MINUTES OF THE ONE HUNDRED TWENTY-NINTH MEETING December 2, 1958

Pursuant to bylaws, the Ohio Turnpike Commission met in regular session at its headquarters at 682 Prospect Street in Berea, Ohio at 10:00 o'clock A.M. Eastern Standard Time on December 2, 1958 with the key members of its staff, representatives of the Consulting Engineers, of the Ohio State Highway Patrol, members of the press, and others in attendance. The meeting was called to order by the Chairman, the roll was called and the attendance was reported to be as follows:

Present:

Chastang, Beightler, Teagarden, Shocknessy.

Absent:

Director of Highways (Noble).

The Chairman announced that a quorum was present.

The Chairman read a letter addressed to him under date of November 24, 1958 by the Director of Highways, Charles M. Noble, as follows:

"Mr. James W. Shocknessy The Ohio Turnpike Commission Berea, Ohio

"Dear Jim:

"Please extend to the Commission my deepest regrets that it will be impossible for me to attend the December 2 meeting of the Ohio Turnpike Commission.

"This comes about because I will be at the Annual Meeting of the American Association of State Highway Officials on that date. The AASHO meeting is one which I must attend, since I am a member of the Executive Committee, a Regional Vice President, and chairman of several of the committees.

"Also, I have long standing commitments to present several papers at the meeting, and to preside over three of the committee sessions at the meeting.

"I know you will understand, therefore, why it is imperative for me to be there.

"Nonetheless, I am most sorry that I will miss the Turnpike Commission meeting which I also consider most important.

"With warmest best personal wishes, as always,

"Cordially,

"CMN:mlk"

"Charles M. Noble "Director

A motion was made by General Beightler, seconded by Mr. Teagarden, that the minutes for the meeting of October 7, 1958 which had been examined by the Members of the Commission and on which the corrections suggested by the Members had been made be approved without reading.

A vote by ayes and nays was taken and all Members present responded to roll call. The vote was as follows:

Ayes: Beightler, Teagarden, Chastang, Shocknessy.

Nays: None.

The Chairman declared the motion carried.

The Chairman asked that the record show that Major S. B. Radcliffe, Deputy Superintendent of the Ohio State Highway Patrol, was seated at the table. He said he would like to have a general discussion on two subjects of profound significance and serious consequence. He said one subject was the use of radar and the other was the adequacy of the existing Ohio Turnpike Patrol. He said the Chairman at the last meeting had taken note of the radar matter and that a request had been made to the Patrol to study the use of radar. He said also that since the last meeting the Superintendent of the Highway Patrol had been asked to consider whether or not the number of patrolmen on the turnpike was adequate. He said he wanted to state that the record of the Ohio Turnpike Patrol in policing the turnpike was a magnificent record. He said there was not any question but that the Ohio Turnpike had a fine record, that its safety ratio was good, but that recently it had had two tragic accidents which could not be overlooked and which brought to the Commission's attention the need for improving the policing of the turnpike if it could be done. He said that during a recent storm the speed limit permitted on the turnpike had been reduced by the Commission and he had been advised by the Deputy Executive Director that the public had not complied with the reduced speed as fully as it should have. He said a lot of cars had gone into the median strip and it was his belief that those cars were principally the ones that did not observe the reduction in speed. He said Mr. Chastang had done some research on the radar matter and had made the results of his research available to the Executive Director and the Members of the Commission.

The Chairman reported further that the Commission had had another handsome result from the standpoint of traffic and revenue during the month of November and had picked up the loss in number of vehicles which it had sustained in the first few months of 1958 because of bad weather and despite the bad weather which had been experienced the last few days of November. He said the Commission's total revenue for the first eleven months of 1958 was approximately \$19,356,000 or about \$1,002,000 higher than the comparable figure for the same eleven-month period of 1957. He said the number of vehicles in November of 1958 was an increase of 29,000 over 1957 and that the revenue from tolls in November of 1958 was approximately \$1,305,000 or 7 percent more than in November of 1957. He said the revenue from all sources in November 1958 was \$1,560,000 which was \$156,000 more than in November of 1957.

The Chairman said that in the absence of any questions that would be the extent of his report.

The Assistant Secretary-Treasurer reported for the Secretary-Treasurer that since the last meeting the following had been sent to all Members:

- 1. Financial Reports as of September 30, 1958 and October 31, 1958.
- 2. Traffic and Revenue Reports for September and October of 1958.
- 3. Detail of investment transactions for October and November of 1958.
- 4. Draft of the minutes of the October 7, 1958 meeting.
- 5. Budget Report for the first nine months of 1958.
- 6. Auditors' Report for period ending September 30, 1958.

7. Accountants' Report, Summary of Rentals reported by restaurant operators, from August 1, 1957 through September 30, 1958.

The Chairman said that in the absence of any questions the report of the Secretary-Treasurer would be received as given.

Mr. Teagarden said it was worthy of mention that the Commission's income from investment of the Bond Interest Account and the Reserve Maintenance Fund totaled \$63,092.04 at the end of November. He said that had the Commission not invested the funds it would not have had \$63,000. He said he thought that was a remarkable accomplishment. The Chairman said it was something to be proud of. Mr. Chastang said it was worthy of note.

The Chairman inquired of Major Radcliffe about Colonel Fred Moritz, Superintendent of the Ohio State Highway Patrol, who had been ill. The Chairman said the Commission extended its wishes for the full and hearty recovery of Colonel Moritz.

The Executive Director reported that over the past several months the staff had directed its attention to the problem of vehicles out of control crossing the median divider and to the possibility that an irresponsible driver might cross under certain circumstances and oppose directional flow of traffic. He said District 10 of the Highway Patrol had cooperated in the studies by furnishing much of the background information. He said the study included consideration of:

- (A). Effectiveness of median under present circumstances
- (B). Incidents of vehicles completing a crossing of the median
- (C). Geometrics and locations where vehicles completed a crossing
- (D). Possible means and methods of increasing efficiency of median in preventing out-of-control vehicles from completing a crossing.

The Executive Director said the study did not include the problem of the wrong way driver nor the use of crossovers which were separate and distinct problems and were the subjects of separate studies. He said that although it might be possible for a driver to cross the median under certain conditions and proceed in opposition to the normal flow of traffic he had not been able to establish any evidence of relationship

between the wrong way driver and median design. He said there were many ways in which a driver could reverse his direction of travel and oppose normal flow. He said some of the possibilities that had been under consideration were:

- (A). A simple "U" turn effecting a reversal of direction of travel
- (B). A left turn from the acceleration lane to the turnpike either at an interchange or a service plaza.
- (C). Exiting a service plaza from the entrance lane
- (D). A right turn from the turnpike into an acceleration lane of an interchange or service plaza
- (E). Crossing the median at a location where physically possible to do so or at a crossover without reversing direction of travel
- (F). Exiting from a maintenance building and making a left turn onto the turnpike.

The Executive Director said the most recent wrong-way drivers, one of whom caused the accident in which seven persons were fatally injured, were intoxicated and had no recollection of their actions resulting in driving the wrong way. He said that in supplementation of the signs and devices to control the direction of traffic flow and in an effort to further minimize the possibility for a person to become confused and proceed in the wrong direction there had been erected within the last two weeks 54 additional one-way signs on the edge of the median just past the end of the raised curb where each acceleration lane entered the main traffic lanes at all interchanges and service plazas and also opposite each maintenance building entrance. He said arrows would be painted on the service plaza pavements at several locations in the plaza where it was possible to oppose directional flow.

He said also that in order that the Commission might have statistics on the effectiveness of the median in trapping out-of-control vehicles the disabled-vehicle contractors had been asked to report specific instances of towing from the median. He said those reports had started January 1, 1957 and that prior to that time the contractors had reported on towing vehicles from ditches which included side ditches as well as the median. He said that, accordingly, the period between January 1, 1957 and October 31, 1958 had been used for statis-

tical data in the study and that during that period of 22 months the disabled-vehicle contractors had towed no less than 782 out-of-control vehicles from the median while 25 such vehicles had been reported as having completed a crossing of the median so that at least 807 vehicles had entered the median. He said the incidence of entering the median was greater during the snow and ice season but was a continuing problem the year around. He said that one interesting point in this regard was the comparison of incidents of the first 10 months of 1957 when 475 vehicles entered the median of which 14 completed a crossing of the median with the first 10 months of 1958 when 227 vehicles entered the median and 9 completed a crossing. He said the count did not include those vehicles which may have entered the median out of control and returned to the pavement under their own power or trucks similarly trapped and removed by their own contract garages. He said that of the 25 vehicles that completed a crossing of the median, 23 were passenger cars and two were trucks and that of the 25 vehicles crossing the median 19 involved no other vehicle and six collided with other vehicles. He said that of the six collisions two resulted in minor property damage and four resulted in injuries to 18 patrons. He said seven persons were injured in one accident on September 7, 1958.

The Executive Director said also that during that same period of 22 months, 20,907,532 vehicles had traveled 1,683,384,804 miles on the Ohio Turnpike. He said that relating the 25 crossings to vehicle miles produced a ratio of one crossing for each 67,000,000 vehicle miles.

The Executive Director said also that to establish the relationship between median crossing and depth of median ditch the depth of the ditch at each location where a crossing had been completed had been determined and it had been found that of the 25 crossings 23 were made at locations where the depth of ditch below edge of berm ranged from 1.2 feet to 4.2 feet and two were made at locations where the depth of ditch below edge of berm ranged from 4.5 feet to 4.8 feet. He said one crossing was made where the ditch was 6.2 feet below the edge. He said the normal depth of ditch below edge of berm, in accordance with standards of design for the Ohio Turnpike was 4.33 feet but the standards permitted the raising of the ditch grade in flat areas to a minimum depth of 1.5 feet below edge of berm if necessary to do so to obtain proper drainage. He said the extra three-tenths of a foot could have resulted from top soil placed in the median for seeding. He said the possibility of a further increase in the effectiveness of the median divider and median ditch to retain out-of-control vehicles had been considered. He said the most effective deterrent to a median

crossing was a physical barrier such as guardrail but little consideration had been given that type treatment because of the hazard to life and property it would create for those vehicles trapped by the existing median with little or no property damage.

The Executive Director said also that second consideration was given to deepening the ditch at all locations possible to the maximum that would be permitted by retaining the standard four-to-one side slope. He said that would give a median ditch depth of 4.33 feet below shoulder grade at many locations currently having a more shallow ditch but would sacrifice some efficiency in median ditch drainage. He said that sacrifice was not considered serious as it would still be possible to obtain a slight grade in the ditch of 0.10 foot per 100 feet. He said it no doubt would result in some saturation of the bottom of the ditch and interfere with mowing operations but that was not considered serious. He said the as-built plans for all construction sections had been examined and the locations where adjustment was possible, taking into consideration limitations of grades and drainage structures, had been determined.

He said adjustment was possible in many areas, particularly westerly from Milepost 160 through the flatter areas of the turnpike. He said there were approximately 84 miles of ditch having a depth between 1.5 feet and 4.33 feet and that to lower that ditch grade would require the removal of approximately 340,000 cubic yards of excavation and that the conservatively estimated cost to do that work would exceed \$700,000. He said the degree of effectiveness of that type of treatment was uncertain because ditches of that depth had been crossed by out-of-control vehicles.

The Executive Director said also that consideration had been given to planting a barrier in the median which would restrain an out-of-control vehicle without doing great property damage to the vehicle. He said there were a number of plants that could be used for that purpose. He said it must be remembered that the median was constructed of two inches of topsoil over a compacted grade and that that condition was not conducive to large scale plantings and that the mortality rate on any plantings made without extensive soil preparation would be great and that the plantings would not be effective in restraining a vehicle for five to ten years depending on the number planted. He said it was also believed that any such plantings would suffer material damage during the winter months by salt-saturated slush splashed by passing vehicles or snow plows. He said Multiflora Rose was considered by many to be the most effective plant that could be used for that purpose. He said that if Multiflora Rose could be established successfully its spreading growth would eventually encompass the drainage flow line and present a serious interference to proper maintenance and that its

intertwined and harsh, brambly growth would make the removal of litter almost an impossibility. He said some concern had been expressed that a planting in the median would have the same effect as a snow fence in occasioning the drifting of snow on the lee pavement. He said it was estimated that the cost to plant the median with a single row of Multiflora Rose spaced four feet apart, which would be effective theoretically in restraining a vehicle in 8 to 10 years from planting time, would be in excess of \$500,000 for approximately 200 miles of ditch treatment. He said that to treat similarly only those areas wherein the ditch was less than 4.33 feet below berm grade would cost approximately \$215,000. By planting double the number of plants an effective barrier could be established several years earlier but the cost would be approximately double the estimates given. He said that since the statistics indicated that the potential of a vehicle crossing the median, based on 22 months experience, was one in 76 million vehicle miles and there was evidence that a ditch having a depth without guard rail protection of 4.33 feet below berm grade could be crossed by a vehicle out of control the lowering of the ditch grade would only increase the efficiency of the ditch in trapping vehicles and would not be a positive barrier to a crossing. He said that, accordingly, it was not believed that an expenditure of \$700,000 to obtain questionable results was supportable.

The Executive Director said also that early in 1958 a modest program of planting the median ditches at the approaches to twin bridges was commenced which it was hoped would in time provide an effective barrier to out-of-control vehicles that had gone into the median and would otherwise drop to the level of the stream or road being bridged. He said aesthetics and relief from monotony would be secondary benefits. He said the examination of the median ditch grades revealed 547 summits where the depth of the ditch was at the minimum. He said it was believed that mass plantings at those summits for perhaps a distance of 300 feet would, in time, prevent crossings of the median where the possibility of crossing was greatest. He said mass planting was distinguished from Multiflora Rose planting in that it involved a variety of plants having perhaps greater strength originally than the Multiflora would have.

He said that from the results of the study to date it would appear that the most effective control would be in planting the mass plantings at the summits of the drainage ditches and, inasmuch as they should be planted with plants of substantial growth, the cost would be greater than it would be if the Commission were to enter into a program of waiting five to ten years for the planting to develop. He said it would be suggested to the Commission to consider the

planting of probably 50 of the summits in the Spring of 1959 with plantings of substantial growth. He said mass planting would be practically the full width of the median, that there would be four rows of planting instead of one. He said that since an out-of-control vehicle usually enters the median at an angle, the angle of entering would determine the mass the vehicle would have to penetrate to cross the median. He said the mass planting would include no trees but would be of a shrub-type growth. He said there was a variety of shrubs that could be used for the purpose. He said it would have to be determined from an initial planting what the effect of salt on the plantings would be. He said a salt-resistant plant would be required.

He said the cost of planting 50 summits was estimated at \$1,000 per summit or a total of approximately \$50,000. He said he was not submitting the idea to the Commission other than for the purpose of obtaining an expression of the reaction of the Commission with respect to such treatment.

Discussion developed that treating the 50 summits would mean an overall treatment of about three miles of the turnpike.

The Chairman said the problem was one that did not admit of easy solution. He said there was time and opportunity for the staff and the Consulting Engineers to make an intensive study of the problem and to report later to the Commission what absolutely ought to be done by the first of March of 1959. He said the Consulting Engineers ought to be in consultation with whatever agency in the Government would handle the information and with safety people throughout the United States.

The Executive Director reported further that following the accident caused by a wrong-way driver which resulted in the death of seven persons the Commission, in cooperation with District 10 of the Highway Patrol, inaugurated a program of fitness checks for vehicles and drivers entering the Ohio Turnpike. He said such checks were made at a number of the interchanges during the month of November for three-and four-hour periods. He said the most recent checks had been made on Thanksgiving Eve and the summary of the finds of those spot checks were as follows:

Commercial vehicles checked, 1,196; passenger cars checked, 10,923; warning tickets written, 49, arrests, none; vehicles denied entrance, 4. He said the warning tickets were primarily for defective lights. He said the checks were made by teams of toll collectors as well as by teams of Highway Patrolmen.

Lieutenant John L. Bishop, Commander of District 10 of the Highway Patrol, said the spot checks were not a total stopping of each vehicle. He said they were just a more intensified personal observation of the driver and vehicle from the point where they were first observed. He said that if there were nothing obviously wrong as far as vehicle or driver was concerned that the team of checkers could observe, the vehicle was not stopped or pulled out of the line of traffic. The Executive Director said it was hardly feasible to check every feature of the vehicle as it entered because the capacity of the entrance lanes was such that a ten-second delay during a busy period could create a big back-up of vehicles entering the turnpike. He said there had always been a routine check by the toll collectors. He said also that a form had been prepared on which the collectors could report their findings with respect to entering vehicles which were denied entrance to the turnpike. He said that since November 16, thirty-six completed forms had been turned in which listed the following reasons for denial of entry: three for intoxication, two for defective tires, four for defective tail lights, one for being too slow for safe operation on the turnpike, and one because of unlicensed driver, two for improper loads, two for being over dimentional limits, and twenty-one for being overweight.

The Executive Director reported further that the staff, particularly the Deputy Executive Director and the Traffic and Safety Engineer, both of whom were trained traffic engineers, had given attention to the use of radar as an effective means of policing the turnpike for speeding violations. He said the most recent radar speed study had been made during the first 15 days of November of 1958. He said the study included the recording of the speeds of 100 passenger cars at each of ten locations spaced at approximately 20mile intervals on each roadway across the entire length of the turnpike. He said the truck traffic sample included the speed of each truck that passed the radar meter during the time required to get speeds of 100 passenger cars. He said the total sample consisted of 2,000 passenger vehicles and 634 trucks and revealed that 6.0 percent of the passenger car sample was exceeding the speed limit by more than five miles per hour and 5.0 percent of the truck sample was likewise exceeding the speed limit. He said that in comparing those findings with previous studies made during the months of August 1956, March 1957 and August 1958 it was found that the percentages exceeding the speed limit by more than five miles per hour in the November 1958 study were approximately two and one-half to six times greater than those of the previous studies.

The Deputy Executive Director said that in the study of August 1958 one percent of the vehicles exceeded the speed limit by more than

five miles per hour; in the March 1957 study 1, 2 percent exceeded the speed limit by that margin, and that in the study of August 1956 one-half percent exceeded the speed limit by that margin. He said that the sizes of the samples in the previous studies were about 600 in August 1958, about 800 in March 1957, and about 1,300; in August 1956. He said one factor that might account for the increase in the number of vehicles exceeding the speed limit in November 1958 over August 1958 was that August was a very high volume traffic The Executive Director said the speed of vehicular traffic generally varied indirectly with the volume of traffic, that as the traffic volume approached near to the roadway design capacity the overall speed pattern decreased. He said that a graphic recorder for attaching to the radar meter had recently been purchased which would enable automatic recording of speed without having an observer present all the time. He said that with the use of the recorder it would be possible to get far greater samples and much better information than was possible from spot sampling. He said inquiry had been made of three eastern toll roads, namely, the Pennsylvania Turnpike, the New York State Thruway, and the New Jersey Turnpike, which revealed that the police on each of those turnpikes used radar for speed-limit enforcement and that they had used it for the previous two to six years. He said the Pennsylvania Turnpike police had six radar teams, the New York State Thruway police had four radar teams and the New Jersey Turnpike police had two radar teams. said assignments of those teams as to location and time were made by the district commander of the police after taking into consideration the nearness and availability of the court and of high accident frequency areas. He said each turnpike reported that the use of radar for speed enforcement had been accepted by the public and that radar had been an effective enforcement tool. He said the New Jersey Turnpike police radar teams had made 9,000 arrests for speed limit violations in 1957 which represented two-thirds of the total arrests made for speed limit violations. He said each of the toll roads advised that by using radar the police could apprehend more speed violators and have more time for other police duties. He said also that Mr. Chastang had made inquiries of a number of toll road authorities and had been kind enough to furnish him with the responses he received. He said each Member received a copy of Mr. Chastang's report under date of November 26, 1958. He said Mr. Chastang's report applied to more Authorities and that it confirmed most of the findings of the staff with respect to the New Jersey, Pennsylvania and New York toll roads. He said that from the information the staff had been able to gather and from that furnished by Mr. Chastang it was the consensus of the staff working on the subject that the use of radar would be an effective tool in policing the Ohio Turnpike and recommended its use.

Major Radcliffe said the Highway Patrol was not quite convinced it was necessary to use radar on high-speed roads. He said that with the high speed limits it would be impossible to use radar for safe enforcement because when a car was stopped under high speed conditions it was practically impossible to do so safely. Captain David W. Unkle of the Highway Patrol said radar was just another tool of enforcement. He said that in Ohio radar enforcement would have to be gone at a lot differently than in New Jersey because in Ohio it would be necessary to erect warning signs. In response to questions Lieutenant Bishop said the warning signs would serve as a deterrent and would have a salutary effect. Major Radcliffe said the Highway Patrol might possibly use radar on a limited basis where it felt the use of radar was necessary.

The Deputy Executive Director said that on the New Jersey Turnpike, although no radar-enforcement warning signs were posted on the road itself, signs had been erected at the entrance toll plazas advising that the speed limits were enforced by radar and patrol cars.

Mr. Chastang said the use of radar was not sneaky because a game was not being played with law violators but rather an effort was being made to protect the public generally. He said that if drivers violated the law they should be apprehended and they could not complain about how they were apprehended particularly.

The Chairman said the overall safety record of the turnpike was good but that he and other Members of the Commission regularly heard from drivers who said they had been passed by automobiles or trucks while they themselves were driving along at 65 miles an hour. He said he thought that regardless of the record, if the record was as good as it was without using everything at the Commission's disposal, the Commission could have a better record by using the most at its disposal. He said that as long as the record was not perfect then certainly the Commission could not say it was good enough. Major Radcliffe said there was no question of that. He pointed out that the Highway Patrol wanted to strive for all the improvement it could but that he did not believe there would ever be perfection. The Chairman responded that there would never be perfection but until perfection should be achieved the Commission and the Highway Patrol could not stop trying for it.

Mr. Chastang read a communication from the New Jersey Turnpike Authority under date of November 11, 1958 which said that radar was used extensively on the New Jersey Turnpike, and further stated that: "We have two radar teams, each composed of three troupers. They are in operation under a prearranged schedule at various points along the turnpike. In 1957 approximately 37% of speeding arrests were the result of radar interceptions. The radar team, we find, issues nearly five times as many summonses during its tour as a one-man trooper patrol".

Major Radcliffe said the question was whether in New Jersey the use of radar enforcement without warning signs just for the sake of arrests or whether it improved the overall traffic picture. He said the effectiveness of radar enforcement of speed limits with warning signs would be in the immediate area where the radar and the signs would be set up and possibly about five or ten miles down the road and that the condition on the rest of the turnpike would be as it was before. The Chairman said that he was convinced that the drivers' knowledge that radar enforcement was in use on the Ohio Turnpike would have a deterrent effect. He said he was not setting himself up and no Member of the Commission, he was sure, was setting himself up as an expert in traffic management and speed patrol and he was willing to defer to the Highway Patrol. He said he remitted the responsibility to the Highway Patrol in its entirety. The Chairman said that on the basis of what had been said at the meeting he thought the Commission had done a more intensive investigation on the subject than the Highway Patrol had done. Major Radcliffe said that on receipt of the letter from the Chairman the Highway Patrol had already started looking into the matter. The Chairman said that with all due respect to Colonel Moritz, he had talked to Colonel Moritz early in September of 1958 and the matter had been going on for almost three months. He said he had a letter addressed to Colonel Moritz on the 13th of October wherein he referred to the fact that he had talked to Colonel Moritz weeks earlier so that the subject was one which had been under active consideration by both the Commission and the Highway Patrol over a period of three months, ever since the September 7th accident. He said that ever since September 7 he had been suffering a conscientious urge to use radar and anything else that was at the Commission's disposal because one of the passengers in an automobile involved in that collision had been quoted as saying that he was just going too fast. He said the Commission had submitted the policing of the turnpike to the Ohio State Highway Patrol and had a contract with it and in the absence of something more than he saw then it appeared to him that the Commission must rely upon the determinations and judgment of the Ohio State Highway Patrol but that the Highway Patrol must recognize the responsibility if fully remitted and if they refused to use it, it was their responsibility.

Mr. Teagarden asked Major Radcliffe if his position was that of not recommending the use of radar on the Ohio Turnpike at that time.

Major Radcliffe responded that he had not said anything like that. He said that he had tried to point out that radar was not a cure-all, that the Highway Patrol did not jump into it with a campaign idea but wanted to go into it on a sensible basis. He referred to a report addressed to Colonel Moritz by the enforcement section of the Highway Patrol under date of November 24, 1958 and read from it as follows: "This to also include spot radar surveys and radar enforcement where needed only". He said the quoted sentence did not exclude the use of radar and of definitely exploring the possibilities as to how and where radar might be used and whether there was sufficient manpower on the turnpike. He said if the Commission was going into radar to any extent it would require more manpower. The Chairman said the Commission would not stand in the way of that. Major Radcliffe said the Highway Patrol had a responsibility, that the Commission had charged the Highway Patrol with the responsibility but that it had also the responsibility of not jumping into something that from an economic sense was going to be a waste of money. The Chairman said the Commission did not want to waste money.

The Chairman asked Major Radcliffe to address himself to the question of the adequacy of the number of Highway Patrol personnel assigned to the Ohio Turnpike.

Major Radcliffe said the Highway Patrol was basing its conclusions with respect to adequacy of personnel pretty much on its coverage. He said one measure of coverage was the enforcement index, which he described as the ratio of accidents involving personal injuries or fatalities to the number of arrests of drivers for movingtraffic violations. He said the enforcement index on the Ohio Turnpike for the first 10 months of 1958 was 48.6 or some 18 points higher than the absolute enforcement index of 30 recommended by national traffic authorities for rural areas. He said the 48.6 index approached a saturation point. Mr. Chastang asked if Major Radcliffe meant to conclude that there was already a sufficient number of men on the turnpike to give good enforcement. He said he had been fully prepared to hear a recommendation for more patrolmen and had been fully prepared to support it and for that reason was somewhat surprised at the report given the Commission by Major Radcliffe. The Chairman said the Highway Patrol was not restricted by legislation from increasing its personnel on the Ohio Turnpike or by money because whatever recommendation the Highway Patrol would make as to additional patrolmen the Commission probably would approve. Major Radcliffe said the Highway Patrol did not want to take precipitous action which might result in having too many patrolmen on the turnpike, a condition he said obtained on the New Jersey Turnpike. He said there were a

thousand and one reasons why travellers on the Ohio Turnpike might not see a patrol car. He said there were 7,984 arrests during the first 10 months of 1958 which would have necessitated the patrolmen involved leaving the turnpike and that 726 accidents had occurred in the same period which in many cases would have necessitated the patrolmen involved leaving the turnpike for additional information. Major Radcliffe said he was not prepared to say whether that was an argument for more patrolmen but that if that did not prove to be the answer, then the Highway Patrol would be guilty of spending funds unnecessarily. He said that by the same token the Highway Patrol did not like campaigns of enforcement but like steady enforcement slowly stepped up and slowly let up.

The Chairman said he did not have in mind campaigning but did have in mind more intensive policing. He said he thought the turnpike was thin on policing. Mr. Cresswell said that in view of the volume of traffic on the Ohio Turnpike perhaps the policing was a bit thin.

The Chairman said it was his understanding that Major Radcliffe had said that the Highway Patrol would consider and probably would institute some form of radar control. He said he thought Major Radcliffe had also said that the existing complement of the Ohio Turnpike was adequate. He said the Commission would expect the Highway Patrol to give further consideration to the matter of the sufficiency of the complement and would like to hear from the Highway Patrol at the next meeting because the Consulting Engineers' representative had said he thought the policing was thin and because Members of the Commission had indicated they were of like opinion. He said there had been a misunderstanding in one of the newspapers to the effect that legislation was required to increase the complement on the turnpike but that it did not take any legislation at all to get more patrolmen. He said there was adequate authority under the law to give a reasonable increase in the Highway Patrol to the Ohio Turnpike Commission and the Commission was able to pay so that there was no problem.

Major Radcliffe said he wanted to point out that if the Highway Patrol did, in the future, find any need for additional patrolmen they would have to be trained. He said patrolmen could not immediately be pulled from the public highways and transferred to the turnpike. He said that when it was possible training schools could be held the year around.

He indicated that the Highway Patrol did not have the money at

that time to conduct a training school. Subsequent discussion developed that prior to the opening of 219 miles of the turnpike in October of 1955 the Highway Patrol had conducted a training school for patrolmen assigned to the turnpike and the Commission subsequently made a payment to the Highway Patrol for the training costs.

The Executive Director reported further that by letter dated October 20, 1958 the Consulting Engineers proposed that the contract for performing the duties of consulting engineers with respect to the maintenance and operation of the Ohio Turnpike be renewed for the calendar year beginning January 1, 1959 under the same terms and conditions set forth in the existing agreement. He said a copy of the letter had been forwarded to each Member of the Commission on October 24, 1958. He said the existing agreement provided, in brief, that the J. E. Greiner Company should perform the duties of Consulting Engineers with respect to maintenance and operations stipulated to be performed under the terms of the Trust Indenture for a fee of \$5,000 per month. He said that fee was established originally following the termination of the obligation of the Consulting Engineers to perform those same services under its contract to provide engineering services for the construction of the turnpike and to commence July 1, 1956. He said the contracts for those services during 1957 and 1958 likewise provided for payment of \$5,000 per month.

The Executive Director said also that upon receipt of the proposal under date of October 20, 1958 copies had been submitted to the Comptroller, Deputy Executive Director, Chief Engineer and Maintenance Engineer for recommendation since they were the members of the staff having most to do with the Consulting Engineers and with the services provided under the agreement. He said each of them had responded with a recommendation for renewal of the agreement in accordance with the proposal. He said it was the consensus that the proposal was favorable to the Commission and that the services of the J. E. Greiner Company had been satisfactory and that the proposal should be accepted. He said he therefore recommended that the Commission accept the proposal and authorize the execution of an agreement with the J. E. Greiner Company covering services for the year 1959.

A resolution accepting proposal for Consulting Engineering services was moved for adoption by General Beightler, seconded by Mr. Chastang, as follows:

Resolution No. 24-1958

"WHEREAS the J. E. Greiner Company is presently performing the duties of consulting engineers in connection with the maintenance and operation of the Ohio Turnpike under an agreement for the year 1958, which agreement was originally executed under date of December 27, 1957, and which by its terms terminates on January 1, 1959;

"WHEREAS the J. E. Greiner Company and the Commission desire to renew their said agreement for the calendar year beginning January 1, 1959 under the same terms and conditions as set forth in the agreement for maintenance and operation for the year 1958;

"WHEREAS said J. E. Greiner Company, a partnership, has submitted to the Commission under date of October 20, 1958 a proposal for renewal for the year 1959 of the presently existing agreement for maintenance and operation terminating January 1, 1959; and

"WHEREAS the Commission now desires to accept the same;

"NOW, THEREFORE, BE IT

"RESOLVED that the proposal of the J. E. Greiner Company, a partnership, dated October 20, 1958 with respect to renewal of service for the calendar year beginning January 1, 1959 be, and the same hereby is, accepted;

"FURTHER RESOLVED that the executive director be, and hereby he is, authorized and empowered to execute a renewal agreement on behalf of the Commission carrying into effect the proposal for renewal of its services for the year 1959 as stated in the J. E. Greiner Company letter of October 20, 1958, and cause said agreement to be delivered to said J. E. Greiner Company on behalf of the Commission."

A vote by ayes and nays was taken and all Members present responded to roll call. The vote was as follows:

Ayes: Beightler, Chastang, Teagarden, Shocknessy.

Nays: None.

The Chairman declared the resolution adopted with the four Members present voting in the affirmative. The resolution was identified as No. 24-1958.

The Executive Director reported further that the storm experience in the days following Thanksgiving had cost the Commission \$40,800 for material and overtime labor alone and was possibly the most costly storm the Commission had experienced but that the 65-mile-an-hour speed limit had been restored no later than noon of Saturday following Thanksgiving. The Chairman said the Executive Director was to be congratulated, that a marvelous job had been done. He said he thought the Commission's maintenance department did a great job. He congratulated the Deputy Executive Director and the Maintenance Engineer.

The Executive Director reported also that the Committee on Budget and Finance had met on November 26, 1958 to determine its recommendation with respect to the final budget for the year 1959 and any action necessary with respect to the 1958 budget. He said it had been determined that the budget for administration and insurance could be reduced by \$55,000 and that the operations budget showed indication of need for replenishing. He said it should be kept in mind that during the preparation of the 1958 budget the Commission had no anticipation of being in the restaurant business in 1958 but that it had continued in the restaurant business until January 14, 1958 and it had cost the Commission approximately \$70,000 for its 1958 restaurant operations. He said the latter amount had been charged to operations without any increase in budget and that a savings of \$55,000 in the administration and insurance budget had been effected. He said that following the post-Thanksgiving storm it seemed desirable that a cushion should be provided for the remainder of 1958 because all surplus that had been expected in snow and ice removal had been used during that one storm. He said it was recommended that the 1958 budget be supplemented to the extent of decreasing the administration and insurance budget by \$55,000 and increasing the operations budget by \$95,000, leaving a net increase of \$40,000. He said the \$40,000was still \$30,000 below the unforeseen cost of operating the restaurants in 1958. He said he recommended that the Commission adopt a supplemental budget for the year 1958 including a total net increase of \$40,000.

A resolution adopting supplement to annual budget for fiscal year 1958 was moved for adoption by Mr. Chastang, seconded by Mr. Teagarden, as follows:

Resolution No. 25-1958

"WHEREAS, pursuant to \$505 of the trust agreement dated June 1, 1952, entered into between the Ohio Turnpike Commission and The Ohio National Bank of Columbus, as trustee, and The National City Bank of New York (now The First National City Bank of New York), as co-trustee, the Commission, by resolution No. 34-1957, adopted an annual budget for the fiscal year 1958;

"WHEREAS, pursuant to \$505 of said trust agreement, the Commission may, at any time, adopt an amended or supplemental annual budget for the remainder of the then current fiscal year;

"WHEREAS experience in the operation of the Ohio Turnpike now indicates a need for certain supplementary budget allowances for the remainder of the current fiscal year; and

"WHEREAS a supplemental budget for the remainder of the year 1958 has been submitted to the Commission and the adoption thereof has been recommended by the Commission's Budget and Finance Committee; and said supplemental budget is now before the Commission;

"NOW, THEREFORE, BE IT

"RESOLVED that the Commission, having duly and fully considered the same, hereby adopts the following supplemental budget of current expenses for the remainder of the fiscal year 1958;

"Supplemental Annual Budget for Fiscal Year 1958

"Expenses:

Administration & Insurance (decrease	se
in estimate)	-\$55,000
Operations (increase in estimate)	+\$95,000
Trust Indenture Expense (unchanged)	0
Tota	+\$40,000

"FURTHER RESOLVED that the assistant secretary-treasurer is hereby instructed to file a copy of said supplemental budget with the trustee and to mail copies thereof to the consulting engineers and the principal underwriters forthwith."

Mr. Cresswell said the Consulting Engineers would approve the amended budget. A vote by ayes and nays was taken and all Members present responded to roll call. The vote was as follows:

Ayes: Chastang, Teagarden, Beightler, Shocknessy.

Nays: None.

The Chairman declared the resolution adopted with the four Members present voting in the affirmative. The resolution was identified as No. 25-1958.

The Executive Director reported further that at its meeting on November 26 the Committee on Budget and Finance considered the preliminary budget of income and current expense for the year 1959 which had been adopted by the Commission at its meeting on October 7, 1958. He said the Committee recommended that the preliminary budget adopted by the Commission by resolution No. 22-1958 be adopted as the annual budget for the fiscal year 1959. He said the total amount of the budget was \$4,845,600.

A resolution adopting annual budget for the fiscal year 1959 was moved for adoption by Mr. Chastang, seconded by Mr. Teagarden, as follows:

Resolution No. 26-1958

"WHEREAS the Commission, by resolution No. 22-1958, adopted a preliminary budget for the fiscal year 1959, and caused copies thereof to be filed with the trustee and mailed to the consulting engineer and the principal underwriters;

"WHE REAS no request whatsoever for a public hearing thereon has been made to the Commission by any person or persons whomsoever; and

"WHEREAS pursuant to \$505 of the trust agreement dated June 1, 1952, entered into between the Ohio Turnpike Commission and The Ohio National Bank of Columbus, as trustee, and The National City Bank of New York (now The First National City Bank of New York), as co-trustee, the Commission desires finally to adopt the budget of income and current expenses for the fiscal year 1959, to be designated the "Annual Budget";

"NOW, THEREFORE, BE IT

"RESOLVED that the Commission, having duly and fully considered the same, hereby adopts the following budget:

"Annual Budget of Income and Current Expenses For the Fiscal Year 1959

"Income

\$21,450,000

"Current Expenses

Administration & Insurance \$ 863,600

Operations \$3,856,000

Trust Indenture Expense \$ 126,000

Total Current Expenses \$4,845,600

"FURTHER RESOLVED that the Commission hereby determines that the total appropriations in any division of the budget aforesaid do not exceed the total appropriations in the corresponding division in the preliminary budget heretofore adopted by resolution No. 22-1958; and

"FURTHER RESOLVED that the assistant secretary-treasurer is hereby instructed to file a copy of said "Annual Budget" with the trustee and to mail copies thereof to the consulting engineer and to the principal underwriters forthwith."

A vote by ayes and nays was taken and all Members present responded to roll call. The vote was as follows:

Ayes: Chastang, Teagarden, Beightler, Shocknessy.

Nays: None.

The Chairman declared the resolution adopted with the four Members present voting in the affirmative. The resolution was identified as No. 26-1958.

The Executive Director reported further that the paving on all eight pairs of service plazas had been completed. He said the actual placing of the paving was completed on all contracts prior to November 1, 1958, the completion date for the work. He said final payment on all contracts should be completed prior to December 31, 1958. He said that following completion of the contract work of placing the wearing course on the service plaza parking areas and automobile and truck roads, the Commission's maintenance forces placed shoulder material along the auto and truck roads, painted auto parking stalls in the area in front of the restaurant buildings, and painted a barrier line along the outer edge of the parking areas. He said it had been observed that in the truck parking areas there had been some damage to the surface of the paving as a result of truck drivers draining crank case oil on the pavement or as a result of the leakage of gasoline or diesel fuel from

truck tanks. He said that to alleviate the damage as much as possible the Commission was placing signs in the truck parking area requesting truckers to use oil drain pans provided by the service station concessionaires. He said that at the truck parking areas at Towpath and Oak Openings Service Plazas a test treatment of tar emulsions had been applied as a seal to the asphaltic concrete to protect the pavement from the effects of motor oil and motor fuels. He said that should it be determined that pavement damage in the truck parking areas had become a serious problem, it might be deemed expedient to treat those areas with that type of seal in 1959.

The Executive Director reported further that it had been the policy of the Commission to close the Commission's offices at noon on the day preceding Christmas and on the day preceding New Years. He recommended that the Commission approve the closing of the administrative office at 12:00 o'clock noon on Wednesday, December 24, 1958 and at 12:00 o'clock noon on Wednesday, December 31, 1958.

A resolution directing the closing of the Commission's offices on certain days preceding holidays was moved for adoption by Mr. Teagarden, seconded by General Beightler, as follows:

Resolution No. 27-1958

"RESOLVED that the Commission's administrative building offices at Berea shall be closed at 12 o'clock noon on Wednesday, December 24, 1958, prior to the 1958 Christmas holiday, with the exception that the executive director shall determine the necessary personnel who shall be present at said offices in order that the essential operational functions of the Ohio Turnpike shall be maintained;

"FURTHER RESOLVED that the said offices, with the exceptions noted, shall be closed at 12 o'clock noon on Wednesday, December 31, 1958, prior to the 1959 New Years Day."

A vote by ayes and nays was taken and all Members present responded to roll call. The vote was as follows:

Ayes: Teagarden, Beightler, Chastang, Shocknessy.

Nays: None.

The Chairman declared the resolution adopted with the four Members present voting in the affirmative.

The resolution was identified as No. 27-1958.

The Executive Director reported further that, as in previous years, a number of the Commission's employees had been unable to take their earned vacations during the calendar year. He recommended that the Commission authorize the deferment of unrealized annual vacations from the calendar year 1958 until the calendar year 1959.

A resolution authorizing deferment of annual vacations of certain named employees of the Commission from the calendar year 1958 until the calendar year 1959 was moved for adoption by Mr. Teagarden, seconded by Mr. Chastang, as follows:

Resolution No. 28-1958

"WHEREAS certain of the Commission's employees have, during the calendar year 1958, accumulated but not taken certain vacation leave, as indicated in the chart hereinbelow set forth; and

"WHEREAS said employees have requested that such accumulated vacation leave for the calendar year 1958 be deferred until the calendar year 1959, and the department heads concerned therewith have recommended such deferement:

"NOW, THEREFORE, BE IT

"RESOLVED that the employees hereinbelow listed are hereby granted permission to defer the accumulated vacation leave hereinbelow set forth opposite their respective names, until such time or times in the calendar year 1959 as shall be designated by such department heads as are charged with that responsibility:

" <u>Employee</u>	1958 Vacation Leave Accumulated But Not Taken During Calendar Year 1958
Adams, Ralph Allendorf, Marion Anders, William Berry, Ralph Borden, Edward H. Bowman, B. H. Burnham; Wilbur Byrd, L. G. Capper, Walter Cartwright, Joyce Clay, David S.	5 2 7 4-1/2 10 2 10 5 10 1

Deetz, Russell S. ·	21
Grace, Andrew	10
Hartford, C. W.	23
Hartshorne, James D.	23
Heil, John P.	5
Hein, Dorothy	5
Hopperton, Matilda	5
Hottenstein, Wesley	5
Illersich, Carol	3
Kappel, Norman	10
Knott, Gertrude	5
Meeker, E. W.	16
Meywes, Robert	3
Morrison, J. B.	3
McBride, Paul	10
Nelson, Lenora	10
Ody, Ruth	7
O'Grady, Walter G.	12
Ployhart, Joseph	6
Rankin, Harry C.	10
Resch, Margaret	5
Smith, Roberta	6
Soller, John	11-1/2
Vangeloff, Alexander	10"

A vote by ayes and nays was taken and all Members present responded to roll call. The vote was as follows:

Ayes: Teagarden, Chastang, Beightler, Shocknessy.

Nays: None.

The Chairman declared the resolution adopted with the four Members present voting in the affirmative. The resolution was identified as No. 28-1958.

The Chairman of the Committee on Service Plazas, General Beightler, reported that the gift shop problem had not been resolved completely. He said plans for limitation of the area of the gift shop had been received from two of the restaurant concessionaires and that the third concessionaire had employed a restaurant architectural firm to prepare a plan.

General Beightler reported further that the Commission's restaurant specialist, William R. Anders, was no longer on that work

alone but had taken over some of the duties that previously had been performed by the Commission's Supervisor of Patron Services and the Assistant to the Supervisor of Patron Services who were no longer with the Commission.

The Chairman thanked General Beightler.

The Chairman of the Committee on Budget and Finance, Mr. Chastang, said the Committee had nothing further to report. The Chairman thanked Mr. Chastang.

The Chairman of the Committee on Claims, Mr. Teagarden, said that since the last meeting one claim for \$90,899.08 had been settled by paying the retainage. He said that on another claim the Commission was being sued. He said the Commission had four claims remaining. The Chairman thanked Mr. Teagarden.

The General Counsel reported that a recent decision of Judge Jones, presiding judge of the Federal District Court in Cleveland, Ohio, held that the Ohio Turnpike Commission was not subject to suit in Federal Court. He said the decision resulted in the dismissal of the action of the Harrison Construction Company against the Ohio Turnpike Commission. He said the decision would have an important bearing on other suits against the Commission in Federal Court.

The Chairman thanked the General Counsel.

The Director of Information and Research reported that by arrangement of the Chairman of the Commission with the Director of Highways there had been conferences between members of the Commission's staff and members of the Department's staff on the relationship between new and relocated highways and the Ohio Turnpike, particularly with reference to turnpike interchanges. He said the Commission's concern as expressed to the Department was that there should be no waste of the investment in the interchanges by relocating interchange roads so that the effectiveness of the interchanges would be reduced. He said the Commission had a secondary interest which was the effect on turnpike traffic of possible relocations of the existing roads or construction of new roads. He said the upshot of the first conference which was attended by the Executive Director, the Chief Engineer, the Resident Engineer of the Consulting Engineers, and the Director of Information and Research for the Commission and by the Assistant Director of Highways, Mr. George Thormyer, and several section chiefs of the Department of Highways, was that the representatives of the Department of Highways said they had overlooked having their consulting engineers and their own departmental engineers keep the Commission informed of the developments on new and relocated highways and that they would thereafter do so from the beginning of any planning or programming of new or relocated highways. He said there had been detailed discussion on the various roads in the area of the turnpike which would, as they were built, affect the use of turnpike interchanges and possibly of turnpike traffic. He said the interchanges which could be or might be affected by future construction programs of the Department of Highways appeared to be: Niles-Youngstown, Streetsboro, Cleveland, Strongsville-Cleveland, North Olmsted-Cleveland, Lorain-Elyria, Stony Ridge-Toledo, and Maumee-Toledo.

The Director of Information and Research reported further that a double bottom truck unit comprising a tractor and two full trailers was parked in the parking lot south of the headquarters building and could be viewed by the Members after the meeting. He said the unit was on the turnpike to demonstrate its capabilities for representatives of the Commission and of the Consulting Engineers. He said there had been requests by the trucking industry to the Commission that it consider allowing double bottoms of greater length than 60 feet and greater weight than 90,000 pounds gross to operate on the turnpike. He said the staff was just getting into the matter, that there would be no conclusions to present to the Commission until a period of months should have elapsed. He said the Consulting Engineers were being asked to participate in the investigation. He said the New York State Thruway was having a very extensive investigation of double bottom trucks which involved the operation of two units each by six trucking companies over a period of two months.

The Chairman thanked the Director of Information and Research.

A resolution ratifying actions of administrative officers was moved for adoption by General Beightler, seconded by Mr. Teagarden, as follows:

Resolution No. 29-1958

"WHEREAS the executive director, deputy executive director, chief engineer, general counsel, assistant general counsel, secretary-treasurer, assistant secretary-treasurer, comptroller, maintenance engineer, and the director of information and research of the Commission, have, by various written and oral communications, fully advised the members of the Commission with respect to their official actions taken on behalf of the Commission since the Commission's last meeting, and the Commission has duly reviewed and considered the same;

"NOW, THEREFORE, BE IT

"RESOLVED that all official actions taken by the aforesaid administrative officers of the Commission on its behalf since the Commission's meeting on October 7, 1958, hereby are ratified, approved, and confirmed."

A vote by ayes and nays was taken and the four Members present responded to roll call. The votes were as follows:

Ayes: Beightler, Teagarden, Chastang, Shocknessy.

Nays: None.

The Chairman declared the resolution adopted with all Members present voting in the affirmative. The resolution was identified as No. 29-1958.

There being no further business to come before the Commission a motion was made by General Beightler, seconded by Mr. Teagarden, that the meeting adjourn subject to call of the Chairman. A vote by ayes and nays was taken and all Members present responded to roll call. The vote was as follows:

Ayes: Beightler, Teagarden, Chastang, Shocknessy.

Nays: None.

The Chairman declared the meeting adjourned. The time of adjournment was 12:45 o'clock P.M.

Approved as a correct transcript of the proceedings of the Ohio Turnpike Commission

Robert S. Beightler, Secretary-Treasure