of the airports in the United States of America focused on the profitability of their existence more than they looked at the economic viability of their activities (Nurhan, Nesrin & Cevat, 2012). The status report that established the sustainability master plan noted that the major airports had little or no focus on economic growth. Economic growth in this sense looked at the overall improvement of people's welfare. The economic growth would be targeted. The three plans from the three airports agreed that economic growth entailed the betterment of all the economic factors that claimed a relationship to the airports. First, the airports would compensate the employees well as a way of making their living standards better. Good compensation for the existing employees would enhance better living conditions and economic viability through trade promotion. The airports would also increase the size of their labor force in order to help in the overall national goal of eliminating unemployment. The plans also jointly agree that the best way to increase the economic viability of the aircrafts is through international trade. As a long-term plan in the sustainability plans of the three airports, they said they would permit their airports to be used for international landing from all over the world. The markets close to the airports would substantially benefit from the expansion in trade with the foreign countries. The long term strategic planning at the three airports also considered the facts that aviation was now a well-developed career in the United States of America (Yamanouchi, 2013). Expansion of the aviation industry to other countries was part of the

sustainability plans that the three airports developed. However, the three airports noted that the economic sustainability and development was an internal stimulation. Flights within the United States of America were also encouraged as a way of stimulating the economy of the country from within. The airports deliberated to schedule an agreed number of flights within the United States of America weekly in order to expand trade. The vast land in America needed a faster means of transport and whereas the electric trains generated a lot of efficiency, the aircrafts needed to come in to ease the pressure more.

The three master plans also agreed on full implementation of the social stimulation theory in aviation technology. Aviation was a means of transport that would take a front role in promotion of social progress among the people. The people in the United States needed a unifying factor and aviation was one of the factors that would most effectively do that. The three airports further deliberated that they would have flights within the borders of the countries especially to areas with a different social status in order to encourage them to unite and engage in national social integration. This would effectively apply the social justification function theory in the aviation application to the society.

The other similarity in the social stimulation strategy for the plans for the three airports was corporate social responsibility (Kearins & Fryer, 2011). The three plans jointly deliberated that each of the airports would undertake some community service in order to give back to the society and make the lives of the people better. As much as the means of undertaking the corporate social responsibility activities were not similar, the fact that

corporate social responsibility would be undertaken was a common fact for all the plans. The economic sustainability feature would agree well with the society in many ways. The society would not only benefit from the activities but the employees to the airports would also feel part of the community through helping the people. The effects of the corporate social responsibility on the society were also a common point in the three plans. The three plans agreed that the people would trust the airlines more in case they engaged in some community work, while it was a selling strategy to promote internal involvement with the airports. At the same time, the plans were similar in the corporate social responsibility schedules. The similarity in the corporate social responsibility plans mainly came in the sense that all the sustainability plans looked to bolster education and eradicate poverty. Quite uniquely, the three plans looked at homelessness as a factor that could aid their corporate social responsibility strategy and the intentions to engage in creating homes for the homeless resembled each other.

The other similarity in the three sustainability plans from the three airports was operational efficiency. The needs of the passengers are paramount in the transport sector. In the air transport, the needs of the passengers boarding the planes should be made more imperative than the others. Essentially, service to the passengers should be improved in order to enhance efficiency in the operations at the airports. In the same light, operational efficiency was a major concern for the three airports. The concern in itself raised a deliberation point with a common application in all the three airports. The sustainability plans for the three airports jointly agreed that they would improve efficiency through adoption of new aviation

technology. As a common concern for all the airports, the technology used in various departments did not represent the best technology that could be applied in the aviation industry.

First, the clearance technology at the airports was a matter that attracted attention from the three sustainability plans. All the plans resolved that the technology was slow and most of the passengers waited for too long to be cleared. Modern queuing technology would be adopted in order to ensure that the passengers were efficiently cleared at the airports, which would not only reduce the traffic at the airports but also improve the service delivery to the passengers. All the three airports also had a similarity in the safety technology for the airports. Safety at the airports was not in bad state, but the safety hazards were notably becoming more sophisticated and more pronounced. At the airports, the three sustainability master plans deliberated on improved surveillance in order to secure the patients at the airports. This would be enabled through improved surveillance technology at the airports for the development and improvement of safety. Flight technology also resembled each other in all the three airports. The three airports agreed that the safety systems in the flights would be boosted in efforts to bolster the safety of the passengers.

In the operation efficiency, the employees, especially the professional efficiency would be monitored to ensure that the flight and ground crew had the best knowledge and skills to perform in the airports. The professionalism in the activities of the pilots and other stakeholders at the various airports would ensure that the flights operated under the best staff members. The three airports jointly deliberated that they would employ well-trained

personnel with good human management skills and personal management skills in order for them to handle the passengers well.

The most essential similarity in the sustainability plans from the three airports is this progressive nature of the plans. All the three sustainability plans showed a lot of progressive development in major areas. First, the employee involvement and decision-making showed a totally changed idea in the airport management. Coordination and monitoring at all levels in the management would involve the airport staff at all times. Although the staff members to be involved in different activities differed from one airport to another, the involvement clearly attracted a lot of congruence. The staff involvement would however happen through a number of ways across the airports. First, the staff would be involved through brainstorming sessions at the airports. The theory of combined development in the aviation technology dictates that all people must take part in aviation decision in order for the staff to produce quality decisions. The three airports' sustainability plans agree on the fact that they would all involve their staff in the new-face sustainability management plans.

Decision-making would be aided through regular staff meetings by the airport staffs in the three airports to decide on the proposed and most efficient decision point to be adopted in the implementation of the sustainability plans (Giustozzi, Toraldo & Crispino, 2012). The Tampa international airport, however, differed with the other airports on the mode of meetings that would have major decisions. In its plan, the airport planned to use the meetings to collect views, which would not necessarily make up the decisions adopted by the airport. However, the other airports stated in



their plans that the meetings would form some of the precedents to decisions made for the sustainability and forward movement of the airports. However, all the sustainability plans from the three airports suggested that they would deliberately have the management boards approving all the decisions before they are adopted. This meant that as much as the staff is involved in all the decisions and deliberations, their word would not be final, as the management boards would have the last word on the best decisions for the airports.

As much as the projects resembled each other in many ways, they also had a number of differences in the deliberation plans and strategies. First, the plans were different on the implementation steps of the deliberated steps (McAllister, 2011). Tampa international airport and the Minneapolis-St. Paul International Airport differed because as much as the Tampa international airport insisted that all its deliberations would be for the long term purposes, the Minneapolis-St. Paul International Airport put some of the plans on the short term basis. The safety maintenance plans would be boosted in the short term at the Minneapolis-St. Paul International Airport. The airport in their sustainability plans would fix the surveillance cameras in the short term in order for them to boost the operational safety of the airports. The Minneapolis-St. Paul International Airport would also fix the security in the planes in order for them to improve the flight security (SNS, 2013). Tampa airport would however put all the plans in their long-term plans of their sustainability plans.

The implementation plans at Tampa international airport would differ from the implementation procedures at Renton Municipal Airport in the

reference of the implementation strategies. The Tampa International Airport sustainability plans would rely on two precursor projects (Finn & McCormick, 2011). This meant that the implementation of the sustainability plan would refer to some of the previous projects on the development and improvement of the projects. However, Renton Municipal Airport would not rely on past application in the implementation of their sustainability plans. This would majorly be in form of new strategy in the implementation of their sustainability plans.

The implementation of the sustainability plans would also differ between the airports in form of their regulatory backup. The Minneapolis-St. Paul International Airport, Tampa International Airport, and Renton Municipal Airport would all have different regulatory strategies (Pollalis, 2012). The Metropolitan Washington Airports Authority would monitor the implementation of the sustainability plans at the Tampa International Airport. This body would monitor the implementation policy only. The body would help in the maintenance of the separation of power structures in aviation technology (Pollalis, 2012). This does not mean that it would be the only organization overseeing the implementation and deliberations agreed by the sustainability plan. It simply implies that it will be the separate body to oversee the development of a separate implementation strategy and division of power in the implementation process. The Federal Aviation Administration will majorly supervise the other airports in order to enhance unitary command in the implementation of the sustainability plans.

The sustainability plans differed in terms of modes of encouraging new projects and progressive nature in the sustainability plans. Most of the

airports viewed the sustainability plans as short term plans to ensure the airports adopted a certain way of operations (Kaszewski & Sheate, 2004). The Minneapolis-St. Paul International Airport aimed at keeping the enthusiastic participants in the project motivated through encouraging their ideas. This meant that the airport would leave their sustainability projects open to improvement and development through fresh ideas that would come from the enthusiastic members. In a way, the Minneapolis-St. Paul International Airport encouraged the participation of the staff and other stakeholders in the development of the sustainability plans. On the other hand, the Tampa international airport, in its sustainability plan, planned to utilize the ideas of the engineers and other people brought on board for their professional reasons. In this context, the improvements made to the project would mainly incorporate the professional advice and not new ideas. Very few loopholes thus remained for the people with new ideas that could majorly alter the plans and developments at the Tampa international airport (Fragkias & Boone, 2013). The Renton Municipal Airport however integrated the ideas of the two airports in a simple way. The airport would adopt a baseline system in evaluating new ideas where by as much as the projects were closed to the ideas from the engineers and the professional people, the people on the ground would not be ignored. Exemplary views and ideas would be considered for implementation.

Concisely, the sustainability plans in most of the airports involved in the pilot program meant the start of a new phase in their airports that would ensure development and environmental improvements in the projects. The Minneapolis-St. Paul International Airport, Tampa International Airport, and

Renton Municipal Airport plans had many similarities in their systems and deliberations as they had differences. They both aimed at maintaining environmental conservation and maintenance of good environments at the airports and the environs. Noise pollution was a major concern that they sort to solve. They also strived at economic development, inception of new ideas, social development, and all-round inclusion of staff in decision-making processes. However, the plans also differed in form of reference for implementation, implementation procedures and the systems that would govern decision making and adoption of new ideas.

## References

Finn, D., & McCormick, L. (2011). Urban climate change plans: how holistic?. *Local Environment*, 16(4), 397-416.

Fragkias, M., & Boone, C. G. (2013). *Urbanization and Sustainability : Linking Urban Ecology, Environmental Justice and Global Environmental Change*. Dordrecht: Springer Science + Business Media.

Giustozzi, F., Toraldo, E., & Crispino, M. (2012). Recycled airport pavements for achieving environmental sustainability: An Italian case study. *Resources, Conservation & Recycling*, 6867.

Kaszewski, A. L., & Sheate, W. R. (2004). Enhancing the sustainability of airport developments. *Sustainable Development*, 12(4), 183-199.

Kearins, K., & Fryer, M. (2011). Corporate Social Responsibility & Environmental Management, 18(3), 151-161.

Kearins, K., & Fryer, M. (2011). Relating sustainability theory to practice at Auckland airport: An engaged scholarship Endeavour involving students.

Corporate Social Responsibility & Environmental Management, 18(3), 151-161.

McAllister, B. (2011). Sustainability 20: A report from Chicago's annual 'Airports Going Green' conference. Airport Business, 25(2), 18-19

Nurhan, O., Nesrin, C., & Cevat, G. (2012). Education for Sustainable Airports. Procedia - Social And Behavioral Sciences, 47(Cyprus International Conference on Educational Research (CY-ICER-2012) North Cyprus, US 08-10 February, 2012), 1164-1173.

Pollalis, S. N. (2012). Infrastructure Sustainability and Design. New York: Routledge.

Pollalis, S. N. (2012). Infrastructure Sustainability and Design. Minneapolis

Smith, J. (2012). The Status of General Aviation Airports in Disaster Response Planning. Journal Of Homeland Security & Emergency Management, 9(2), -1.

States News Service (2013). Massdot, Volpe national transportation center announce 1st in nation 'carbon neutral' airport project Nantucket airport chosen to implement energy efficiency plan.

Yamanouchi, K. (2013). Challenges to green airport: Hartsfield-Jackson officials pursue ambitious plans. Other cities are further along.(Business). The Atlanta Journal-Constitution (Atlanta, GA).