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ABSTRACT

It is proposed that the University of California and the California State University and College system cooperate in the development of a compatible machine-readable library patron card or badge that would meet the requirements of campuses in both systems. For discussion purposes, this report suggests the basic features to be included in such a card. As to physical characteristics, the card should be designed to be compatible with a wide variety of available badge reader/transactor equipment. As to contents, the card should include the following machine-readable elements: borrower I. D. number (Social Security number when available), borrower status code, and campus code. A campus coding scheme is suggested. Borrower name, borrower status code, university or college (including campus) name, and validation or expiration date should be human-readable. Signing of the card should be accomplished as part of the card preparation process; inclusion of photograph could be left to local option. The back of the card should carry condition governing its use, as well as campus administrative information. (Author)

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Proposal for a  
University of California/California State University and Colleges  
Inter-Segmental Machine-Readable Library Patron Card

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2. Present UC systemwide badge guidelines. "Preparation Guidelines for Permanent Identification or Service Cards" (bulletin G-31). University of California, Office of Business and Finance, April 15, 1970.
3. Excerpt from UCLA. "Background Material: Supplement to Proposal for Machine-Readable Library Cards." Prepared by Anthony Hall, Dorothy Palazzola, et. al. March 15, 1972 (Proposal) and September 15, 1972 (Supplement).
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## ABSTRACT

It is proposed that the University of California (UC) and the California State University and College (CSUC) systems cooperate in the development of a compatible machine-readable library patron card or badge that would meet the requirements of campuses in both systems. For discussion purposes, this report suggests the basic features to be included in such a card.

As to physical characteristics, the card should be designed to be compatible with a wide variety of available badge reader/transactor equipment. As to contents, the card should include the following machine-readable elements: borrower I.D. number (Social Security number when available), borrower status code, and campus code. A campus coding scheme is suggested. Borrower name, borrower status code, university or college (including campus) name, and validation or expiration date should be human-readable. Signing of the card should be accomplished as part of the card preparation process; inclusion of photograph could be left to local option.

The back of the card should carry conditions governing its use, as well as campus administrative information, including statements regarding the following: non-transferability; when to be carried and to whom shown upon request; what to do in case of loss; what to do when the card expires or when university or college status is terminated.

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## I. BACKGROUND

The Library Systems Project (LSP) of the California State University and College (CSUC) system has recently decided to begin the implementation of circulation control at its 19 campuses as one of the first modules in its automation effort. Likewise, the University of California's Library Automation Program (LAP) is interested in developing automated circulation control for the 9 campuses in the UC library system. UC and CSUC are both interested in finding solutions that are transferable to each of the campuses within their own systems. In addition, this common interest provides an important opportunity for cooperation between these two segments of the California System of Higher Education.

This study was begun as part of a Design Seminar conducted in the School of Librarianship at the University of California, Berkeley, under the direction of Professors R. Swank, M. Cooper, and C. Bourne. The Institute of Library Research at the University of California, Berkeley, provided continuing support.



## II. OBJECTIVES

Intersegmental cooperation means, to a certain extent, intersegmental standardization. Specifically, in the area of automated circulation control, it means standardization of some specifications for transactor equipment, book cards, and library cards or patron badges. This study focused on the machine-readable library patron card.

The purpose of this report is to show how, in terms of badge requirements, the two systems relate to each other and to standards in the field; and to suggest a preliminary intercampus and intersegmental standard that might serve as a focal point for continuing discussion.

### III. METHOD OF APPROACH

The first task was to identify the major design variables and to review, within this framework, a) the system requirements or specifications for both the UC and CSUC systems, b) particular campus requirements (necessary in the event that these were not developed consistently with the systemwide requirements), and c) national or industry-wide standards.

The badge requirements for the CSUC system are set forth in considerable detail in various documents and correspondence from the Office of the Chancellor, CSUC (pertinent copies attached, Appendix 1). Since the CSUC campuses are developing this project on a coordinated basis through a central LSP office, no attempt was made to contact individual CSUC campuses to discover if there were any local specifications not consistent with systemwide requirements.

The UC system guidelines are set forth briefly in "Preparation Guidelines for Permanent Identification or Service Cards" (Bulletin no. G-31 from the Office of Business and Finance, April 15, 1970; copy attached, Appendix 2). The currency of this document was verified in June 1973 by the Office of Business and Finance. Note that these are guidelines, not specifications, and thus are much less specific and less detailed than the CSUC requirements. Moreover, UC has not developed these guidelines with any comparable degree of coordination among its several campuses. For this reason, additional checks for local refinements were made with the Library Systems Office at UC Berkeley (which has not developed any refinements of the system guidelines), the Systems Department of the University Research Library at UCLA (see Appendix 3, "Background Material: Supplement to Proposal for Machine-Readable Library Cards"), and the Systems Office of the Main Library at UC Davis (see Appendix 4, note of 6/1/73 from E. Jestes).

There are national standards for credit cards ("American National Standard: Specifications for Credit Cards," New York: American National Standards Institute, 1971), and industry-wide standards for Hollerith card punching (Electronic Industries Association Std. RS-292). But so far as is known, no such standards exist for machine-readable library patron or data collection cards. Nevertheless, there are certain unofficial or practical standards which are determined by available badge reader equipment. Appendix 5 contains a summary of various vendor requirements.

Table 1 summarizes what we currently know about a) UC and CSUC system requirements, and b) particular campus requirements. An "x" indicates merely the existence of a requirement; otherwise, specifications are spelled out. Table 1 also summarizes the features of the proposed intersegmental card; supporting information is given later in the section on DESIGN OF THE CARD.

Two variables which are not fully described in Table 1 are a) Borrower

status code, and b) Campus code. Table 1 shows only that the UC system, UCLA, and CSUC all make some provision for Borrower status code, and that UCLA and CSUC make some provision for Campus code in their respective badge specifications. UC has also developed an official list of campus codes (Appendix 6), although it is not part of the system guidelines for I.D. cards. Berkeley, Davis, Santa Cruz, and UCSF have all developed local lists of borrower status codes (Appendices 7-10). Not surprisingly, there is considerable variation between system and campus. Tables 2 and 3 summarize the current situation with regard to Borrower status and Campus codes.

Table 1

Comparison of Various Design Specifications for a Machine-Readable Library Card

<u>Physical Characteristics</u>	<u>UC (system)<sup>1</sup></u>	<u>UCLA<sup>2</sup></u>	<u>UC Davis<sup>3</sup></u>	<u>CSUC<sup>4</sup></u>	<u>Proposed Intersegmental Standard</u>
Material	polyvinylchloride plastic	clear polyester film with plastic insert		no paper lamination	polyvinylchloride or polyvinylacetate plastics
Paper insert		see above		no	yes, if plasticized
Card size	2.125 x 3.375 in. or 2.328 x 3.250 in.	2.328 x 3.250 in.		2.328 x 3.250	2.328 x 3.250
Card thickness	not less than .024 nor greater than .035 in. (excl. embossing)	max. overall .035 (excl. embossing)			.030 in. (excl. embossing)
Overall thickness				max. overall .045 in. (incl. embossing)	not greater than .048 in. (incl. embossing, photo, validation)
Card flatness		within .031 in.		.015 in all directions	within .015 in.
Tolerance		sides sq. within .003 in.; sides// within .002 in.		all directions + .005 in.	sides sq. within .003 in.; sides // within .002 in.
Opacity				must be opaque	at least, must not be translucent
Corner cut				yes	
Radius of corner cut				60°	
Guidehole				yes	

Table 1 (con.)

<u>Physical Characteristics</u>	<u>UC (system)</u>	<u>UCLA</u>	<u>UC Davis</u>	<u>CSUC</u>	<u>Proposed Intersegmental Standard</u>
Registration punch					
Encoding	Hollerith punched & embossing	Hollerith punched & printing (computer)		Hollerith punched. required; emboss. optional	
Type of punched holes	Hollerith	Hollerith		Hollerith	
Columns of punched data	10	11		12 alphanumeric	at least 14 numeric
Embossing	yes	no		optional	
Tippling					
Embossed fonts/ type styles	Farrington 7b (numbers) sans-serif (alphabetic)				OCR size C (numeric) Farrington 7B (alphanumeric), 7 or 10 ch./ inch
Data (punched) area & embossed area				cannot overlap	cannot overlap
Validation devices		pressure sensitive self-destructing sticker			together with card itself cannot exceed overall thickness of .048 in.
Finish					matte (entire) or clear (smooth) with matte signature panel
Signature	x	back of card		location optional	x

Table 1 (ccn.)

Proposed  
Intersegmental  
Standard

<u>Physical Characteristics</u>	<u>UC (system)</u>	<u>UCLA</u>	<u>UC Davis</u>	<u>CSUC</u>	<u>Proposed Intersegmental Standard</u>
Photograph	optional; cannot interfere w/ embossing		x	optional, not larger than 1-1/4 sq. in.	
Loop				optional	no
<u>Card Contents</u>					
Borrower name (human-readable)	x	x	x	x	x
Borrower name (machine-readable)	x	x	x	x	x
Signature	x	x		x	x
Borrower I.D. no. (human-readable)		x			
Borrower I.D. no. (machine-readable)	SSN	SSN	x	SSN	SSN
Check digit					
Borrower status code (human-readable)		x			x
Borrower status code (machine-readable)	x	x	x	x	x
University or college (incl. campus) name (human-readable)	x	x	x	x	x

Table 1 (con.)

Card Contents	UC (system)	UCLA	UC Davis	CSUC	Proposed Intersegmental Standard
Campus code (machine-readable)		x		x	x
Validation/Expiration date (human-readable)	x	x		x	x
Validation/Expiration date (machine-readable)			x		
Statements on back of card governing its use (i.e., non-transferability; when to be carried, and to whom shown; what to do in case of loss; what to do when card expires)	x	x [except for "what to do when card expires"]			x

Sources

- 1 See Appendix 2, California. University. Director of Business Services, Offices of Vice President for Business and Finance. "Preparation Guidelines for Permanent Identification or Service Cards." (Bulletin G-31, File Reference 265-20-8) April 15, 1970.
- 2 See Appendix 3, UCLA. "Background Material: Supplement to Proposal for Machine-Readable Library Cards. Prepared by Anthony Hall, Dorothy Palazzola, et. al. March 15, 1972 (Proposal) and September 15, 1972 (Supplement).
- 3 See Appendix 4, note of June 1, 1973 from Ed Jestes.
- 4 See Appendix 1, Various documents and correspondence from the Office of the Chancellor, CSUC, especially California State University and Colleges. Division of Information Systems, Office of the Chancellor. "Request for Proposal for Library Circulation Control Transactors for the California State University and Colleges, 26 March 1973." 1973.

Table 2

Comparison of Borrower Status Codes

<u>Type of Charge</u>	<u>CSUC</u>	<u>UCLA<sup>2</sup></u>	<u>UC Berkeley<sup>3</sup></u>	<u>UC Davis<sup>4</sup></u>	<u>UC Santa Cruz<sup>5</sup></u>	<u>UCSF<sup>6</sup></u>
PERSONAL	0	60 Academic (UCLA) 80 Academic (Other UC)	1 Faculty 70 Faculty other UC: Hastings 71 Faculty other UC: Davis 72 Faculty other UC: Irvine 73 Faculty other UC: Los Angeles 74 Faculty other UC: Riverside 75 Faculty other UC: San Diego 76 Faculty other UC: San Francisco 77 Faculty other UC: Santa Barbara 78 Faculty other UC: Santa Cruz 79 Faculty other UC: Stanford [sic] 61 Associate: Faculty out of state colleges 83 Special: out-of-state Visiting Faculty	Extended	Faculty	
	1 Undergrad.	01 State College Faculty (courtesy) 02 Other College & Univ. Faculty (courtesy)				
	5 Graduate	10 Undergraduate 00 Undergraduate (other UC) 30 Graduate (UCLA) 20 Doctoral Candidate 50 Graduate (other UC)				
	9 Campus employ-ee (other than faculty)	90 Staff (UCLA)				
7 Extension		40 Extension				
8 Courtesy Libr. Card Holder		70 Courtesy (All Other)				
			2 Extended--Library Employees 31 Extended--other than library: Faculty spouse 32 Extended--other than library: LFL			
			5 General borrowers 51 General--Public Health (State Dept. of) 4 Student other UC			
				Undergraduate	Undergraduate	
				Graduate	Graduate	
					UCSC Staff	
			80 Special: non-fee borrower not otherwise classed 81 Special: Alumni	Summer Session Associate	Courtesy	



Table 2 (con.)

Type of Charge	CSUC	UCLA	UC Berkeley	UC Davis	UC Santa Cruz	UCSF
PERSONAL (con.)						
			82 Special: LRL (Berkeley & Livermore)			
			84 Special: US Gov't Borrowers			
			85 Special: Local & State Govt.-- without fee			
			99 Special: GTU students			
	03 Fee: Company		86 Special: Local & State Govt. --with fee	Special (fee card) Special		
	04 Fee: Individual		88 Special: Business & Industry			
			87 Special: students (mostly other colleges)			
			89 Special: fee borrowers not otherwise classified			
NON-PERSONAL:	05 Reference		09 Reference borrowers			
External	06 Interlibrary Loan					
Departmental	15 Graduate Reserve Service					
	25 Reserve Section, College Library					
	35 Reference Dept.					
	45 Branch Libraries and Other Dept. charges					
Internal	17 Bindery prep.					
	27 Technical Services Dept.					
	37 Los & Billed--Replacement					
	47 Searching--Replacement					
	57 Hold Shelf					
	67 ERBC, Marking, Brittle Books, Withdrawn, Relisted					
	77 Non-Circ. Reading Room					
	87 Post Cataloging					

Table 2 (con.)

Sources

<sup>1</sup>See Appendix 1-a, Section VII, Attachment A, p.3, "Uniform General Specifications for Campus Activity (ID) Cards."

<sup>2</sup>See Appendix 3, "Content Requirements of MRLC."

<sup>3</sup>See Appendix 7, Present UCB borrower status and departmental codes.

<sup>4</sup>See Appendix 8, UC Davis borrower status codes.

<sup>5</sup>See Appendix 9, UC Santa Cruz borrower status codes.

<sup>6</sup>Too extensive to fit within the Table. For list of codes, see Appendix 10, UCSF borrower status codes.

Table 3

Comparison of Systemwide Campus Codes

<u>Code</u>	<u>UC</u> <sup>1</sup>	<u>CSUC</u> <sup>2</sup>
00	All campuses	
01	Berkeley	Library Systems Project
02	San Francisco	
03	Davis	
04	Los Angeles	
05	Riverside	Hayward
06	San Diego	
07	Santa Cruz	
08	Santa Barbara	
09	Irvine	
10		Pomona
15		San Luis Obispo
20		Chico
21	Lawrence Radiation Lab (Berkeley and Livermore)	
22	Los Alamos	
23	Gen-12	
25		Fresno
30		Humboldt
35		Bakersfield
40		Long Beach
45		Los Angeles
50		Fullerton
55		Dominguez Hills
60		Sacramento
63		San Bernardino
65		San Diego
70		Northridge
75		San Francisco
80		San Jose
85		Sonoma
90		Stanislaus

Sources

<sup>1</sup> See Appendix 6, UC system campus code scheme.

<sup>2</sup> See Appendix 1-c, "3 System Identification."

#### IV. DESIGN OF THE CARD

##### A. PHYSICAL CHARACTERISTICS

As to physical characteristics, the following specifications are proposed for an intercampus or intersegmental card.

1. Material. Recommended: polyvinyl-chloride plastic.

Polyvinyl-chloride refers to a general family of plastics widely used in the manufacture of credit and data collection cards. Within this family, there is a variety of acceptable materials, such as Bakelite R polyvinyl-chloride 3603.

2. Insert. Recommended: plasticized paper.

A plasticized paper insert is recommended because it leaves the designer with control over a considerable amount of the art work. For example, it makes possible the printing of much information on front and back, the use of multi-colored inks, and the inclusion of a photograph. The use of a plasticized paper insert is thought to reduce the possibility of swelling and resultant warpage (see Table 1 for the CSUC requirement on this point).

3. Card size. Recommended: 2.328 inches by 3.250 inches.

This is the (unofficial) standard size for data collection cards or patron badges. So far as is known, all current badge readers (e.g., MDS, IBM, AMP, Hickok, and Standard Register) accept this size card. A few readers (e.g., AMP and Standard Register) will also accept the standard credit card size (2.125 inches by 3.375 inches).

4. Card thickness. Recommended: 0.030 inches (excluding embossing).

This nominal value is well within the stated requirements of UC system, UCLA, and CSUC, and should fit most transactors. This dimension provides a card of suitable thickness and sturdiness for library use. The recommended overall thickness should not be greater than 0.048 inches; this includes embossing (see 15 below), photograph (see 22 below), and validation labels (see 19 below).

5. Card flatness. Recommended: within 0.015 inches.

This specification is stricter than the UCLA requirement, but is required for compatibility with the greatest number of badge readers.

6. Tolerance. Recommended: sides square within 0.003 inches; sides parallel within 0.002 inches.

Again, the strictest requirement here means the greatest compati-

bility with various equipment requirements.

7. Opacity. Recommended: must not be translucent.

CSUC requires that the card "must be opaque and not introduce 'prisms' due to clear areas surrounding punches" (see "13. Punched holes," below). However, "must not be translucent" is probably sufficient for most badge readers.

8. Corner cut. No recommendation.

Few badge readers (Standard Register is one) actually require a corner cut for correct insertion of the badge.

9. Radius of corner cut. No recommendation.

Different radii are possible; e.g., 3/8 inch (30/60° angle) and 5/16 inch (45° angle). If the card should have a corner cut, its radius should be such as to fit the greatest number of badge readers.

10. Guidehole. Not recommended.

The guidehole is a means of locating the plastic card in the terminal. Though a small number of currently available badge readers (IBM is one) actually require a guidehole, it represents a considerable disadvantage to the system because of the resulting loss of Hollerith coding capacity.

However, if the card should have a guidehole, and if data are to be encoded by means of Hollerith punched holes, then it is suggested that the guidehole be placed in the zone-punch area (as shown in Figure 1). This placement, though it rules out a photograph, is necessary so that numeric punches may be made in columns 9-12 of the badge (see below, "14. Columns of punched data," and further, under "B. CARD CONTENTS").

11. Registration punch. No recommendation.

The registration punch is used for aligning the card in the reading head. It is not known which badge readers, if any, require this.

12. Encoding: No recommendation.

There are three principal ways of encoding machine-readable data for badges: by means of punched holes; embossing for imprinters for optical character or bar code readers; and magnetic coding.

13. Punched holes. Recommended: if punched holes, then Hollerith punching.

The three major types of hole punching schemes presently used in this country are Hollerith (associated with most data processing systems), Kimball (associated with some retail sales applications), and AUDAC

(associated with automatic telephone dialers). Note that on the matter of Hollerith punched holes, there are industry-wide standards (EIS Std. RS-292).

14. Columns of punched data. Recommended: 14.

If punched holes are preferred as the encoding mode, provision must be made to encode at least 13 characters. This number is required for a 9-digit Social Security or borrower I.D. number, a 2-digit borrower status code, and at least a 2-digit campus code (see below under "B. CARD CONTENTS"). Allowance should be made for an additional contingency character. For position of punched data, see "18. Punched data area and embossing area," and Figure 1.

15. Embossing. No recommendation.

Embossing is a pressure-forming action which requires a card thickness of at least 0.020 inches (see above, "4. Card thickness"). Note that the overall thickness of the card (see above "4. Card thickness"), including the height or thickness of the embossed characters, cannot exceed 0.048 inches. See also "18. Punched data area and embossing area," and Figure 1.

16. Tipping. No recommendation.

Tipping is a process which improves the visibility of the embossed numbers or letters.

17. Embossed fonts/type styles. Recommended: if information is embossed, it should be in OCR Size C (numeric) or Farrington 7B (alpha-numeric), 10 characters per inch or 7 characters per inch.

If embossing is preferred as the mode of encoding, the use of these types will, as noted in the UC guidelines (Appendix 2), "promote compatibility with optical character reading systems as well as insuring a legible imprinting capability."

18. Punched data area and embossing area. Recommendation: no overlap.

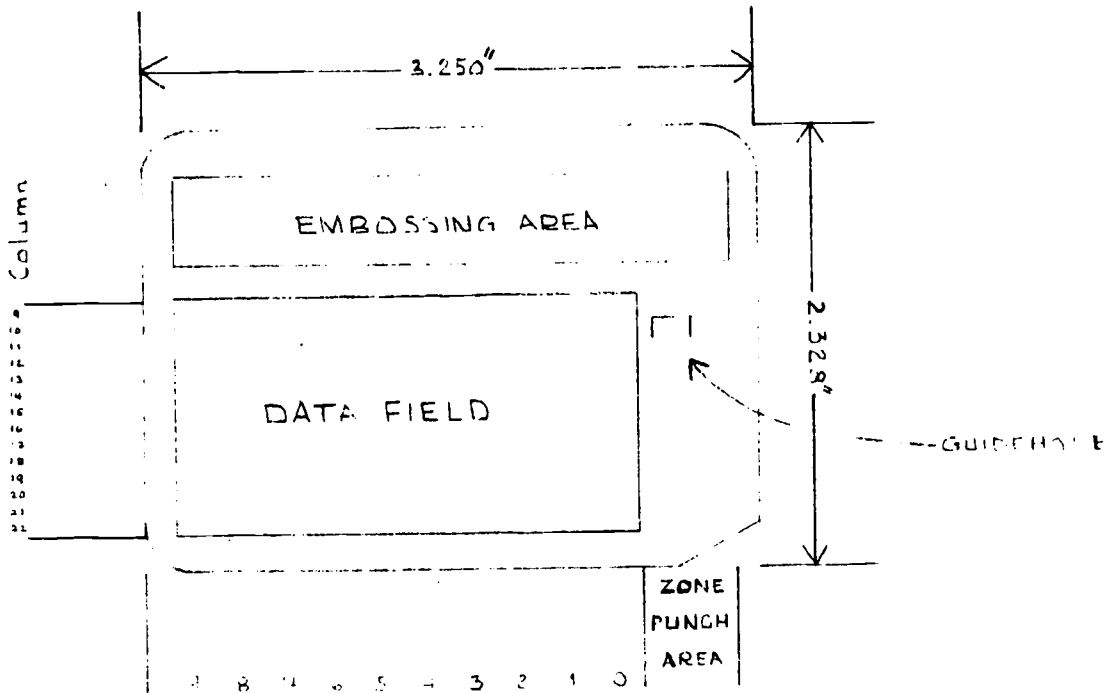
This is a common equipment requirement. Figure 1 shows how the data and embossing areas might be placed.

19. Validation "devices." Recommended: overall thickness of the card, including validation "devices," should not exceed 0.048 inches.

The figure 0.048 inches represents the lowest common denominator of known manufacturers' maximum card thickness requirements [including embossing, photo insert, validation "devices" (e.g., adhesive labels)].

Figure 1

Illustration of Proposed Library Card  
Showing Relative Positions of  
Data Field, Embossing Area, and Guidehole and/or Corner Cut



20. Finish. Recommended: matte (entire card) or clear (smooth) with matte signature panel.

The possibilities are clear (smooth), matte, or clear with matte signature panel. See "21. Signature," below.

21. Signature. Recommended: in permanent ink.

For a signature to be affixed to the card, there must either be a matte signature panel, or the entire card must have a matte finish that will accept permanent pen inks.

22. Photograph. No recommendation.

Inclusion of a photograph makes the card expensive. To illustrate some typical costs, Los Angeles Public Library will be ordering large quantities (about 1 to 1.5 million) of a rather stripped-down version of a card (pre-punched/embossed data in serial number order, without signature panel, and without photograph) at an expected cost of approximately \$0.05 to \$0.07 per card. Addition of a photograph would raise the cost to the level of \$0.50 to \$0.75 per card.

23. Loop. Not recommended.

This is a fastening device used to clip the badge on to the clothing; it requires a slit in the card--which, for library applications, would be an unnecessary additional production cost.

## B. CARD CONTENTS

Among the variables listed under the general rubric "Card Contents" in Table 1, the following are necessary for adequate patron identification: borrower name and signature, borrower I.D. number, borrower status code, and validation or expiration date. The notion of intercampus and intersegmental applicability requires, additionally, the university or college name and campus code. Some of this information should be machine-readable, and some should be human-readable. Table 4 shows the various data elements of the proposed card broken down by mode of readability.

1. Borrower name. Recommended: in human-readable form.

Borrower name in human-readable form will be useful for visual identification purposes. It would not be necessary to have borrower name encoded in machine-readable form so long as it was already available on a name-and-address file stored on magnetic tape.

2. Signature. Recommended: in human-readable form.

Signature and borrower name (human-readable) would serve the same purpose of visual identification, with each backing up or verifying the other.



Table 4

Data Elements of Proposed Card By Readability

<u>Data Elements</u>	<u>Machine-Readable</u>	<u>Human-Readable</u>
Borrower name		x
Signature		x
Borrower I.D. number	9 digits	
Borrower status code	2 digits	2 digits
University or college name		x
Campus code	2 digits	
Validation/Expiration date		x
Conditions governing use, etc.		x

3. Borrower I.D. Number. Recommended: 9 digit Social Security number in machine-readable form only.

CSUC, UC system, and UCLA all prefer the Social Security number (SSN) for use as the borrower I.D. number. Indeed, this number offers the not inconsiderable advantages that it is both ready-made and unique. Moreover, UC student, faculty, and staff records are now being converted to Social Security numbers; for students, the conversion is almost complete. The SSN, however, does have certain disadvantages: for one, the SSN does not contain a check digit (see below, under 4); secondly, one sometimes hears the objection that use of the SSN represents a threat to the security/confidentiality of user data, which are thought to be more accessible to unauthorized users when based on Social Security numbers. In fact, however, the security of user data does not depend upon the form of access to the machine file, but rather depends upon effective policy to safeguard the privacy of that data. CSUC has enumerated the main points of such a policy in their "Feasibility Study and Implementation Plan for a Library Circulation Control Transactor for the 19 Campus Libraries" (November 1972; excerpt attached in Appendix 1-d). And in the event that any individuals might still object to this use of their Social Security numbers, pseudo- or dummy-numbers could be assigned to them, as would be done for firms, branch libraries, and campus and library departments.

Borrower I.D. number would not be required in human-readable form.

4. Check digit. No recommendation.

The check digit is a useful error detection device that could be added to the Social Security number, but this would require the use of another column of data.

5. Borrower status code. Recommended: 2 digit number in both human-readable and machine-readable form.

If the borrower status code were in machine-readable form, various loan periods (corresponding to different borrower categories) could be set automatically by the transactor. A human-readable borrower status code might serve additional visual identification purposes; e.g., when stack access is limited to a particular type or types of borrower.

Table 2 showed considerable dissimilarity between existing borrower status codes at UCB, UCLA, and CSUC. Table 5 attempts to build on their points of agreement, and is offered here as a possible scheme that would meet all intercampus and intersegmental requirements.

6. University or college (including campus) name. Recommended: in human-readable form.

The university or college (including campus, as University of California, Berkeley, or California State University at San Jose) name in human-readable form (as in a seal, for example) would be useful for

Table 5

Proposed Intersegmental Standard Borrower Status Coding Scheme

Type of Charge

PERSONAL	00 Academic (local)
	01 Academic (other UC or CSUC)
	02 Other college & university academic (Courtesy)
	10 Undergraduate (local)
	11 Undergraduate (other UC or CSUC)
	20 Graduate (local)
	21 Graduate (other UC or CSUC)
	30 Campus employee (non-academic)
	40 Extension
	50 Courtesy (non-fee): Alumni
	51 Courtesy (non-fee): Federal government borrowers
	52 Courtesy (non-fee): Local and State government borrowers
	53 Courtesy (non-fee): Non-fee borrowers not otherwise classified
	60 Special (fee): Local and state government borrowers
	61 Special (fee): Business and Industry
	62 Special (fee): Fee borrowers not otherwise classified
NON-PERSONAL	
External	70 Interlibrary loan
Departmental	80 Branch libraries and other departmental charges; other local determination
Internal	90 Local determination

visual identification purposes, particularly in intercampus and inter-segmental applications.

7. Campus code. Recommended: 2 digit number in machine-readable form.

As shown in Table 3, the UC standard campus coding scheme conflicts on two points (the codes 01 and 05) with the CSUC scheme. No specific remedy is proposed here, but it would be a simple matter to assign codes that would meet present intersegmental requirements and still leave a considerable number of slots available for expansion. This would support the possibility of bringing in affiliated schools (e.g., UC affiliates Hastings and San Francisco Art Institute), and members of local consortia. If the decision were taken to include the California community colleges in a statewide cooperative system, a 3 digit field would be required.

8. Photograph. No recommendation.

This might be ruled out by either guidehole or cost considerations; or this could be left to local option. See above, A. 22.

9. Validation or expiration date. Recommended: some device in human-readable form.

A machine-readable validation or expiration date would require the re-issuing of a card every time it expired (quarterly, or every semester). UCLA has reviewed the possibilities of human-readable validation devices, and suggests in its "Background Material: Supplement to Proposal for Machine-Readable Library Cards," (March 15 and September 15, 1972, pp. 10-11) the feasibility of a pressure-sensitive label with the expiration month and year imprinted with permanent ink. Neither can the ink be erased, nor the label removed, without showing evidence of tampering. However, if complete insertion of the card into the terminal should be necessary, then these labels or stickers could be affixed one on top of another only to the point where the overall thickness of the card did not exceed 0.048 inches (see above, A. 4.)

10. Conditions governing use of the card

It is recommended that the back of the card should carry conditions governing its use, as well as campus administration information, and statements regarding the following: non-transferability, when to be carried and to whom shown upon request, what to do in case of loss, and what to do when the card expires or when university or college status is terminated.