My dear Mr. Keehn:

Enclosed I send a letter from Dr. Goodspeed, which perhaps you will kindly return to me. I think this explains the situation. While we should be glad to help the reporters, I do not see how under the circumstances we can make the appropriation in question.

Very truly yours,

[Signature]

The fact remains that the papers are quoting double figures. I have been notified to see the Telephone Company. — J. D. Rockefeller
Dear Dr. Judson,

I am in mortis sympathy with the situation of the petitioners and shrewdly see that it be granted even if possible to do it without actual additional expense to the University. We have however such a contract with the Telephone Company that there is not a single free phone in the University. It is probably not known to you that in addition to paying a small monthly rental for each of your 65 telephones, a minute rental for each of the five trunk lines, a minute rental for the switchboard, a mileage charge for the phones off the original campus, and in addition to the salaries of the operators, there costs for every message sent out. Not only there sent over the so-called long phones, but every message sent on any pay phone we use. A month therefore cost us three cents for every message a student sends to instructor, heroine, long distance, 750 a year is a moderate estimate of the actual extra expense the granting of this petition would cost the University. Over and above the rental from the pay phones one annual telephone expenditure $2,000.

I think you can see that however much we want...
like to assist the boys, it is impossible to not pay out in actual cash ten cents for each of their messages to him. I think if they understood that this is what it will actually cost us in extra cash more above the regular standing charge from the telephone system they will not feel that they can ask it.

Very truly yours,

[signature]
Memorandum of the Committee Meeting

Held at the Quadrangle Club

Friday, May 25th, 1917.

Those present were Messrs. Dickerson, Dismore, Fairweather, Moulde, Flimpton, Robertson, and Rouse.

The Telephone Company submitted a report, a copy of which is to be sent each member of the Committee. Messrs. Fairweather, Moulde, the Chairman, and Rouse requested to make a digest of this report and submit specific recommendations. Mr. Rouse was requested to remove the limit on all limited service telephones wherever this would result in an increased cost to the University. Mr. Rouse was requested to complete the telephone directory at once.

It was voted to recommend to the Committee on Expenditures that the University arrange with the Emery Motor Livery Company to establish a taxi cab station on the Campus and sell coupon books entitling the holder to a discount of 15% for Emery service.

The report on the inspection of the Law Building and Haskell Museum was deferred until next meeting.

The Cashier called attention to the fact that his office provided messenger service to the City Office twice daily and suggested that the other departments take advantage of this free service.
SPECIAL SERVICE TO TERMINALS:

This service is of four classes:

Terminal lamp caps are marked with a special opal designating the class of service furnished to each terminal as follows:

White Lamp Cap - Unlimited Service.
White Lamp Cap Letter "X", Unlimited service to individuals

listed on designation strip, operator questions calling party, where voice is not recognized or name of individual calling is not given, as to who is calling. Where person's name is given and they are not entitled to unlimited service, they are told to use a public telephone. There are twenty-five of these terminals and five of them are located in corridors and it is suggested that one rule be adopted for handling calls from these telephones as follows:

A - Authorized users be instructed to pass their order to the operator as follows:
"Mr. Perrine speaking, Main 5000."

B - When no name is given, operator to advise calling party to use public telephone.

It would not seem necessary to restrict the use of all these lines as twenty of the twenty-five are in private offices and would rarely ever be used by others than those entitled to this service as it is quite a drag on the operators to question these calls where calling party fails to pass the name, and it would seem that only the five located in corridors should have this special opal designation.

White Lamp Cap, Letter "N"

Twenty-nine terminals equipped with a single nickel slop baird coin box are located in the various departments where students and clerks use these telephones for intercommunicating and outgoing service. Outgoing calls are charged at the rate of five cents per call.

Special instructions were issued to give free service to four individuals from certain terminals when they passed their name to the operator. It is suggested that these individuals be furnished with slugs and account for the use of these slugs for official business where necessary, in order to avoid this special instruction to the operators, and all outgoing calls be charged at the rate of five cents for each five minutes' conversation, or fraction thereof. A list of individuals given special service is attached.
Report of Study of Conditions and Irregularities on Private Branch Exchange switchboard and Terminal Stations at the University of Chicago, Midway 800, March 1917.

EQUIPMENT:

4 Position, #31, Private Branch Exchange.

Terminal jacks equipped = 240 Ultimate capacity
Terminal jacks in use = 217
Trunk jacks equipped = 30; ultimate capacity 40
Trunks in use: Measured service "in" and "out"= 19
Measured commuted outgoing only= 2
Connecting trunk = = = = = = = = = = =

TRAFFIC:

Busy hour - 458 calls; traffic record of January 11, 1917.

The traffic has increased during the past three months and the busy hour load is approximately 550 calls. Due to the number of calls which are questioned by the operators on account of special service and the collection of nickels, this load is too heavy for the three operators at this board to give prompt and efficient service.

One of the operators is practically new and it will be some time before she will become acquainted with the names of the various departments which are difficult to locate, due to irregular arrangement mentioned later in this report.

The switchboard has a capacity of 240 terminals and, with the natural growth in the next year, it will be necessary to install a new switchboard to care for the increased growth of terminals and traffic. This has been referred to our Traffic Engineers for recommendation.

The location of the present board is not satisfactory as the switchboard room faces west on a courtway where teams are continually passing and it is difficult for the operators to hear when the teams are going through.

The light and ventilation is unsatisfactory, due to the room being small and switchboard located too near the window. The entrance to the room is through a short hall, which is used as a locker room for the office force. This prevents the door being closed. Arrangements should be made to have the room shut off for privacy and proper ventilation and lighting provided.
Another suggestion in order to avoid the irregular operating condition at the P.B.X. and difficulty in collecting nickels at the switchboard is that public telephones be installed for the use of students for outgoing calls and the nickel telephones be changed to direct terminals in charge of the clerks or heads of various departments, as it does not appear advisable to place the responsibility for collecting nickels up to the operators with the heavy traffic which they are obliged to handle.

There are between seventy and one hundred calls per day from nickel telephones for exchange numbers.

**RED OPAL:**

Seventy-nine terminals are designated with red opals which indicate that calling party is entitled to intercommunicating service only. Occasionally operators are obliged to advise calling parties that these telephones cannot be used for outgoing exchange calls, which makes it necessary for them to check very closely on all calls from these terminals.

**INDIVIDUAL SERVICE:**

There are four terminal users who request operator to secure connection by number or name of individual and then call them back. Attached is a list of these terminals and we would recommend that this service be discontinued as the operator is obliged to wait in on each call, thereby neglecting the service to other terminal users and incoming calls.

**SPECIAL SERVICE:**

Occasionally heads of departments and clerks use terminals equipped with nickel coin box and request outgoing service claiming it is on official business. Where this is necessary it would be well to instruct all people who are obliged to call from these telephones in emergency to deposit their nickel and submit a voucher for expense.

**OPERATING METHODS AT P.B.X.:**

A study of the phrases used by the operators was made with a view of suggesting improvements in this line, with the following results:

Phrases suggested and put into effect:

Answering incoming calls on trunk lines - "University" with emphasis on the third syllable - "UN-I-VER-SI-TY"

Answering terminal call signal:
"Number!" with rising inflection.
Answering recall signal:
"What is it please?"

Requesting nickel:
"Drop a nickel please."

Questioning call from a terminal designated with white opal, letter "X" or "N"
"Who are you pleased?"

Informing party where not entitled to special service to use a public telephone:
"Please use a public telephone nearby."

Recall signals
Trunk signals
Terminal signals

METHOD OF PASSING CALLS TO EXCHANGE OPERATOR RECOMMENDED:

Terminal user to pass the full order to the P.B.X. operator who in turn would select an idle trunk and pass the call to the exchange operator. This would give a double check on the repetition of the order to the terminal user and the P.B.X. operator would be more apt in handling the call, both as to enunciation and supervision and should the exchange operator fail to repeat it correctly she would be in a position to signal promptly rather than wait for the signal from the terminal user.

The present practice is for the terminal user to request a line and P.B.X. operator selects an idle trunk and terminal user gives his order to the exchange operator.

At present the number of operators does not allow the practice recommended; it would be necessary to increase the number of operators to four to care for same.

PHRASES USED BY TERMINAL USERS ON INCOMING CALLS:

A record was kept of the phrases used by persons answering terminal telephones with a view of improving the speed of answering and standardizing the phrases used for each department.
Record showed the following:

Total number of calls observed ........................................ 102
Party answering with name of person or department .................... 33
Party answered with "Hello".............................................. 49
Party answered with "Yes"................................................ 7
Party began conversation without introduction ............................ 8
"Don't Answer" reported.................................................... 5

Average answering.......................................................... 11.1"
Maximum................................................................. 1' 23"
Minimum answering.......................................................... 4"

IRREGULARITIES ON INCOMING CALLS TO TERMINALS:

A number of terminals request the calling party to hold the wire while they leave the telephone and look up information.

It is necessary at times to transfer calls and due to the poor method of flashing, the terminal is cut off.

P.B.X. operators are not informed, at the time, of these cases, but receive a letter through the Superintendent's Office two or three days later.

A number of cases were observed where terminals called local and exchange numbers, and abandoned call without notifying the operator.

On outgoing calls some of the terminal users continue conversation with persons in the room where they are calling from, after the P.B.X. operator has requested the number.

A list of these irregularities showing terminal numbers and names where possible is attached.

LOCAL DIRECTORY FOR TERMINAL USERS ON INTERCOMMUNICATING CALLS

It is noted that out of one hundred calls, but eight calls from one terminal to another were made by number, although a local directory is issued. The names of some of the departments are very confusing and similar as are the names of individuals, which makes it difficult for the operators on the heavy intercommunication traffic, which they handle, to locate the departments and names promptly.

The directory should be arranged to cover names of individuals and departments in alphabetical order. In this connection, the terminals on the switchboard should be changed to an alphabetical arrangement to provide a simple method of locating the various terminals in the departments and buildings on incoming calls.
Irregularities.

Terminals requesting calling parties to "Hold The Wire" while they look up information.

Terminal #63 Purchasing.
Terminal #71 Purchasing.

Terminals cut off on transfer because of slow flashes:
Terminal #82 Miss Carter (Dean Angell's Office)
" #73 " " " "

Terminals continuing conversation with people in room instead of giving their order when operator answers.

Terminal #71 Miss Booth
" #35 Miss Barton

Terminals calling local and exchange numbers and abandoning the calls without notifying operator.

Terminal #63 called #2 and disconnected before answer was received.
Terminal #123 called a So. Chicago number and disconnected after exchange operator took the order.

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Special Study - March, 1917

Terminal users requesting operator to secure connections by number or name of individual and then call them back:
Terminal #20 Mr. Newman Miller, Mgr.
" #27 Mr. Tracht
" #11 Mr. McFarland
" #171 Mr. Rouse

University of Chicago - Midway 800
Special Study - March, 1917.

Terminals with "NW" opals and names of individuals who are given free service:
Terminal #144 Mr. English
" #145 Mr. Michelson
" #145 Mr. Carlson
" #111 Divinity Office.