

INSTRUCTIONS
FOR
CONDUCTORS AND OPERATORS

**ON THE CORRECT USE
OF THE NEW TRANSFER**



CHICAGO SURFACE LINES

Transportation Department

September, 1932

Instructions on the Basic Plan and the Proper Method of Handling the New Transfer

The fundamental purpose of a transfer is to provide each passenger a continuous ride in one general direction between any two points on the system for one fare. The reasons for adopting the new transfer are chiefly to avoid the difficulties passengers now experience in making certain trips over reasonable routes with the present transfer, to provide conductors and one-man car operators with fairly complete information on the passenger's entire trip up to the time when the transfer is presented, to permit a closer check than is possible with the present transfer on the time used by the rider in making the entire trip, and to prevent stop-overs at transfer points. Furthermore, the new transfer offers a means of correcting many of the minor abuses which occur with the present transfer plan.

The new transfer is quite different from the one used at the present time. The size, appearance and the information carried on the transfer face are changed. The new plan of operation, and especially the way in which transfers will be handled at intersections is totally unlike the present method. However, after the transfer has been in use for a time, conductors will find that their work is much easier.

The transfer will plainly show where the passenger pays his fare and starts his trip. It will show the time the transfer was issued and the route traveled from the starting point to the points where he transfers. Also, it will enable the conductor receiving the transfer to check its time limit accurately.

To do this easily the transfer uses an outline map of the city divided into square sections or "zones." A map similarly divided into zones, but including parks, all car lines, street names and other city features, is included in this booklet on pages 10 and 11 so that the general plan may be better understood, while large maps showing all the city streets and all car lines, parks and other important landmarks are hung on the depot walls.

On these large maps and on the small zone map in these instructions one heavy zone line will be seen running north and south, while a similar heavy line is shown crossing the map in an east and west direction. These heavy lines run along State Street north and south and on Madison Street east and west. They are called base lines, since they form the base or starting points of the city street numbering system and also because they represent the starting lines in the layout of this zone system. Zone lines are 15 standard city blocks (1500 house numbers) apart. The zones are square except between Madison Street and 30th Street, where there are more than 800 house numbers to the mile north and south.

Starting at Madison Street (the east and west base line) the zones or groups of zones run as follows:

NORTH OF MADISON STREET		SOUTH OF MADISON STREET	
1st zone	0 to 1500	1st zone	0 to 1500
2nd zone	1500 to 3000	2nd zone	1500 to 3000
3rd zone	3000 to 4500	3rd zone	3000 to 4500
4th zone	4500 to 6000	4th zone	4500 to 6000
5th zone	6000 to 7500	5th zone	6000 to 7500
		6th zone	7500 to 9000
		7th zone	9000 to 10500
		8th zone	10500 to 12000

Starting at State Street (the north and south base line) the zones or groups of zones will run as follows:

EAST OF STATE STREET		WEST OF STATE STREET	
1st zone	0 to 1500	1st zone	0 to 1500
2nd zone	1500 to 3000	2nd zone	1500 to 3000
3rd zone	3000 to 4500*	3rd zone	3000 to 4500
		4th zone	4500 to 6000
		5th zone	6000 to 7500

It is one of the basic principles of this general plan to provide the passenger with a map of the city in transfer form, which he must carry with him as he transfers from line to line. This is provided in the form of a small outline drawing of the city zone map showing the shore line of Lake Michigan and certain diagonal car lines which serve to guide the trainmen in locating at a glance the position at which they are operating. Since very few lines pass through more than eight or ten zones, this problem of quickly locating one's position on the zone map will not be found difficult after a short period of careful study.

To avoid overcrowding the small zone map on the transfer face, the identifying house numbers found on the zone boundary lines of the large maps have been reduced from "1500," "3000," "4500," "6000," etc., to merely "15," "30," "45," "60," etc., while the base lines—Madison Street and State Street—carry the figure "0."

Zones at the west end of Milwaukee, Grand and Irving Park lines are not enclosed, and the outer ends of a number of the less important lines are likewise not enclosed. However, punch marks outside the diagram at these points will be used to indicate the starting points of passengers beginning their rides in those sections and will serve as effectively as if the squares were completed.

Transfers are printed separately for each line.

*Actual area of this line of zones does not extend east of the Indiana State line.

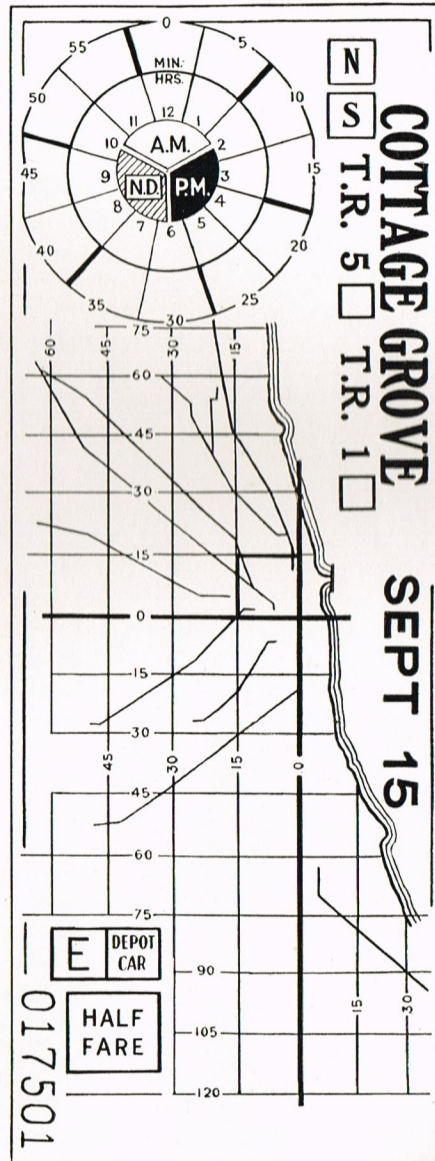


FIGURE I

The transfer for the Cottage Grove line is shown on the opposite page in natural size. It carries on its face:

- (1) The outline map of the city as divided into zones with the numbers on the zone lines showing the house numbers in hundreds for the streets that are the boundaries of the zones, or line showing where cars pass from one zone into the next. (The exact location of these zone lines can be best seen on the large maps);
- (2) The name of the line on which the transfer was first issued;
- (3) The date of the transfer;
- (4) A place to punch the general direction in which the car was going when the transfer was issued;
- (5) A clock diagram much like a clock face in which the time of issue is shown by punching the hour and minutes after the hour. For example, it is always to be used as railway trainmen count time, by punching and reading it as one-five (1:05) if the time were five minutes after one or as one-fifty (1:50) if the time were fifty minutes after one;
- (6) Three spaces within the clock show, when punched, whether the time is AM or PM, or whether the time is between midnight and 2:00 AM the next day. (See description of this feature on page 5);
- (7) Special squares to be punched when needed, such as emergency, half-fare and depot car.

These zones on the transfer are used for two purposes:

First, the transfers are punched in advance by punching a hole in the zone where it is to be given out to show the point where the passenger starts. It is easier to punch the transfer for a district between the two boundaries of a zone which are 1500 house numbers apart than to try to punch mark the map to show exactly where each passenger boards, and this gives sufficiently accurate information.

Second, since it takes about 10 minutes running time as an average for cars to cross a zone, it is easy to count up the time needed for a trip from the starting zone to the zone where the passenger changes cars and hands the transfer to the next conductor.

Methods of Using Transfers

The transfer is issued and used as follows:

The conductor estimates the number of transfers he will give out in each zone and punches more than enough in advance by making five punch marks to show—

- (1) The hour,
- (2) The minutes after the hour,
- (3) The AM, PM or ND marking.
- (4) The zone where the transfer will be issued,
- (5) The general direction the car is moving on the trip.

On some transfers the conductor adds punches for a downtown branch or other such special markings where necessary.

The time to be punched on the clock is the time when the car is due to pass out of the zone in which the transfer is issued.

As the car crosses the street that divides one zone from the next, the conductor sets aside the transfers punched for the zone he is leaving and which were not issued and proceeds to use those punched for the zone he is entering. Thus he continues from zone to zone throughout the line.

Transfers are issued to passengers who request them when paying cash or token fares, just as has been done with the old transfer.

Receiving, checking and returning a transfer for another ride is, however, quite different. When a passenger presents a transfer, he must do so at a transfer point. Most transfers will be used only once and therefore will be left with the conductors as fares, and passengers will not ask to have them returned. However, many passengers ride two or three lines on transfers before completing their journeys.

When the transfer is given to a conductor and the passenger doesn't ask for it back, the conductor merely needs to check it to be sure the passenger is making a trip in the right direction on a line that doesn't take him back to where he started and to see that the transfer is presented within the time limit and on the right date.

At a glance the conductor sees the date and the line from which the transfer was issued. The punch mark in a zone along the issuing line shows where the passenger started, so the conductor can quickly see whether the passenger is going directly back to the point of starting. The conductor then looks at the zone where the transfer was issued, which will be at the punch mark farthest from where the transfer was presented, and counts the number of zones to the point where he receives the transfer (see the description of method of counting zones and computing time given on page 12. This gives him the number of 10-minute periods to add to the time indicated on the transfer clock (see description of method

of reading the clock on page 5). Then, since he knows exactly the time his car passed the point where the transfer was collected, he knows whether the transfer was presented before its time limit expired. This method works equally well for the checking of the time for the second, third, or for any of the rides taken on a transfer. The receiving conductor can see where the first zone was punched for the line issuing the transfer, and can follow along the general route of that line to the punch mark indicating the first point of transfer, then crosswise to the next punch for the next point of transfer and so on, to the point at which he received the transfer. All this route he can follow quickly with practice and can determine, almost at a glance, the number of zones crossed and therefore the number of 10-minute spaces to be added on the clock. Also, he watches to see that the passenger is not traveling back to the point or zone from which he started.

Should the passenger be going back along a line that passes within a mile of the point from which he started, the conductor or operator must question the passenger and so determine whether the destination is a reasonable one and does not mean a round trip ride or to see that the passenger has not used an unreasonable route to reach such a destination. If he has taken unnecessary rides or a round about route, it seems likely he has done so for stop-over purposes at some intersection. (See page 15.)

However, it is expected that in many cases the passenger will ride a half mile or so in a reverse direction in order to travel more directly or more rapidly to his destination. This short reverse riding may also occur near the end of his trip. This is not wrong and should be encouraged. With the start of the new plan, transfers will be accepted at both the converging and diverging points when two or more lines operate together over a section of street. (See page 16.)

When the passenger asks for his transfer back, the check just described is followed by punch marking the zone in which he is transferring from one route to another if the passenger is entitled to further rides. If the transfer is accepted for a ride from the point where the passenger boarded the car and there is another line to which he may transfer, the conductor will give him back the same transfer after punching it for the zone in which the passenger has just presented it.

When the transfer is presented for a ride a considerable distance from the starting point of the passenger's trip the check on the specific direction and line boarded on this first ride is less important than when checking rides nearer the start of the trip. The general direction of the trip is clear and can be checked to see that it is away from the starting point. These features of the line name and general direction of the original ride are, however, of con-

siderable assistance in checking trips on two or more lines within a single zone or in a small area.

It is not at present intended that the conductor will make any record of the number of transfers issued or received or of the number punched and handed back. He does make a record on his trip sheet of the serial numbers of the transfer packs given to him at the depot. Transfers received from the depot and not issued, together with those collected from passengers, must be turned in at the end of the day's work.

Checking of the transfer is not difficult if handled according to the methods carefully described later in this booklet. There are no added limitations placed on the passenger which must be kept in mind when checking to see if he is entitled to ride on the transfer. The arrangement and method of showing the principal items of information is different on the new transfer, so that after becoming accustomed to the new plan, quicker and more accurate checking can be done.

The method of handling the transfer in order to make this checking easiest is quite important. A complete understanding of the following description of the features of the new transfer and the definite method of holding and reading the new transfer will greatly simplify the conductor's work.

Information Provided by the Transfer

The miniature zone map together with other printed or punch marked information on the transfer face provides the conductor or operator with all of the essential data about the passenger's trip, thus enabling him to check the transfer. These more important items of information regarding the passenger's trip are as follows:

- (1) The zone in which the passenger paid a cash fare and started the trip. (See list of exceptions on page 16.)
- (2) The car or bus line (also the branch line when one or more branches exist) on which the trip was begun.
- (3) The general direction of car travel on the trip when the transfer was issued.
- (4) The time when the car on which the trip was begun was due to leave the zone in which the passenger's trip started. (See list of exceptions on page 16.)
- (5) The date on which the transfer is valid. (Use of transfers in the early morning hours of the following day is discussed on page 5.)
- (6) Half fare. (Mentioned later in "Special Markings.")

Since the quick and accurate checking of time is of equal importance with checking the passenger's

ride for direction, great care has been taken to provide a time diagram in clock form which may easily be read with both accuracy and speed.

Method of Punching and Reading the Time Clock

The time diagram is constructed to resemble the face of a clock with spaces provided for punch marking hours and minutes to the nearest five minutes. In time punching the clock, hours will be punched in the inner circle corresponding with the hour hand or short hand of a clock and minutes will be punched in the outer ring of spaces corresponding with the longer minute hand of a clock. This time may be indicated in regular clock fashion by merely making punch marks in the proper spaces while the reading of time from this clock should become equally simple after some study and practice.

Figure II shows the proper punch marks on the time clock to indicate 3:40 P.M. One note of caution must be raised here—IN READING THE TIME CLOCK, TIME SHOULD BE READ ONLY AS HOURS AND MINUTES AFTER THE HOUR AND SHOULD NEVER BE READ AS MINUTES BEFORE THE HOUR. That is, the punching here shown is 3:40 not twenty minutes to three. Care must be taken to observe this standard method of reading time when using this time clock. Examples of the right and wrong method of reading time are shown below.

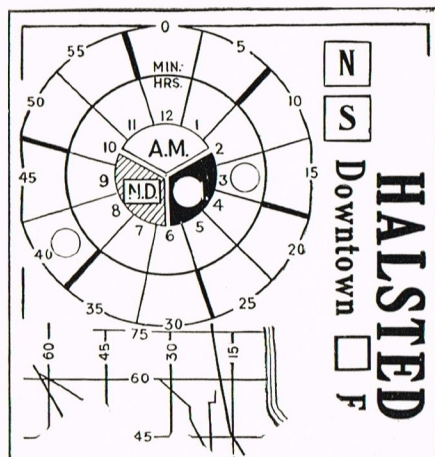


FIGURE II

RIGHT METHOD OF READING TIME

3:40
4:55
12:45
10:35
8:50

WRONG METHOD OF READING TIME

20 minutes of 3
5 minutes of 4
15 minutes of 12
25 minutes of 10
10 minutes of 8

In recording the time due out of each zone, conductors and operators will follow the rule of punch marking the five minute period nearest the time at

which the car is due at the out-going zone boundary line. Thus, the time clock should be punched 3:40 when the car is due to leave the zone at 3:38, 3:39, 3:40, 3:41 or 3:42, and it should be punched 3:45 when the car is due at this point at 3:43, 3:44, 3:45, 3:46 or 3:47. This method will apply to the punch marking of all minute periods.

The three center divisions of the time clock indicate the general periods of the day or night when the transfer was issued. **One of these spaces must always be punched to make the transfer valid, but transfers should never be issued with more than one of these spaces punched.** Transfers collected with more than one of these spaces punched should be considered invalid, not good for fare, and should not be returned to the passenger. In time punching transfers these spaces should be marked as follows:

SPACE

PUNCHED

AM—On transfers issued between 2:00 AM and 12:00 Noon.

PM—On transfers issued between 12:00 Noon and 12:00 Midnight.

ND—(Next day.) On transfers issued between 12:00 Midnight and 2:00 AM on the day following the date printed on the transfer face—normally issued only on late night trips and in owl service.

Special Markings for Normal and Emergency Transfer Use

Special punch marks are required in certain instances to identify the specific trip or the exact route over which the car was operating at the time the transfer was issued. Such special markings are required in the following instances:

Space to Be Punched

Square marked "Half Fare"

This square is to be punched when issuing transfers to "half fare" passengers.

Square marked "Depot Car"

This square is to be punched when transfers are issued on trips to and from the depot while operating on lines other than the one for which the transfer was printed.

The first conductor receiving a transfer marked in this manner should pick it up and exchange it for one of his regular transfers.

Square marked "E"

This square is to be punched when, during an emergency a car must be switched to another line without being provided with trans-

fers for this new line. In these instances transfers should be punched in the standard manner to show the zone in which they are to be issued and the time clock should be punch marked to show estimated time the car is due to leave the zone. The direction of car movement, however, should not be indicated but five or six punch marks should be placed thru the line name.

The first conductor receiving a transfer marked in this manner should pick it up and exchange it for one of his regular transfers.

Squares in the line name following the words "Extension" "Downtown," "TR 1," "TR 5" and other markings indicating branch routes

One of these squares should always be punched when the car or bus is making trips on such a route.

Squares following individual line names when two or more line names are printed on the same transfer.

On such transfers the proper square should be punched to show the name of the line on which the transfer is to be issued.

Summary of Rules for Conductors and Operators

- (1) Issue transfers only for cash or equivalent token fares. This rule is altered only in the handling of Emergency transfers and those issued by cars going to or from the depot while operating on other lines.
- (2) Punch transfers in advance to show direction of travel and the zone in which they are to be issued. Mark the "half fare," "downtown," "emergency" and similar spaces when necessary.
- (3) When traveling over other lines to and from the car house punch mark the "depot car" space in addition to the other markings necessary.
- (4) When a transfer is offered for a ride check the date, line, direction, starting zone and time when the passenger is due at the transfer point. The traveling time allowed passengers on all trips will be 10 minutes per zone or

fraction of a zone passed thru, except in the central business district zone north of Madison Street and west of State Street in which 15 minutes traveling time will be allowed.

- (5) Reverse riding on adjacent or nearby lines within a mile apart shall not be permitted for one fare unless the passenger explains satisfactorily that his starting point and destination are not the same.
- (6) When the passenger requests his transfer returned, the conductor or operator must always check to see if the transfer is good for a ride, and if good he will punch the map diagram to record the zone in which the transfer was presented and return it to the passenger. CONDUCTORS MUST QUESTION PASSENGERS WHO ATTEMPT TO RIDE BACK WITHIN WALKING DISTANCE OF THEIR STARTING POINTS. Unless proper explanation can be made a second fare should be collected.
- (7) When a transfer passenger boards from an extension line and requests his transfer returned this will be handled and punched in the same manner as if the passenger had boarded from an intersecting line.
- (8) Conductors preparing transfers for issue on zone boundary lines (Peterson, Madison, 75th, State and Commercial) will punch mark the zones north of Peterson, Madison and 75th Streets and west of State and Commercial. When handling transfers from other lines these conductors and operators will punch zones on the same side of these boundary lines as previous punch marks are located.
- (9) When punching transfers received from the lines which run along streets that are boundary lines of zones, conductors and operators will punch zones along Peterson, Madison, 75th, State and Commercial on the same side of these boundary lines as previous punch marks are located.
- (10) Conductors on the Pay-As-You-Pass type cars will check time from the start of the trip to the zone in which the transfer is presented without trying to locate the zone in which the passenger boarded his car. This method is explained on page 14. If the pas-

senger wishes the transfer returned the identifying punch mark will be placed in the zone where the transfer is presented rather than the zone in which the passenger boarded the Pay-As-You-Pass type car.

- (11) Many times it will be necessary to have two or three punch marks in the same zone. Such transfers must be watched carefully to see what the passenger is doing. Of course, since the transfer shows the name of the line where the transfer was issued, and since it is presented at a transfer point with another line, it is rather easy to see how the passenger is trying to travel and so to decide whether he is being fair. If conductor is in doubt courteous questions should be asked. When making the third ride in any one zone the passenger is allowed an extra 5 minutes for transferring and this period must be included on all later rides.

Illustration of Details of Preparing and Issuing Transfers

Each conductor will receive transfers specially printed for the line on which he works except in a few instances where a group of very small lines will be listed on a single transfer. On these latter transfers squares will be punched by the issuing conductor to indicate the specific line on which the transfer originated. One such grouping of lines includes Laramie, Noble and South Cicero.

In preparing transfers to be issued the following items should be punched:

- (1) *Punch mark the zone in which the transfer is to be issued.
- (2) Punch mark the general direction of car travel on the trip when the transfer is to be issued.
- (3) *Punch mark the time when the car is due to leave the zone in which the transfer is to be issued.
- (4) Punch mark, when necessary, the sub-statement in the line name which specifically describes the trip being made.
- (5) Punch mark "depot car" space on the transfers to be issued on pull-out and pull-in trips between the depot and the line to which the transfers belong.

*There are a few special cases where these features are altered slightly. These locations are listed on page 16, together with the detailed instructions.

- (6) Punch mark the "emergency" square in the special instances previously described.
- (7) Punch mark the "half fare" space when transfers are issued for the 3 cent fare.

Five punch marks are normally required to prepare this transfer for adult fares. Three punch marks record the time, one indicates the general direction of car travel on the trip on which the transfer is to be issued, and one punch mark shows the zone in which the transfer is to be issued.

To explain the proper method of punching and issuing transfers an example will be used. A conductor on the Clark-Wentworth line in preparing transfers to be issued between 15th and 30th Streets

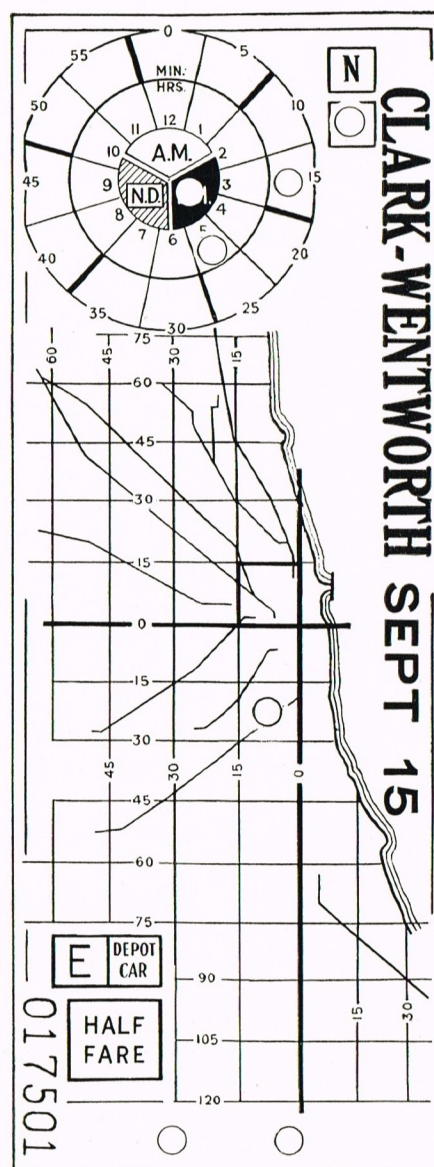


FIGURE III

on the southbound trip, when the car is due at 30th Street on this trip at approximately 5:13 P.M., will punch mark the transfers as shown in Figure III. The conductor records the time due out of the zone by marking the time clock 5:15 P.M.

Since south is the general direction of travel on this trip, the direction square marked "S" near the upper right hand corner of the time clock is punched to record this information, and since the transfers

zone punched for 15 minutes after the car is due to cross the zone boundary line to enter this district. All west side and northwest side lines which loop back at Dearborn Street should punch transfers for a time 5 minutes after the time they are due at this Dearborn Street terminal.

A number of examples of the proper time punching of transfers for issue within the terminal zone of trips toward this terminal are given below:

LINE NAME	DIREC- TION	LOCATION OF TERMINAL	TRANSFERS ISSUED IN THIS TERMINAL ZONE WHEN APPROACHING THE TERMINAL SHOULD BE TIME PUNCHED AS FOLLOWS:
NORTH SIDE			
Crawford	N. B.	Crawford-Bryn Mawr	10 Min. after time due at 4500 N.
Kedzie	N. B.	California-Roscoe	10 min. after time due at 3000 N.
Tayl-Sedg-Sh.	N. B.	Sheffield-Clark	10 min. after time due at 3000 N.
State	N. B.	Division-Wells	15 min. after time due at Madison
Milwaukee	S. B.	Dearborn-Madison	5 min. after time due at Mad-Dearb.
Blue Island	N. B.	Dearborn-Adams	5 min. after time due at Dearb-Adams
Stony Island	N. B.	Grand-Lake Shore	10 min. after time due at M- dison
Belmont	E. B.	Halsted-Belmont	10 min. after time due at 1500 W.
WEST SIDE			
Lawrence	W.B.	Austin-Lawrence	Time due at Austin
Armitage	W.B.	Armitage-Grand	10 min. after time due at 4500 W.
Van Buren	W.B.	Kedzie-Van Buren	10 min. after time due at 3000 W.
35th	W.B.	Kedzie-35th	10 min. after time due at 3000 W.
SOUTH SIDE			
Pershing Road	E. B.	Cott. Grove-Pershing	10 min. after time due at State
79th	E. B.	Brandon-79th	10 min. after time due at 3000 E.
93rd-95th	E. B.	The Strand-89th	10 min. after time due at 9000 S.
So. Racine	S. B.	Racine-87th	10 min. after time due at 7500 S.
Stony Island	S. B.	Stony Island-93rd	10 min. after time due at 9000 S.
So. Deering	S. B.	Torrence-112th	10 min. after time due at 10500 S.

according to this illustration are to be issued between 1500 and 3000 south, the punch mark showing the starting point of the passenger's trip will be placed in the zone between "15" and "30" south and between "0" and "15" west.

In the preparation of transfers conductors and operators will usually find it convenient to prepare transfers for all or a major part of each trip in advance as at present. Groups of transfers can be pre-punched according to each man's experience as to the probable needs for the individual zones. Transfers punched in excess of the actual needs in any zone should be set aside before issuing transfers in the next zone and must be turned in at the depot at the end of the day's work.

In the preparation of transfers to be issued in the zone in which the line terminal is located when traveling toward this terminal this general rule should be followed—for the terminal zone on trips toward the terminal, punch transfers 10 minutes after the car is due to cross the last zone boundary before reaching the end of the line. This also applies to switchback and short line cars approaching the turnback point. One exception to this rule is the central business district zone bounded by 1500 west, 1500 north, State Street and Madison Street. (On the transfer this zone is enclosed with a heavy line.) Cars that terminate in this zone except on those lines which loop back on Dearborn Street should issue transfers within this

Illustration of Proper Methods of Checking Transfers Offered as Fare

In this new plan the conductor or operator has two distinct contacts with the transfer and the operations to be performed are different in each case. First, he must prepare transfers for issue when cash or token fares are offered, and, second, he must carefully check the transfers offered for rides to learn if they are acceptable as fare in the direction the car is traveling and at the time when they are presented. These two operations are of equal importance to the proper functioning of the transfer plan.

One major purpose of this new transfer is to eliminate the large excess of time now offered the rider in making a trip over the system. To accomplish this effectively it was found desirable to abandon entirely the present method of marking and checking time and substitute a plan in which the passenger's starting point and route of travel are shown by punch marks on a map consisting of zones of approximately uniform street car running time. With the passenger's route easily traced from the starting zone to the zone in which the transfer is presented as fare, it is then only necessary in checking time to count the number of zones through which the passenger has traveled and allow the standard traveling time at 10 minutes per zone. This traveling time together with an allowance of 10 minutes to cover

the extra time necessary to make connections is then added to the time when the passenger left the starting zone as shown by the clock to complete the time check. This time check will usually be a short and rather simple computation since the great majority of the rides on the system cover a distance of not more than 5 zones. It is best figured by the method described on a later page of this book.

When a transfer is offered as fare the specific items to be checked and the record to be placed on the transfer when it is returned to the passenger are as follows:

- (1) Check the printed date on the face of the transfer.
- (2) Check the starting line, direction and zone, and the route traveled to determine the validity of the transfer from the standpoint of direction.
- (3) Check the traveling time allowed the passenger from the start of his ride to the point where it is being checked (on the basis of 10 minutes per zone or portion of a zone passed through) and add this time together with the regular allowances to the time shown on the clock to determine the validity of the transfer from the standpoint of time.
- (4) Check the "Half Fare," "Emergency" and "Depot Car" squares. "Emergency" and "Depot Car" transfers should not be returned. If the passenger wishes another transfer to continue his trip he should be given a regular "cash transfer"—the same as issued in that zone when cash or token fares are paid.
- (5) When the passenger requests his transfer returned (normal transfers are referred to here and not transfers of the type mentioned in item 4 above) so that he may continue his trip on another line, the conductor or operator—after finding it valid in all respects—will punch the zone map to show the zone in which the transfer to his car took place. (See special instructions for handling transfers on Pay-As-You-Pass type of cars on page 7.) Conductors and operators must question passengers who attempt to ride back within walking distance of their starting points. Unless proper explanation can be made a second fare should be collected.
 - (a) Conductors and operators working on routes operating on zone boundary lines (Peterson, Madison,

75th, State and Commercial) when punch marking transfers from other lines will place the punch mark in the proper zone on the same side of this zone boundary line as previous punch marks have been located.

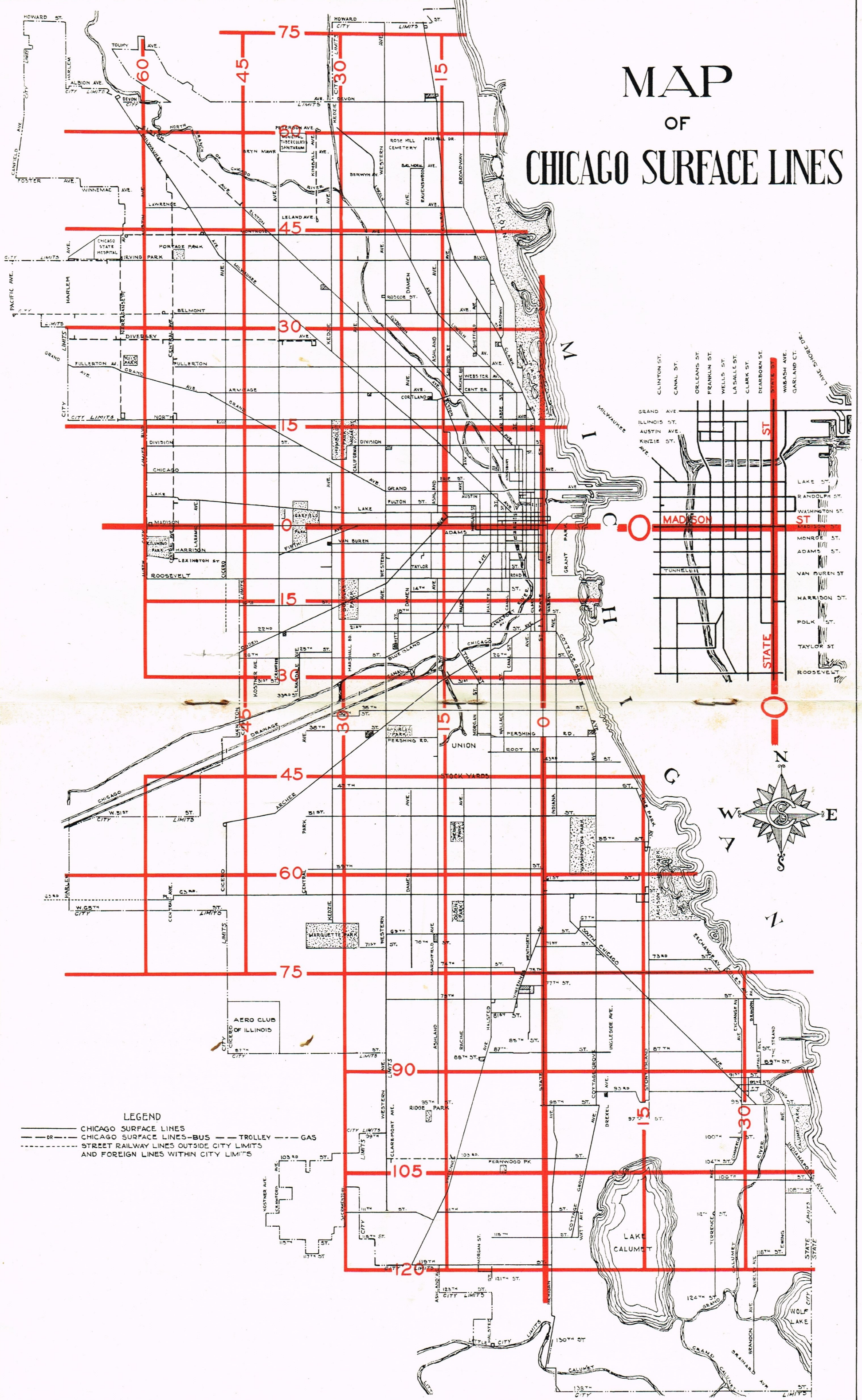
- (b) When punch marking transfers received from these boundary line routes, conductors and operators on intersecting lines will put punches in the proper zone along Peterson, Madison, 75th, State and Commercial on the same side of these boundary lines as previous punch marks are located.

When computing traveling time over the system on the basis of the standard zone traveling time allowance and including the fixed allowance added to each trip to cover the time consumed in transferring from one car or bus line to another, there are two deviations to these general rules to bear in mind. They are as follows: (1) The allowed traveling time through the central business district zone north and west of Madison and State Streets (enclosed by a heavy line on the transfer zone map) is 15 minutes instead of 10 minutes which is standard for all other zones. (2) When a passenger makes three rides in any one zone, that is, a cash ride and two transfer rides, he will be given an additional 5 minutes "allowed time" for connections for the third ride. This extra allowance will have to be included each time the transfer is again presented for a ride, if he makes other transfers later in other zones.

The proper method of dealing with this item can be stated as a simple rule—when the third ride is made in one zone or when the third punch mark is placed in any one zone, the total time allowed the passenger on this trip will be increased by 5 minutes.

To explain further the checking of transfers by receiving conductors or operators an example will be used. The passenger whose transfer is shown in Figure IV started his trip on Halsted Street near 55th Street and his destination was on Fulton St. west of Ashland Ave. When the passenger boarded the Halsted Street car he received a transfer with the direction punch marked north, with the zone south of 45th Street and west of State Street marked to show the zone of origin, and with the time clock marked to indicate the time (1:15 P.M.) this car was due at 45th Street. When the Madison Street conductor received this transfer at Halsted and Madison, he first checked the date of the transfer and the line name and direction of the trip. Secondly, he noted that a westbound ride on his car was allowable as to direction, since the trip started some distance south and the Madison Street car would not take him back near his starting point.

MAP OF CHICAGO SURFACE LINES



LEGEND

- CHICAGO SURFACE LINES
- OR — CHICAGO SURFACE LINES—BUS — TROLLEY — GAS
- STREET RAILWAY LINES OUTSIDE CITY LIMITS
- AND FOREIGN LINES WITHIN CITY LIMITS

As the third step he checked the transfer as to time by counting the zones back to the starting point by 10 minute periods or in terms of the standard traveling time allowed per zone. Thus, starting with the zone west of State Street and south of 45th Street he computed the allowed traveling time by counting 10, 20, 30, 40 minutes up to Madison Street. He included the zone in which the ride started as a means of figuring in the 10 minute period which is allowed once on each trip to cover the time needed for transferring. As the next step the conductor added this 40 minutes, the total allowed time, to the starting time of the trip as shown on the clock and found that the transfer would become invalid for a ride on his car from this point at 1:55 P.M. as the clock was punched 1:15 P.M. We can assume here that the transfer was presented before this time and was therefore acceptable as fare.

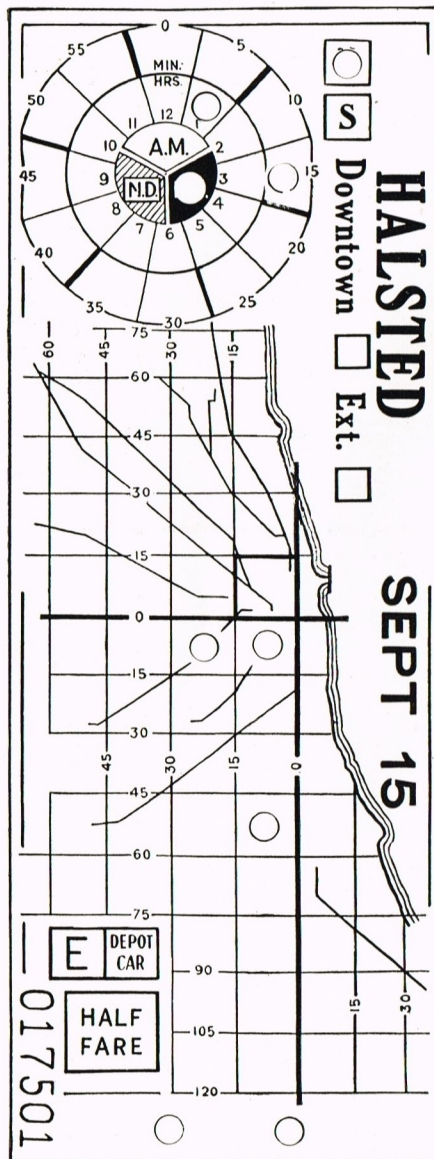


FIGURE IV

Many conductors and operators will take advantage of the special marking of this time clock to simplify their time checks. Instead of computing the allowed time for the trip, then reading the clock and finally adding these two items to obtain the exact time when the transfer becomes invalid, which takes three operations, the conductor can take this allowed time for four zones and can count off four ten minute zones on the clock from the 15 minute square which is punched. These clock zones of 10 minutes are divided off by heavy lines so he can quickly see the clock time four zones after 1:15 or 1:55. He can read off this 1:55 very quickly, as four zones from the time punched without bothering to add up any figures and is more likely to get it correct when working quickly.

Since the passenger who presented this transfer on the Madison Street car indicated that he wished the transfer returned, the conductor recorded the zone of transfer by placing a punch mark in the zone south of Madison Street and west of State Street and handed it back to the passenger. The Madison Street conductor operated on a zone boundary line street and he punched this transfer, according to the rule, in the zone south rather than north of Madison Street, since the previous punch mark was south of this street.

This illustrates the proper method of checking and marking the transfer by the first conductor to whom it was presented. When the transfer was offered for a ride north on Ashland line at Paulina and Madison Streets, the first items to be checked were the date, line name and the direction of the starting ride. Secondly, this conductor noted that the northbound ride on the Ashland line was allowable as to direction since the passenger was continuing to travel away from his starting point. This starting point or starting zone is usually indicated by the punch mark farthest away from the point at which the transfer is presented.

As the third step, this conductor checked the transfer as to time by computing traveling time at the rate of 10 minutes per zone from the starting point of the trip to the zone in which the transfer was being offered for a ride. The actual count was 10, 20, 30, 40 minutes north along Halsted Street and then west one zone along Madison Street for a total of 50 minutes overall allowed time. This period added to the time shown on the clock—which represented the passenger's leaving time at the north boundary line of his starting zone—told the Ashland conductor that the transfer would become invalid as to time at 2:05 P.M. The other method would be to count the four zones north and one west, and then to count five time zones on the clock to get the time at 2:05 P.M. for that zone.

Since the passenger again indicated that he wished the transfer returned and since it was still valid for

a ride west on a line farther north, the conductor recorded the point of transfer by punch marking the zone south of Madison and west of 1500 west and returned it. This zone was marked in accordance with the rule that when transfers are received for a ride in either direction from routes operating on zone boundary lines, punch marks should be placed on the same side of this zone boundary line as previous punch marks were located. This represents the proper method of checking and marking the transfer by the second conductor to whom it was presented.

When the transfer was offered for a westbound ride on the Fulton-21st line at Ashland, the operator checked the date and other information including the rights of the transfer user for a westbound ride on this line. In making the time check on the transfer this operator also followed the passenger's route over the system computing the allowed traveling time at the rate of 10 minutes per zone. Here the actual count was 10, 20, 30, 40 minutes north on Halsted, then west one zone for a total of 50 minutes and north another square to include the zone in which the transfer was being presented. This resulted in a total of 60 minutes or one hour as the total time allowed the passenger in making this trip. The transfer was not punch marked to record this zone of transfer since the passenger did not request it to be returned.

To explain further the basic principles of the transfer and make clear the proper method of handling and checking transfers at car and bus line intersections an illustration involving a diagonal line will be discussed. The passenger whose transfer is shown in Figure V started his trip on the Irving Park line near Austin and his destination was along 14th Street east of Damen Avenue. When this passenger boarded the Irving Park car and paid his fare he received a transfer with the direction punch marked east, with the zone north of 3000 north and west of 4500 west marked to show the zone of origin, and with the time clock punch marked 11:15 A.M.

When the Milwaukee conductor received this transfer at Irving Park and Milwaukee he first checked the date, line name and the direction of this first ride. Secondly, he noted that a ride in the southeast direction was allowable as a continuation of the eastbound ride on the Irving Park line, since it brought the passenger farther away from his starting point rather than toward it. Since this eastbound Irving Park transfer was presented at Milwaukee, which is in the same zone as the starting point for the passenger it is evident that the passenger boarded west of Milwaukee on the original ride, and therefore, a ride in the southeasterly direction on Milwaukee would carry him away from his starting point. In checking time the standard 10 minute allowance for transferring which is included once on each trip would be added to the time shown on the clock to give

11:25 A.M. as the latest time when the transfer would be good in this zone.

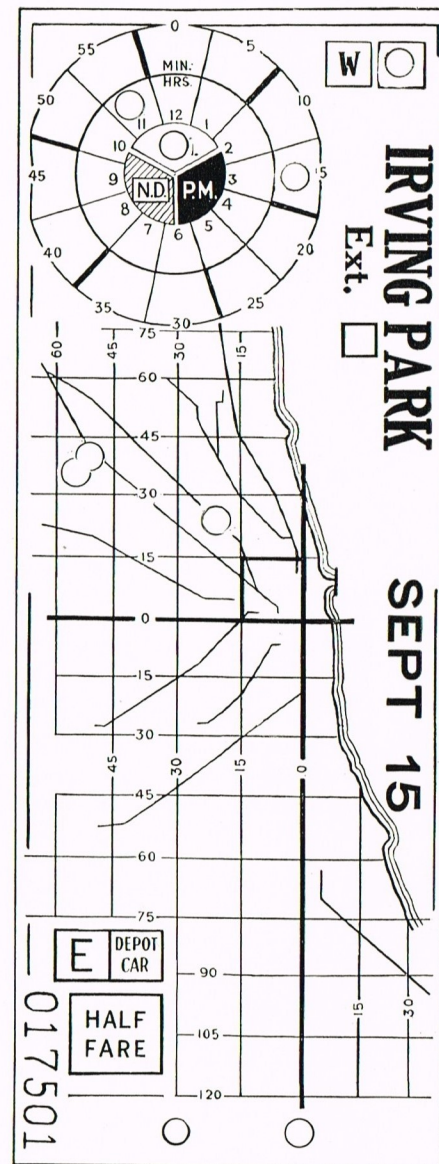


FIGURE V

Since the passenger indicated that he wished the transfer returned when he presented it to the Milwaukee conductor, this conductor recorded the zone of transfer by placing a second punch mark in this zone of origin of the ride and returned it to the passenger.

When this transfer was offered for a ride southbound on the North Damen line at Milwaukee Avenue, the first items checked were the date, line name and direction of starting ride. Secondly, the conductor noted that the southbound ride on Damen was allowable since the passenger was still traveling away from his starting point. As the third step this conductor checked the transfer as to time by counting zones in

terms of traveling time starting with and including the zone of origin of the trip. This count was 10, 20, 30, 40 minutes and in counting off these zones the conductor followed the diagonal line representing Milwaukee on the face of the transfer. This period of 40 minutes was then added to the time punch marked on the clock showing the transfer would be good until 11:55 A.M. When the passenger requested his transfer returned the North Damen conductor recorded the zone in which the transfer took place by punch marking the zone north of 1500 north and west of 1500 west and handed it back to the passenger.

After the preliminary checks on the date, the line of issue and the direction of the initial ride, the conductor on the 14th-16th line who received the transfer eastbound at Damen Avenue noted that the direction was satisfactory and then checked the time by again following the route of the passenger's trip. Starting with the zone of origin, this computation was 10, 20, 30, 40 minutes along Milwaukee to and including the zone north of 1500 north and west of 1500 west, then south along the route of the North Damen line for a total of 50 and then 60 minutes; this last figure included the zone on the 14th-16th line in which the transfer was being offered for a ride. To complete the check and obtain the time when this passenger was due at the transfer point this 60 minutes was added to the clock record to show the latest time for it to be good as 12:15 P.M. Since the passenger did not need the transfer again the conductor on the 14th-16th line kept it without marking the zone in which the passenger boarded.

While the method of computing traveling time which has been described here, namely that of tracing the zones or portions of zones actually crossed by the passenger on his trip, is the foundation of the time computation, there is another method which arrives at the same result and which accomplishes the check more easily in some instances. This method will be explained with respect to the trip illustrated in Figure V.

Instead of following the passenger's route as outlined by transfer points on the zone map, the North Damen conductor when checking time according to this plan could have counted zones directly east to the zone directly above the zone at which the transfer was being presented and then counted the zones south of this zone. Thus the conductor would have counted three zones east from the starting zone and then south one zone for a total of 40 minutes. In this computation the conductor might also have counted south first and then east. When checking the traveling time down to the intersection of the North Damen and 14th-16th lines, the count might have been south four zones and east two zones for a total of 60 minutes. By counting in the starting zone the extra ten minutes makes up for the allowance of ten minutes given for connections.

This method of checking traveling time has particular advantages when dealing with diagonal lines and with trips which involve rides on the Clark Street Pay-As-You-Pass type cars, when the passenger presents his transfer for checking and punching outside the zone in which he boarded the car. In using this method of computing time the following rules must be kept in mind:

- (1) When this latter method of computing time is employed on trips which pass through any part of the central business district zone north of Madison Street and west of State Street, the total traveling time computed on the basis of 10 minutes for all zones should be increased by 5 minutes to cover the additional period allowed passengers whose route brings them into the central business district zone.
- (2) This method last described should not be used in computing traveling time on trips starting south of 105th Street on one side of Lake Calumet and going to points south of 105th Street on the other side of Lake Calumet, but instead time should be computed by following the passenger's route as shown by punch marks on the transfer zone map.

Limitation on Reverse Riding

One important abuse of the present transfer is single fare round trip riding using adjacent or nearby lines. As an example (See Figure VI), a rider living west of Wentworth at Garfield Boulevard can now walk to Wentworth and ride north to 51st Street and then ride west on 51st and south on Halsted where a walk of only a few blocks will return the passenger to his starting point for only one fare for the complete trip. At present with the old transfer the conductor is working at a considerable disadvantage in these instances since he is not informed as to the actual line or even the section of the city in which the passenger's ride started, and in preventing this type of abuse he is assisted only by the rule which limits this reverse riding to the section between the crossing at which the transfer is offered and the next junction point.

With the new transfer which shows the name and the section of the line on which the passenger's trip was begun, the conductor or operator is better informed on the early part of the ride so that he may question the passenger as to both his exact starting point and destination. As a further example, if the passenger gave his starting point as Garfield Blvd. west of Wentworth when he was questioned by the Halsted conductor southbound at 51st Street and

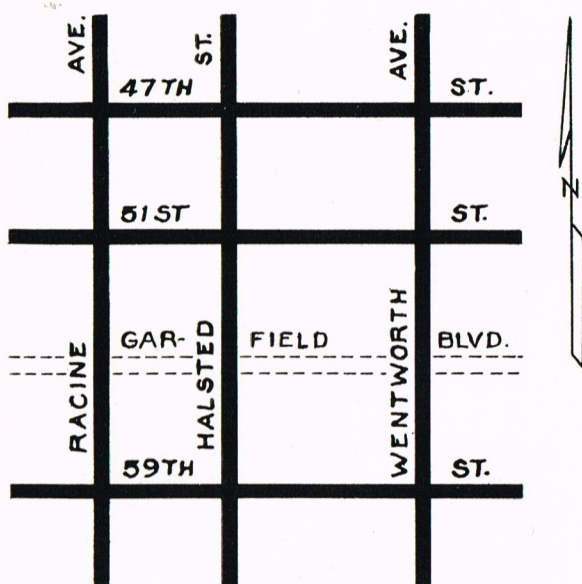


FIGURE VI

said that his destination was in the vicinity of Garfield Boulevard and east of Halsted, the transfer should be accepted only under such circumstances as if the passenger appeared feeble or not likely to walk the distance of approximately a half mile between Wentworth and Halsted, or if the weather was such that the walk would be avoided, or if it were late at night. In cases of this kind the appearance of the passenger and the reasonableness of his story should determine whether the transfer is to be accepted or declined. (In all such instances the conductor or operator should attempt quietly and courteously to show the passenger why the transfer cannot be accepted.)

The company wants to encourage customers to use street car service, but cannot encourage abuse of the transfer privilege. Courteous questioning and explanation in a quiet voice will warn the passenger who doesn't understand or who is not deliberate in trying to beat a fare from trying the same kind of trick again for he finds that the transfer shows just what he is doing. The passenger who is willing to be tough or rough is caught also, and when treated firmly learns that he can't get away with it because the trainmen have a clear way of checking up and have an interest in preventing stealing of rides by passengers.

This represents one situation among many that are met by trainmen in which courtesy, care and firmness must be used to avoid embarrassment to those who are making proper and fair use of our service, and who are welcome customers and to catch those who are wilfully beating a fare. It calls for good judgment and proper courtesy, and it is better to lose a fare than to be rough in voice or language or treatment, thereby hurting an innocent passenger's feelings or making others who hear feel that trainmen are not gentlemen to their customers. Roughness is not nec-

essary to make explanations or to get results and the trainman who knows how to be kindly and fair can keep a friendly feeling that makes his work easier and encourages use of the service.

Conductor's Check on Trips Made Over Round a-bout Routes

The passenger must be permitted a reasonable choice of routes in going from starting point to destination, but when a decidedly round-a-bout route is used such a trip is usually made to permit a convenient stop-over on the way. Thus a transfer presented for a ride back toward the line on which it was originally issued should be looked upon as a sign of probable transfer abuse. An example of such abuse is illustrated below (See Figure VII) :

A passenger starting on the Kedzie line south of 22nd Street is going to a point on Madison between Kedzie and Garfield Park. The most logical route for a passenger traveling between these points is the most direct route (north on Kedzie and west on Madison), but the passenger wants to make a short business call at Crawford and Madison and he transfers, therefore, west on 22nd Street line and north on Crawford to Madison.

When this Kedzie transfer is presented at Crawford Avenue for a ride back towards Kedzie (the line of issue) it should be a signal to the Madison Street conductor of a probable attempt at some form of abuse. When questioning passengers concerning such

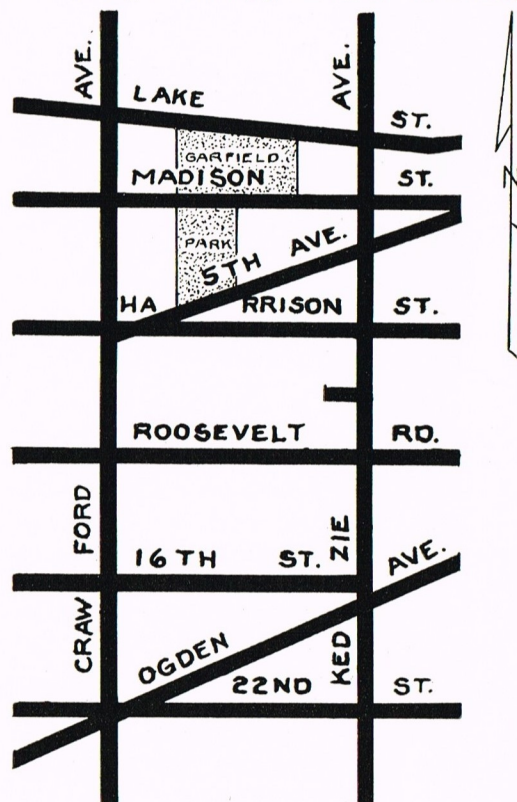


FIGURE VII

round a-bout trips, it should be pointed out that the most logical route (north on Kedzie and west on Madison) consumes less time, requires less distance to be covered and the passenger would have had to change cars or routes only once instead of three times.

If the passenger's trip was begun on North Damen at 15th Street and he then rode south to 22nd Street, east on 22nd Street to Ashland and South on Ashland line to 51st Street and then west on 51st to South Damen, the ride would not have been questioned since he was merely traveling back toward the STREET on which the trip was begun and not toward the LINE on which the initial ride was made. The North Damen line does not operate south of Blue Island Avenue while the South Damen line terminates at 47th Street on the north.

Transfers Accepted at Both Converging and Diverging Points

When two or more car lines operate together over a street, the present transfer rules make transfers good only at the diverging point or the intersection at which the lines separate. With the start of the new transfer this rule will be changed to permit transferring at both the point where car lines come together to travel over a single street (converging point) and the location where the lines separate to leave this street which they use together (diverging point). A partial list of such locations is given below.

ROUTES TRAVELING TOGETHER OVER A SECTION OF LINE		DIRECTION OF TRIP	INTERSECTIONS AT WHICH TRANSFERS BETWEEN THESE LINES WILL BE ACCEPTED	
FROM (ROUTE)	TO (ROUTE)		CONVERGING POINT	DIVERGING POINT
Clark	Broadway	N. B.	Clark-Division	Clark-Diversey-Broadway
Clark	Broadway	S. B.	Clark-Diversey-Broad.	Clark-Division
Kedzie (N.Ked.Br.)	Milwaukee	N. B.	California-Milwaukee	Kedzie-Milwaukee
Kedzie (N.Ked.Br.)	Milwaukee	S. B.	Kedzie-Milwaukee	California-Milwaukee
Elston	Milwaukee	N. B.	Desplaines-Milwaukee	Elston-Milwaukee
Elston	Milwaukee	S. B.	Elston-Milwaukee	Desplaines-Milwaukee
Cottage Grove	Broadway	N. B.	Harrison-Wabash
Broadway	Cottage Grove	S. B.	Randolph-Wabash	Harrison-Wabash
Wallace-Racine	Halsted	N. B.	47th-Halsted	Pershing Road-Halsted
Wallace-Racine	Halsted	S. B.	Pershing Rd.-Halsted	47th-Halsted
Stony Island	47th	N. B.	47th-Lake Park	47th-Cottage Grove
Stony Island	47th	S. B.	47th-Cottage Grove	47th-Lake Park

Lines Extending Beyond the Limits of the Zone Map on Which Special Rules Apply in the Preparation of Transfers

zone map on the transfer.

These special rules refer to the punch marking of transfers to be issued on the lines listed below and only on trips toward the central section of the city.

Ewing-Brandon Line

All transfers issued on northbound trips should be punch marked in the zone north of "120" south and east of "30" east to record the zone of origin. The time shown on the clock should be 10 minutes after the car is due at 108th and Ewing.

South Deering Line

All transfers issued on northbound trips from the shuttle line running on Torrence Avenue between 112th and 124th Street should be punch marked in the zone north of "120" south and east of "15" east to record the zone of origin. The time shown on the clock should be 10 minutes after the car is due at 112th and Torrence.

State Street Extension (Riverdale Line)

All transfers issued from this shuttle line on northbound trips should be punch marked in the zone north of "120" south and east of State Street to record the zone of origin. The time shown on the clock should be 15 minutes after the car is due at 119th and Michigan.

63rd Street Extension (Argo Line)

All transfers issued from this shuttle line on eastbound trips should be punch marked in the zone south of "60" south and west of "60" west to record the zone of origin. The time shown on the clock should be 15 minutes after the car is due at Oak Park and 63rd Place.

Belmont Extension (Trolley Bus Line)

All transfers issued from this trolley bus line on eastbound trips between the west

terminal and Austin should be punch marked in the zone north of "30" north and west of "60" west to record the zone of origin. The time shown on the clock on transfers issued in this section of the line should be 5 minutes after the bus is due at Austin and Belmont. (Extra time needed by passengers transferring to Belmont car line.)

All transfers issued on eastbound trips between Austin and Central should be punch marked in the normal manner to indicate the zone of origin, but the time recorded on the clock should be 15 minutes after the bus is due at the east terminal. (Extra time needed by passengers transferring to Belmont car line.)

Irving Park Extension (Gas Bus Line)

All transfers issued from this bus line on eastbound trips should be punch marked in the zone north of "30" north and west of "60" west to record the zone of origin. The time shown on the clock should be 10 minutes after the bus is due at Neenah and Irving Park.

Western Line

All transfers issued north of Peterson Avenue on southbound trips should be punch marked in the zone north of "60" north and west of "15" west to record the zone of origin. The time shown on the clock should be the time when the car is due at Peterson Avenue.

Clark-Wentworth Line

All transfers issued north of Peterson Avenue on southbound trips should be punch marked in the zone north of "60" north and west of "15" west to record the zone of origin. The time shown on the clock should be the time when the car is due at Peterson Avenue.

Method of Dealing with Delays Due to Service Interruptions

Since the time allowed passengers on trips over the system will usually be close to the time actually needed for these trips, street delays of five minutes or longer will occasionally cause the passengers (through no fault of their own) to present transfers on which the time has expired.

When, in reply to questioning the passenger gives a reasonable story of a delay, the conductor can check the statement with the time on the transfer. If the delay has been long and has occurred on the line from which the passenger has just transferred it is likely that several passengers will have similar late transfers. Courteous questioning of the passenger with respect to these items and consideration of the amount of time by which the transfer is over-due will usually distinguish honest riders who have been delayed from passengers who have made stop-overs.

Traveling Time Check During Periods of the Day or Night When Lines Are Operating on Wide Headways

The traveling time allowance of 10 minutes per zone which is used as the basis for timing the passenger's trip over the system is intended to fit only the requirements for time during the rush, mid-day and early evening periods. During the late evening, night and early morning periods on weekdays and during a much longer period in the morning on Sundays and holidays, headways on many lines are very wide and passengers traveling during these hours will frequently consume many minutes more than the normal waiting period at transfer points.

Conductors and operators working during these periods when the headways are very wide must not hold the riders strictly to the traveling time allowance of 10 minutes per zone. They must take into consideration the frequency of service being provided on the lines which the passenger has ridden and also give weight to the number of times he transferred, and therefore the number of times he may have been delayed due to wide headways.

This time check on the passenger's ride is not to be overlooked during these periods but it calls for a combination of careful judgment on the part of conductors and operators and a general knowledge of the frequency of late evening and night car service on the various lines.

Special Features Built into the Transfer to Assist in Fast and Accurate Checking and Handling of Transfers

In an effort to provide conductors and operators with a transfer from which the essential information describing the passenger's trip can be read both accurately and quickly, the size of the transfer has been increased to provide a better separation between the individual parts than would otherwise be obtained. As a further aid the clock has been developed to indicate time in such a manner that it may be read at a glance, after some practice, in the same way as one would read an ordinary clock.

To further assist the trainmen in checking those items of the transfer which change daily or vary with the line on which the passenger's trip was begun, the date, line name and direction squares are printed in a strong outstanding color.

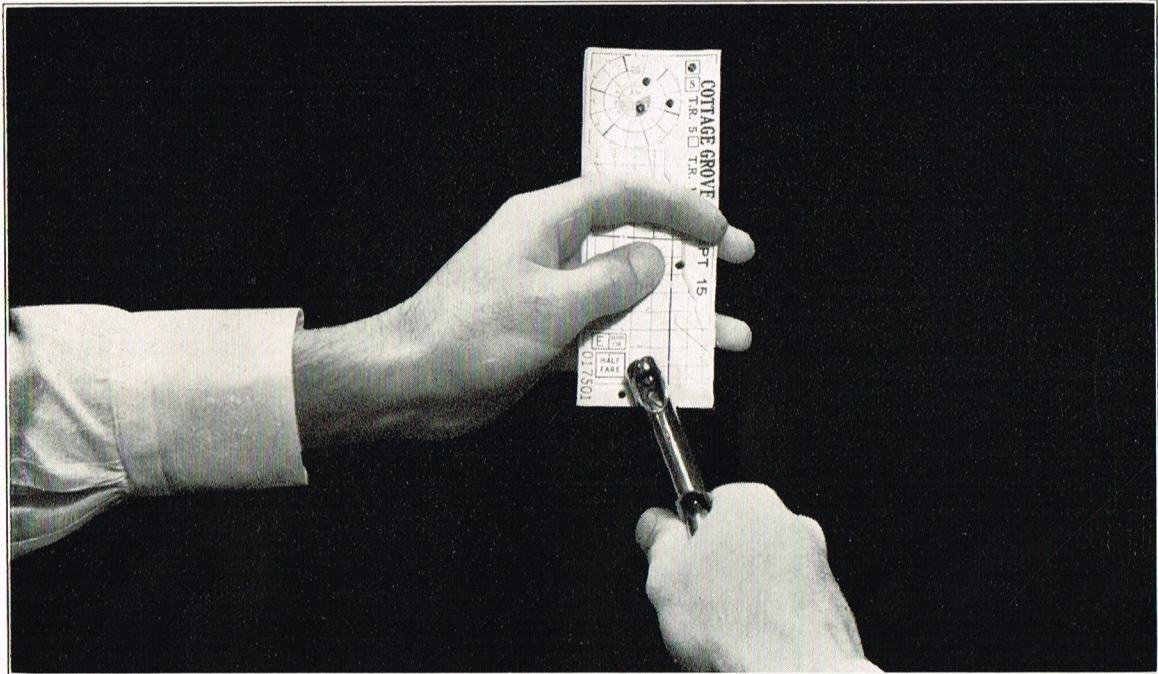
Proper Method of Removing Transfers from Pads

When removing a supply of transfers from the bound pad the wire staple should be straightened at the open end and the transfers removed in small bunches without tearing the paper at the lower end of the transfer. The rough edges around the two staple holes should be removed by punching over these holes with the transfer punch, thus permitting the transfers to be slid over one another without danger of catching at this point. This open space below the zone diagram in which the binding staple is now placed will serve an additional purpose at a later date and should not be torn off.

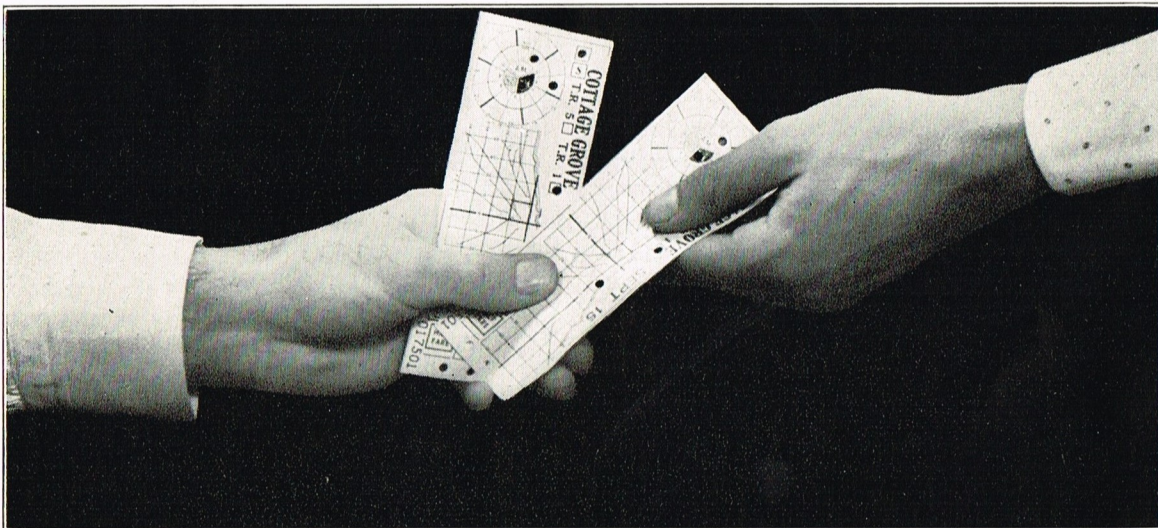
Accurate Punch Marking Is Essential

It is vital to the successful operation of this transfer plan that conductors and operators punch mark the transfer accurately both when preparing transfers for issue at the time cash fares are paid and when transfers are received and returned at car and bus line intersections. Much trouble can be saved for conductors and operators by accurate punching for correct time and location. Careless work will produce many disputes and much illwill.

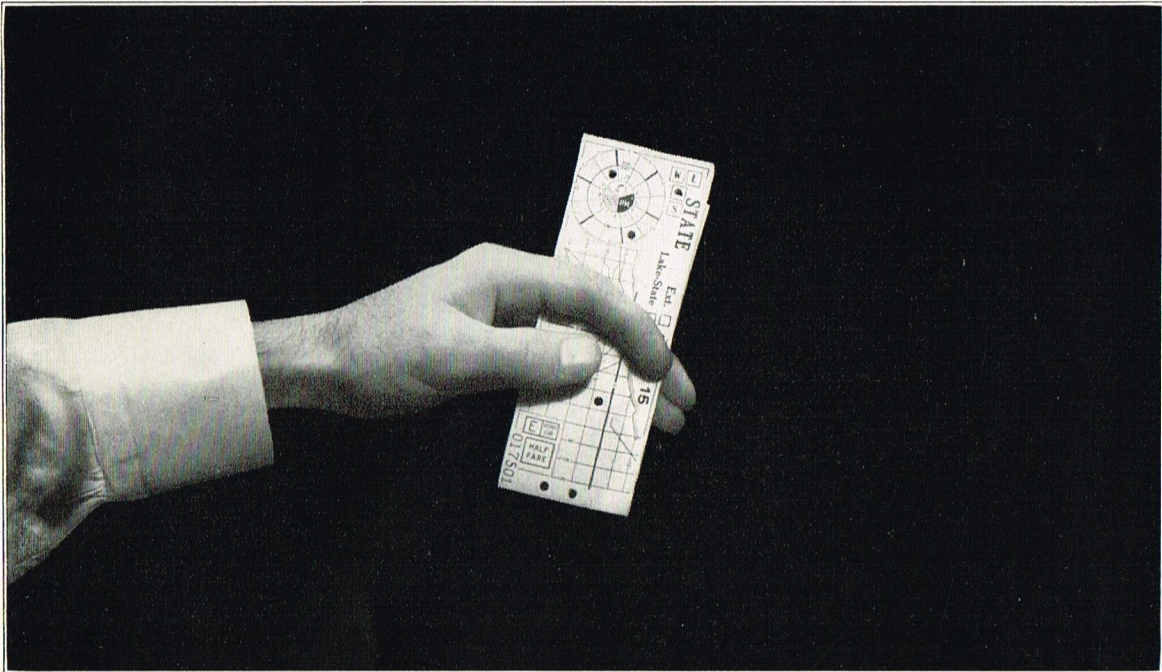
Illustrations of the Proper Method of Holding and Punch Marking Transfers



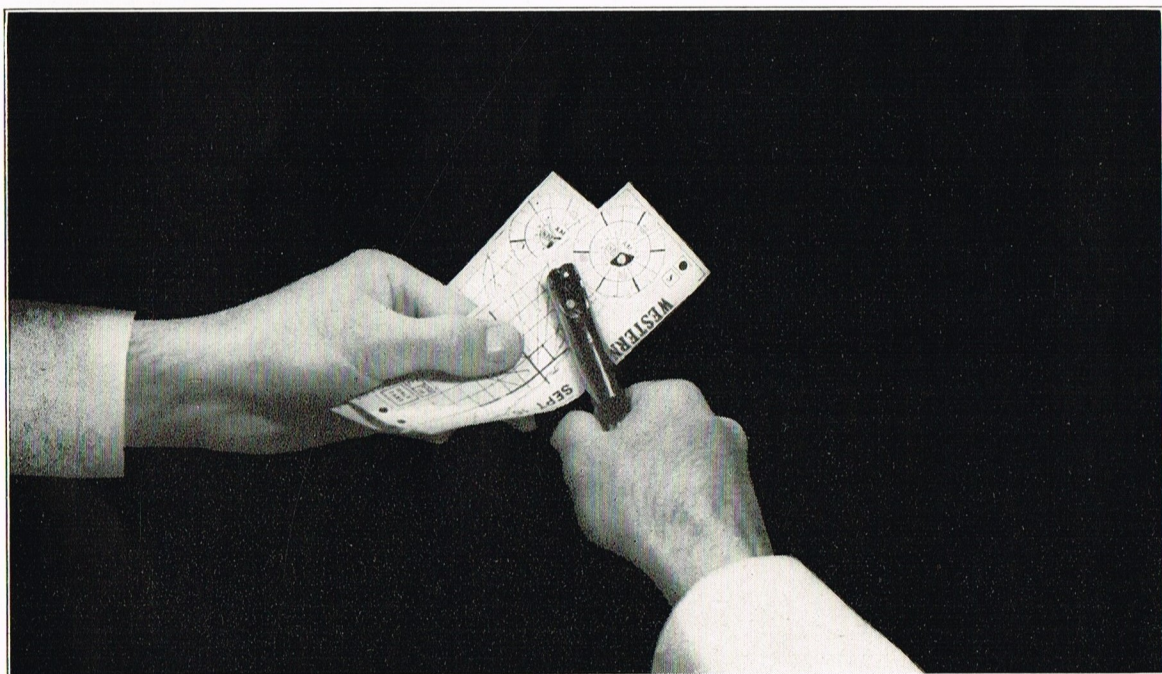
Rough edges around stapleholes should be removed as shown.



Proper method of holding and issuing transfers between transfer points.
Most cash fare transfers are issued between car line intersections.



When receiving transfers at car or bus line intersections, the cash fare transfers should be held in the position shown above so as to leave the thumb and first finger free to handle the transfers presented by passengers.



Proper method of holding both the supply of cash fare transfers (between the first and second fingers) and the transfers offered as fare (between the thumb and first finger).



Proper method of holding punch (at right angles with the side of the transfer) when punch marking the line of zones between 3000 and 4500 west.

C. H. EVENSON,
Supt. Transportation.

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