## Modeling Postal History with Postal Numbers



## Diane DeBlois \& Robert Dalton Harris

## Post Offices, Rensselaer County, New York



Extinction of early offices by RFD ca1900

Mrenssemater Co,


Early persistent offices likely to be township centers

## Gross Revenues $=$ PM Compensation + Net Postage


1841.

EXECUTIVE.
*105

| Post Offices. | Counties. | Postmasters. | Compen- <br> sation. | $\begin{gathered} \text { Nett } \\ \text { proceeds. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Ulsterville |  | Samuel Allen........ | $\begin{gathered} \text { Dol.ets. } \overline{\mathrm{D}} \\ 3866 \end{gathered}$ | Dol. cts. 5577 |
| Unadilla | , | J. Hayes, to May 14, 1841 <br> A. D. Williams | 24251 | 16176 |
| Unadilla Centre. | Otseg | E. Gregory | $\begin{array}{ll}18 & 69 \\ 44 & 05\end{array}$ | $\begin{aligned} & 3474 \\ & 77 \quad 37 \end{aligned}$ |
| Unadilla Forks | Otseg | H. | 4778 | 15186 |
| Union Cor | Livingston | Levi Robinso | 3483 | 6060 |
| Union Ellery | Chautauque. | Orin Bendict. | 3826 |  |
| Union Falls. | Clinton.... | Henry Frize | 1139 |  |
| Union Mills | Fulto | Joseph Mars |  |  |
| Union Society | Green | Hiram Fox |  |  |
| Union Springs | Cayug |  |  |  |
| Union Squar |  | A. Skinner.. Cyrus Salisbu |  |  |
| Union Villag |  | J.A.Smith,to Decem- |  |  |
| Union | O | ber 31, 1840...... <br> L. L. Smith. . . . . . . . | 2832 |  |
| Upper Aqueliogue | 84 | Bartlett Grifing, | 1610 <br> 38 <br> 8 |  |
| Upper Lisle.... |  | George Iyle Cholw | 7688 | 11086 |
| Cpper Had llook |  |  | 14677 | 29766 |
| Utica. |  | A. G. Dauby | 149480 | 1111105 |
| Uxbridg | Montgomery. | J. P. Jone |  |  |
| $V$ alatic | Colu | J. Vanderp | 15062 | 27945 |
| Valonia Springs. | Broo | Lucian Stowell..... <br> H. R. Dow, to Sep |  |  |
| Van Bure | Onondaga.. | tember 1, 1840.... <br> J. Earll. ............ | 2678 | 4915 5979 |
| Van Buren Centre | Onondaga... | Jonathan Skinner.. | 2971 869 | 5972 1659 |
| $V$ an Buren Harbor | $r$ Chautauque | G. C. Osbour | 869 673 | - 1056 |
| Van Burenville Vandermark... | Orange... | J. B. Everett.. | 165 | - 282 |
| Van Ettenville | Chemung | James Van Etto | 1778 | 8 3193 |
| Van Hornsville | Herkimer. | D. Van Horn . . . . . . . <br> C. E. Strouse, to Sep- | . $\begin{array}{r}39 \\ \hline 14\end{array}$ | $4 \quad 6594$ |
| Varic | Seneca ... | tember $30,1840 \ldots$. <br> J. Y. Gambee . | 20.72 | 4159 |
| Varna | Tompkins ... | . William Scutt, 2 | 55.86 |  |
| Varysburg | Genesec..... | J. C. Salisbury........ Peter Price, to June |  |  |
| Venice | Cayug | 18, 1841........... <br> E. W. Bateman. | 45. |  |
| Verbank. | Dutchess. | John G. Greene ... | 24 <br> 35 <br> 17 | 7 4690 <br> 8863  |
| Vermont | Chautauque | Charles P. | 1318 | 8 - 2448 |
|  |  | J. W. Jenkins | 27177 | 757873 |
| Vernon |  | Hiram Cody | ${ }^{41} 60$ | ( 816743 |
| Verona. |  | George T. Peckham.. |  |  |
|  | *14 |  |  |  |

Gross Revenues, Rensselaer County Townships 1841-1869
\% at right indicates rates of growth

## Postal Route Contracts were let every 4 years

[ Doc. No. 139.]
South Voluntown, to be supplied from Voluntown; 5 miles, and back, once a week

STATE OF NEW YORK.
"Proposals for carrying the mails of the United States from the 1st of July, 1837, to the 30th June, 1841, inclusive, on the following post routes in New York, will be received at this Deparst day of said month." May nest, inclusive ; to be decided on the 31st day of 23 of January, 1837.]

ROUTE No. 501.
From New York, by West Point, Newburg, Hamptonburg, PoughFrom Hark, Tivoli, Catskill, Hudson, Coxsackie, Stuyvesant, and Albany, to Troy ; 152 miles, and back, daily, in steamboats, during the season of navigation.
Leave New York every day at $5 \mathrm{p} . \mathrm{m}$. ; arrive at Troy next day by 7 a. $m$.

Leave Troy every day at $4 \mathrm{p} . \mathrm{m}$. ; arrive at New York next day by 6
a. m .

Proposals for running twice daily will be considered.
Bidders' names.
sums per annum, according
to the terms contained in
foregoing advertisement.
oregoing advertisement. a combined; (not two

James Raymond,
James Raymond, James A. Stevens, daily.)

$$
\text { 31,500. Received since } 10 \text { th May. }
$$

15,000; Rwice daily, (once to part of the 15,000 ; twice daily, (once to part of the Hudson River Steamboat Association : River Steamboat Association of twice daily, during to Newburg, Poughsteamboat, to Newburg, Poughkeepsie, Catskill, Hudson, Albany, and Troy; and once daily to all the other offices named: the company to determine by which line to supply the sman wlices ; and after the election, not再 to change durs the
both limes for the season.
28th July, 1837. - The Postmaster General orders that a contract for this route be made with A.
rity. (See files.) A. K.

## ROUTE No. 502.

From New York, by Yonkers, Dobb's ferry, Tarrytown. Sing Sing, rtlandtown, Peekskill, Wappinger's creek, Ponghkeepsie, Hyde Park, Staatsburg, Rhinebeck, Red Hook, Upper Red Hook, Clermont, Livingston, Hudson, Columbiaville, Kinderhook, Valatie, South Schodack, Schodack centre, and Greenbush, to Albany ; 152 miles, and back, daily, in our-horse post-coaches during the suspension of steambrat navigationsay from the 15 th of December to the 1st of April, in each year.
ay from the 15 th of December to the a . ; arrive at Albany next day by
4 p. m.
Leave Albany every day at $6 \mathrm{a}, \mathrm{m}$. ; arrive at New York next day by 2 p . m.

Sums per annum, according to the terms contained in foregoing advertisement
(See also page 204.)
James Raymond, (see No. 1,) combined bid.
Charles Phelps, - $\quad 14,000$; or $\$ 13,000$, taking two hours
Leonard V. Reed, Leonard V. Reed,
J. J. Yates \& Co.

10,490
E. Whalin,

11,000
Baker \& Walker, Smith \& Miller,
and L. V. \& J. B. Reed, 15,$000 ;$ or $\$ 14,000$, two hours' extension. Eratus Beach, - $9,000$. (Beach is the lowest bidder, according to advertisement, on 503, 536, and 537.) Accepted May 31, 1837, with consolidation of 503,536 , and 537 . Under this number to run from 15 th of December to 15 th of April, at $\$ 9,375$; and from April to 15 th December, at $\$ 5,115$, tri-weekly. To be paid each quarter, according to paid each quarter, according to service rendered lowed in addition, for winter service.
John Butterfield, James Raymond, (see 501) Baker \& Walker,

## 10,400

8,500. (Received since May 10th.) 12,000 , and furnish mail-guard ; or $\$ 11,000$, time extended.

At the request of Erastus Beach, Augustus Morgan and C. L. Beach are united with him in the contract
Contract with Beach, Morgan, and Beach, dated 18 th August, 1837, at $\$ 14.490$ : to commence 1st July, 1837 ; to expire 30th June, 1841. (For schedule, see No. 503.)

## Postal Routes \& Postal Revenues by Township



Townships of Rensselear County: Gross Postal Revenues



Postal routes in 1839 frame postal revenues 1841 to 1869

## Postal Routes \& Post Office Revenues



Snapshot, Monroe County, 1839

## Serial Order of Postal Contracts Reveals Recursive Branching.

ROUTE No. 513.
From Newburg, (501) by Coldenham, Montgomery, Bullville, Bloomingburg, Wurtsboro', Gales, Monticello, White Lake, Bethel, Fosterdale, Cochecton, Damascus, Penn., Rileyville, Pleasant Mount, Dimocksville, Gibson, New Milford, Great Bend, Conklin, N. Y., Binghampton, Union, and Campville, to Owego ; 14.3 miles, and back, daily, in four-horse postcoaches.

Leave Newburg every day at 3 a. m.; arrive at $O$ wego next days by $8 \mathrm{p} . \mathrm{m}$, and in winter by 12 m. , next day after.
Leave Owego every day at $4 \mathrm{a} . \mathrm{m}$, and in winter at $2 \mathrm{p} . \mathrm{m}$. preceding day; arrive at Newburg next day by 7 p. m.

Bidders' names. Sums per annum, according to the terms contained in the foregoing advertisement. (See also p. 204.)
Erastus Hathaway, - $\quad \$ 4,500$. Not accepted, because he has heretofore negligently and wilfully failed to perform mail service according to contract. A. K. J. T. Rubinson \& Co. \$10,220. Accepted May 31, 1837.

Contract with J. T. Robinson \& Co. dated 29th July, 1837 : to commence 1st July, 1857; to expire 30th June, 1841.

Earlier tabulations embedded no such ordering.

## Empire State by Design: New York


"Map of New York Exhibiting the Post Offices, Post Roads, Canals, Rail Roads, \&c. by David H. Burr. (Late Topographer to the Post Office.) Geographer to the House of Representatives of the U.S." [1839]

Step 1, New York City (501-540)


## Step 2, Albany (541-621)

Thick black $=$ daily 4 horse postcoach
Thin black $=$ daily not 4 horse postcoach
Thick green $=3 \mathrm{x}$ week 4 horse postcoach
Thin green $=3 \mathrm{x}$ week not 4 horse postcoach
Thick red $=2 \mathrm{x}$ week


## Step $1 \& 2$, New York City \& Albany



Thick black $=$ daily 4 horse postcoach
Thin black $=$ daily not 4 horse postcoach
Thick green $=3 \mathrm{x}$ week 4 horse postcoach
Thin green $=3 \mathrm{x}$ week not 4 horse postcoach
Thick red $=2 \mathrm{x}$ week
Thin red = Once a week

## Steps 1, 2 \& 3, New York City, Albany \& Utica



Step 4, Geneva (726-828)

Thick black $=$ daily 4 horse postcoach
Thin black $=$ daily not 4 horse postcoach Thick green $=3 \mathrm{x}$ week 4 horse postcoach
Thin green $=3 \mathrm{x}$ week not 4 horse postcoach
Thick red $=2 \mathrm{x}$ week
coach


## Steps 1 to 4, New York City, Albany, Utica \& Geneva



## Step 5, Buffalo (829-880)

Thick black $=$ daily 4 horse postcoach
Thin black $=$ daily not 4 horse postcoach
Thick green $=3 \mathrm{x}$ week 4 horse postcoach
Thin green $=3 \mathrm{x}$ week not 4 horse postcoach
Thick red $=2 \mathrm{x}$ week
Thin red = Once a week

## Steps 1 to 5, New York City, Albany, Utica, Geneva \& Buffalo



## Recursive Branching Facilitates Close Scheduling



Postal Route Frequency: Daily


Frequency of mails is a measure of postal connectivity

Postal Route Frequency: 3 Times Weekly


Thick blue $=3 \mathrm{x}$ week 4 horse postcoach
Thin blue $=3 \mathrm{x}$ week not 4 horse postcoach

## Postal Route Frequency: Daily + 3x Weekly



Thick black = daily 4 horse postcoach Thin black $=$ daily not 4 horse postcoach

Thick blue $=3 \mathrm{x}$ week 4 horse postcoach Thin blue $=3 \mathrm{x}$ week not 4 horse postcoach

Postal Route Frequency: Weekly \& Semi-Weekly


Thick red $=2 \mathrm{x}$ week
Thin red $=$ Once a week

## Postal Route Frequencies Statewide



Thick black = daily 4 horse postcoach Thin black $=$ daily not 4 horse postcoach

Thick blue $=3 \mathrm{x}$ week 4 horse postcoach
Thin blue $=3 \mathrm{x}$ week not 4 horse postcoach

Thick red $=2 \mathrm{x}$ week Thin red = Once a week

## Postal Route Classification Promoted Economies of Scale*



Thick black $=1$ st Class daily Thin black $=1$ st Class 3 x week

## Second \& Third Class Postal Routes

Second Class Routes traverse in daylight, out one day 35 miles, back the next, usually thrice weekly in stage wagons. Third Class Routes, farm to market, out in the morning, back in the afternoon, weekly, no more than 20 miles.


## Postal Routes in New York State, All Classes



## Classification of the Railroads for Carrying Mail


#### Abstract

Provided, That, for the conveyance of the mail on any sed. of compensation than is now allowed by law; nor for carrying the mail on any railroad of the second class, a greater compensation than one hundred dollars per mile per annum; nor for carrying the mail on any railroad of the third class, a greater compensation than fifty dollars per mile per annum. And in case the Postmaster General > shall not be able to conclude a contract for carrying the In case a con- marl on any of such railroad routes, at a compensation not tract cannot be exceeding the aforesaid maximum rates, or for what he mailroad, how the may deem a reasonable and fair compensation for the sermail may bo sransmitioda vice to be performed, it shall be lawful for him to separate the letter mail from the residue of the mail, and to contract, either with or withont advertising, for conveying the letter mail over such route, by horse express or otherwise, at the greatest speed that can reasonably be obtained, and also to contract for carrying over such route the residue of the mail, in wagons or otherwise, at a slower rate of speed.


From Law Enacted March 3, 1845.
3 Classes of railroad:
First Class - paid no more than $\$ 300$ per mile per annum
Second Class - no more than $\$ 100$
Third Class - no more than $\$ 50$

## Continental United States



## Balanced Postal Economy: Systematic Growth at 7\% per Annum



## 1830s Revenue Outstripping Expenditures: Postage Reduction Recommended



## Annual Reports, by State, from both the PMG and the Auditor

Table of mail service for the year ending June 30,1855 , as exhibited by the state of the arrangements at the close of the year The entire service and pay are set down to the State under which it is numbered, though extending into other States, instead of being divided among the States in which each portion of it lies.]


[^0]The increase in the cost of coach transporation in Missouri and
ing 532,570 additional in Missouri, and $\$ 16,750$ additional in New Mexico.

For each state, by mode of transportation, miles of post road and giving miles of transportation and expense


# Regional Disparities 




Books join newspapers as mailable matter in 1851; weekly newspapers distributed free in county of publication. Hartford, Connecticut, centered a burgeoning subscription book business.


## Railroad Supercedes Coach as Primary Carrier on First Class Routes



## Network Climax: the Railway Mail System



By 1900, in order to transport printed matter, economies of scale required an aggressive aggregation of the mails


[^0]:    - The Battimore, Wiimington, and Philadelphiar rairrod, is under a Maryland number.

    This embraces the steambout service from Lovisville to © incinnati, and from Lonisville to New Orlean
    This includes the routc from New Orleans to Mobil

