Before the
Federal Communications Commission
Washington, **D.C. 20554**

In the Matter of	)	
	)	
Federal-State Joint Board on	)	
Universal Service	)	CC Docket No. 96-45
	)	

ORDER

Adopted: January **6,2003** Released: January **7,2003**

By the Chief, Wireline Competition Bureau:

I. INTRODUCTION

1. In this Order, we adopt the Delphi version of the forward-looking cost model, which has been translated from Turbo-Pascal computer language, for calculating high-cost support **for** non-rural carriers. We also find that certain technical improvements are necessary to ensure that the forward-looking cost mechanism operates as designed in the *Fifth* ***Report*** *and Order.*[1] To avoid the possibility of two successive changes in support amounts within a relatively short period of time, we shall defer calculating support for non-rural carriers using the Delphi version of the forward-looking cost model with incorporated technical improvements until the effective date of a Commission order in the separate proceeding addressing the non-rural high-cost support methodology adopted in the *Ninth* ***Report*** *and* ***Order,*** which **was** remanded to the Commission by the United States Court of Appeals for the Tenth Circuit.[2] We find, however, that adopting the Delphi version with incorporated technical improvements at this time is appropriate to enable the staff to perform necessary **work** to determine cost per loop estimates used to calculate high-cost support and the Commission to consider such estimates in conjunction with its review of the Federal-State Joint Board on Universal Service's (Joint Board) recommendations in the *Ninth* ***Report*** *and Order* remand proceeding.[3]

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[1] ***Federal-State Joint Board*** *on* ***Universal*** *Service*, CC Docket Nos. 96-45, 97-160, Fifth Report and Order, **13** FCC Rcd 21323 (1998) (*Fifth* ***Report and Order).***

[2] ***Federal-Stale*** *Joint* ***Board*** *on* ***Universal*** Service, CC Docket 96-45, Ninth Report and Order and Eighteenth Order on Reconsideration, 14 FCC Rcd 20432 (1999) ***(Ninth Report and Order), reversed in part and remanded in parr,*** *Qwest Corp. v. FCC*, 258 F.3d 1191 (10th Cir. 2001).

[3] ***Federal-Sfate Joinr Board*** *on* ***Universal Service,*** CC Docket 96-45, Recommended Decision, FCC 02J-2 (rel. Oct. 16, 2002) ***(Recommended*** *Decision).*

II. MODEL PLATFORM AND NINTHREPORTAND *ORDER* REMAND PROCEEDING

A. Background

2. *Nigh-Cost Model Platform*. When the Commission initially adopted the high-cost model platform used to estimate the forward-looking costs of non-rural carriers in the *Fifth Report and Order,* it anticipated that it would review and adjust the model periodically.[4] Because the Commission expected that there would be a need to make technical improvements to the model on an ongoing basis, the Commission also delegated to the Wireline Competition Bureau (Bureau) "the authority to make changes or direct that changes be made as necessary and appropriate to ensure that the model platform of the federal mechanism operates as described in this Order."' Consistent with this delegated authority, the Bureau works with interested parties *to* identify instances where the model is not working as intended and develops appropriate modifications. Periodically, Commission staff post updated versions of the cost model on the Commission's website, along with an explanation of the technical improvements.[6]

3. On June 20, 2001, in a Public Notice, the Bureau announced that it had translated the model from Turbo-Pascal computer language to Delphi computer language and posted the Delphi version on the Commission's website.[7] The Bureau then sought comment on whether to use the Delphi version of the model for purposes of calculating support amounts for 2002. The Bureau also noted that the posted Delphi version of the model was a beta version that **would** continue to be refined and updated as Commission staff and interested parties worked with it and identified appropriate revisions.[8] Accordingly, the Bureau sought recommendations concerning improvements to the Delphi version. After receiving comments, the Bureau made certain subsequent changes.' The revised Delphi version containing the technical improvements discussed below was posted on the Commission's website on August 31, 2001.[10]

4. In the 2002 *Line Counts Update Order,* the Bureau deferred a transition to calculating support using the Delphi version of the model until a later date." The Bureau did so

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[4] *See Fifth Report and* Order, 13 FCC Rcd at 21329, para. 13.

[5] *See id.*

[6] *See, e.g., Common Carrier Bureau Announces Procedures for Releasing High-Cost Support Amounts fur Non-Rural Carriers* ond *Revised Model Results,* CC Docket Nos. 96-45 and 97-160, Public Notice, 15 FCC Rcd 15559 (2000). The model and related files are located at www.fcc.gov/ccb/tapd/hcpm/welcome.html. The technical explanation of all modifications made *to* date is available in the "history.doc" file.'

[7] *Common Carrier Bureau Seeks Commenr on Translation of Cost Model to Delphi Computer Language and Announces Posting of Updated Cost Model,* CC Docket No. 96-45, Public Notice, 16 FCC Rcd 12630 (2001) *(Delphi Public Notice*). The translation to Delphi computer language affects only the outside plant module, which **was** the only part *of* the model written in Turbo-Pascal.

[8] *See Delphi Public Notice at* 1

[9] *See* AT&T Delphi Public Notice Comments at 3, 4; WorldCom Delphi Public Notice Comments at 2, 5. Other parties did nor object to the changes incorporated into the Delphi version of the model. *See* BellSouth, Qwest, and Sprint Joint Delphi Public Notice Comments at **2.**

[10] **See *supra*** note 6.

[11] *See Federal-Sfale Joint Board on Universal Service*, CC Docket 96-45, Order, 16 FCC Rcd 22418,22426, para. 22 (Com. Car. Bur. 2001) (*2002 Line Counts Update Order).*

to provide for an opportunity to further consider the effect on high-cost support amounts of minor changes in cost estimates caused by the technical improvements incorporated into the Delphi version of the model. The Bureau noted that additional time also would enable it to consider arguments that it should adopt a version of the model in Visual-Basic computer language.[12]

5. *Ninth Report and Order Remand Proceeding.* In the *Ninth Report and Order*, the Commission established a mechanism to determine the amount of federal support to be provided to non-rural carriers in each state by comparing the statewide average costs per line for non-rural carriers to a nationwide benchmark.[13] On July 31, 2001, the Tenth Circuit remanded the benchmark methodology to the Commission for further proceedings.[14] In response to the court's remand, the Commission released a Notice of Proposed Rulemaking seeking comment on remanded issues from the *Ninth Report and Order* and stated it would refer the record in that proceeding to the Joint Board for a recommended decision.[15] The Joint-Board issued a recommended decision on October 16, 2002.[16] The Commission is currently considering the Joint Board's recommended decision."

B. Discussion

6. In this Order, we determine that we should use the Delphi version of the forward-looking cost model for calculating and targeting support for non-rural carriers. We also find that the technical improvements incorporated into the Delphi version of the model and discussed herein are necessary and appropriate to ensure that the forward-looking cost mechanism operates as designed in the *Fifth Report and Order.* As discussed below, calculating support using the Delphi version of the cost model with incorporated technical improvements could lead to changes in support amounts. The *Ninrh Report and Order* remand proceeding also could lead to modifications of the non-rural high-cost support methodology, that, in turn could lead to changes

[12] *See Id.* at para. 22.

[13] *Ninth Report and Order*, 14 FCC Rcd at 20438-39, para. 10.

[14] *Qwesr Corp v FCC*, 258 F.3d at 1205. The court remanded the *Ninth Reporr and Order* to the Commission to "establish an adequate legal and factual basis for the Ninth Order and, if necessary, to reconsider the operative mechanism promulgated in that Order." *Qwest v. FCC*, 258 F.3d at 1205. In its decision, the court also affirmed the *Tenth Repori and Order*, which finalized the inputs (*e.g.*, the cost of network components such as cables and switches, customer locations, and line counts) for the model platform. *Federal-State Joint Board on Universal Service, Forward-Looking Mechanism for High Cost Support for Nan-Rural LECs*, CC Docket Nos. 96-45, 97-160, Tenth Report and Order, 14 FCC Rcd 20156 (1999) (*Tenth Report and Order*), *affirmed*, *Qwest Corp. v. FCC*, 258 F.3d 1191 (10th Cir. 2001). In particular, the court affirmed use of the model to calculate forward-looking cost and deferred to the Commission's expertise in establishing the technical specifications of the model, such as the appropriate computer language for the model. *See Qwest Corp. v. FCC*, 258 F.3d at 1205-06. The court also upheld the Commission's authority to fix technical errors in rhe model without notice and comment. *See id.* at 1206-07.

[15] *Federal-State Joint Board on Universal* Service, CC Docket 96-45, Notice of Proposed Rulemaking and Order, 17 FCC Rcd 2999, 3011, para. 26 (2002).

[16] *See supra* note 3. The Joint Board recommended continued use of statewide average costs and a national benchmark of 135 percent to determine non-rural high-cost support, but recommended that the Commission modify the non-rural high-cost support mechanism by adooting additional measures to induce states to ensure reasonable comparability of urban and rural rates. *See id.* at para. 1.

[17] *Commenr Soughi on the Recommended Decision of the Federal-Stare Joint Board on Universal Service Regarding the Non-Rural High-Cost Support Mechanism*, CC Docket 96-45, Public Notice, DA 02-2976 (rel. Nov. 5, 2002).

within a relatively brief time in support amounts.[18] To avoid the possibility of two successive changes in support amounts resulting from adoption of the Delphi version with incorporated technical improvements and thereafter a final Commission action in the ***Ninth Reporr and Order*** remand proceeding, we shall defer calculating support for non-rural carriers using the Delphi version with incorporated technical improvements until the effective date of a Commission order in the *Ninth Report and Order* remand proceeding.

7. *Translation to Delphi Computer Language.* We conclude that it is appropriate to use the outside plant portion of the forward-looking cost model that has been translated to Delphi computer language. Delphi, essentially an upgraded version of the previously used Turbo-Pascal language, is a more advanced and easier-to-use computer language than Turbo-Pascal. In particular, unlike Turbo-Pascal, Delphi computer language allows a user to step through the source code line-by-line." This improvement will allow the Commission and interested parties to better understand and follow the logic of the model in reaching its results. In addition, the Delphi computer language processes data more quickly and is more adaptable to the Windows operating system than Turbo-Pascal.[20] **As** such, translation to Delphi will enable the Commission and interested parties to more easily use and analyze the cost model and its results.

8. The Bureau deferred adoption of Delphi computer language for the model last year in part to allow it to consider arguments that it should instead adopt a version of the outside plant portion of the model in Visual Basic computer language submitted by Qwest." Based on our examination of the record developed in response to the ***Delphi** Public **Notice,*** we do not adopt the Visual Basic model submitted by Qwest for the reasons stated below. Because Delphi computer language uses the same logic in its programming steps as Turbo-Pascal, the translation to Delphi does not fundamentally change the organization of the model logic. Interested parties and Commission staff already have invested a substantial amount of time understanding, testing, and fine tuning the Turbo-Pascal and Delphi computer code.[22] Visual Basic, on the other hand, is an entirely different computer language.[23] Qwest conceded that its Visual Basic model is a beta version that "would require certain refinements and corrections before it could be used in determining universal service high cost support."[24] Although some parties expressed a preference for Visual Basic over Delphi, none have provided additional analysis *or* information concerning any effects this Visual Basic version may have on the cost model's logic or detailed comparisons of model results.[25] **As** a result, we find it would be less reasonable to adopt the

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[18] *See infra* para. 12.

[19] ***See*** BellSouth, Qwest, and Sprint Joint Delphi Public Notice Comments at 2.

[20] ***See id.***

[21] *See **2002 Line Counts Update Order,*** 16 FCC Rcd at **22426,** para. 22; Letter from Craig J. Brown, Qwest, to Magalie Roman Salas, FCC, dated Aug 13, **2001** ***(Qwesr Delphi Public Notice** Ex Parte)*.

"*See* AT&T Delphi Public Notice Reply Comments at 2, n. 3.

[23] *See* AT&T Delphi Public Notice Reply Comments at **2.**

[24] *See* Qwest Delphi Public Notice **Ex** Pane at 1. Qwest also states that differences in results between the Turbo-Pascal version and the Visual Basic version, while not intentional, are "most likely caused by the two versions' different handling ***of*** functions and variable types." *Id.*

[25] *See* BellSouth, Qwest, and Sprint Joint Delphi Public Notice Comments at **4;** AT&T Delphi Public Notice Reply Comments at 2.

Visual Basic version than the Delphi translation. Rather, on this record, we find it appropriate to use the outside plant portion of the model that has been translated to Delphi computer language.

9. ***Technical Improvements.*** As noted above, the Commission foresaw that technical improvements would be necessary to ensure that the model operates as designed and instructed the Bureau to implement such improvements where necessary and appropriate.[26] After posting a Delphi version of the model, the Bureau sought recommendations on improvements to that Delphi version, incorporated technical improvements where necessary, and then posted a revised Delphi version of the model on the Commission's website.[27] In the 2002 *Line Counts Update Order,* the Bureau stated that more time was needed to study the effect these improvements would have on high-cost support calculations.[28]

10. After investigating the various technical improvements incorporated into the posted Delphi version of the model, the Bureau discovered that two changes in particular impacted cost estimates generated by the model, which in turn could affect high-cost support calculations.[29] First, a correction was made to locate drop terminals using the 360 feet square grid cell assumption adopted in the *Fifth Report and Order,* rather than 1000 feet square grid cells.[30] This correction places drop terminals closer to customer locations and results in an overall decrease in distribution cable and structure costs. Second, Bureau staff corrected the coding that caused the model to read the wrong row of input tables for drop terminal, manhole, and service area interfaces (SAIs) costs. This coding error caused the model to retrieve incorrect values for these outside plant inputs. Correcting this coding error results in higher costs in certain wire centers.[31]

11. We find that implementation of these technical improvements is necessary and appropriate to ensure that the model operates as designed in the *Fifth Report and Order!* The

[26] *See supra* para. 2

[27] *See supra* note 6.

[28] *See* 2002 *Line Counts Update Order*, 16 FCC Rcd at 22426, para. 22.

[29] All the technical improvements incorporated into the Delphi version of the model are explained in the history.doc file on the Commission's website. *See supra* note 6. Other technical improvements were not identified by Commission staff as impacting high-cost support calculations.

[30] *See Fifth Report and Order,* 13 FCC Rcd at 21370, para. 20. An earlier version of the model used grid cells that were 1000 feet square, but the drop length in the model algorithm was not adjusted when the Commission adopted a 360 feet square grid cell assumption in the *Fifth Report and Order.*

[31] For example, in the case of feeder manhole cost, the model's input table reflects values for underground facilities with a capacity of 2, 4, or 9 ducts. Prior to implementation of this technical improvement, when 4 or 9 ducts were required, the model incorrectly retrieved a manhole cost value for 2 or 4 ducts respectively.

[32] We note that in comments on the Delphi version of the model, and more recently, in a petition for reconsideration of the 2002 *Line Counts Update Order,* interested parties have suggested other changes to the model's inputs and platform. *See e.g.,* BellSouth, Qwest, and Sprint Joint Delphi Public Notice Comments at 7; AT&T Delphi Public Notice Comments at 11-12; Maine Public Utilities Commission's and the Vermont Public Service Board's Petition for Reconsideration, filed Feb. 25, 2002. We do not address these proposals at this time because, unlike the technical improvements which are the subject of this Order, these proposals would change both the model's inputs and the model's platform design adopted by the Commission in its prior orders. Therefore, these proposals require review by the Commission. We note that the Commission expressed its intention to initiate a proceeding to study such proposed changes to the model inputs and model platform in a comprehensive manner at the time it originally adopted the model platform and inputs. *See Tenth Report and Order,* 14 FCC Rcd at 20170, para. 28 ("We therefore

(continued....)

Bureau analysis indicates that these technical improvements cause small changes in cost estimates generated by the model. For instance, using year-end 2000 line counts as input values, the combined effect of these technical improvements would cause the nationwide average cost per line to increase by less than $0.03 for 2002.[33] However, the effect on statewide average cost per line varies by state. The statewide average cost per line increases in states containing wire centers with higher density zones because such service areas require more underground structure, larger SAIs, and larger drop terminals.[34] By contrast, the average cost per line for states containing wire centers with lower density zones decreases, relative to the nationwide average, because their service areas require less underground structure, smaller SAIs, and fewer large drop terminals.[35] Under the benchmark methodology adopted in the *Ninth Reporr and Order,* minor changes in nationwide or statewide average costs will affect non-rural high-cost support ainounts.[36]

12. We shall defer calculating support for non-rural carriers using the Delphi version of the cost model with incorporated technical improvements until the effective date of a Commission order in the *Ninth Report and Order* remand proceeding. The ***Ninth Reporr and Order*** remand proceeding could lead to modifications to the non-rural high-cost support methodology that, in turn, would lead to changes in support amounts.[37] Calculating support using the Delphi version of the cost model with incorporated technical improvements likewise could lead *to* changes in support amounts. Section 254(b)(5) of the Communications Act of 1996 Act states that the universal support mechanism should be specific and predictable.[38] Consistent with this principle, we find that coordinating the determination of support for non-rural carriers using the revised Delphi version of the cost model, incorporating the technical improvements described above, with the effective date of a Commission order in the *Ninth Report and Order* remand proceeding will avoid the possibility of two successive changes in the model's calculations and support amounts within a relatively short period of time. Specifically,

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have committed to initiating a proceeding to study how the model should be used in the future (*e.g.*, how inputs data should be updated) and how the model itself should change to reflect changing circumstances."). ***See*** *also* ***2000 Biennial*** *Regulatory* ***Review – Comprehensive Review of*** *the* ***Accounting*** *Requirements* ***and ARMIS Reporting*** *Requirements* ***for incumbent*** *Local* ***Exchange Carriers: Phase*** 2, CC Docket **No.** 00-199, Report and Order, 16 FCC Rcd 19911, 19929 n. 69 (2001).

[33] ***See*** Attachment ***A.*** This increase is based on a comparison between the previously-used Turbo-Pascal version of the model with the Delphi version of the model containing technical improvements.

[34] For instance, California's cost per-line increases from $18.36 to **$18.58,** Florida's cost per-line increases from $19.86 to $20.07, and New Jersey's cost per-line increases from $18.09 **to** $18.38. ***See*** Attachment A.

[35] For instance, Mississippi's cost per-line decreases from $37.78 to $37.06, West Virginia's cost per-line decreases from $33.43 to $32.40, and Vermont's cost per-line decreases from $32.37 to $30.64. ***See*** Attachment A.

[36] For example, small cost changes could cause a state's average cost per loop **to fall** in relation to the benchmarkof 135 percent ofnationwide *cost.*

[37] ***See*** *Qwest* ***v*** *FCC,* ***258*** F.3d at 1205 (remanding the *Ninth* ***Reporf and Order*** to the Commission to "establish *an* adequate legal and factual **basis** for the Ninth Order and, **if** necessary, to reconsider the operative mechanism promulgated in that Order.") We note that the Joint Board recommended continued use of statewide average costs and a national benchmark of 135 percent to determine non-rural high-cost support, but recommended that the Commission modify the non-rural high-cost support mechanism by adopting additional measures to induce states to ensure reasonable comparability of urban and rural rates. *Recommended Decision,* FCC 02J-2 at para. 1.

[38] 47 U.S.C. § 254(b)(5).

the Delphi version of the model with incorporated technical improvements will be used for purposes of estimating forward-looking costs and determining support for non-rural carriers following the effective date of a Commission order in the *Ninth Reporr and Order* remand proceeding. In the intervening interim period, non-rural support shall continue to be based on cost estimates of the Turbo-Pascal version of the cost model using the data updates adopted in the 2002 *Line Counts Update Order*.[39] In addition, we will continue to adjust support amounts calculated using the current model's cost estimates to reflect the lines reported by non-rural carriers each quarter.[40] We find that adopting the Delphi version with incorporated technical improvements at this time is appropriate to enable the staff to perform necessary **work** to determine cost estimates under this version. Accompanying this Order is a Public Notice seeking comment on updating line counts and other input values for the Delphi version of the cost model consistent with the framework adopted in the 2001 and 2002 *Line Counts Update Orders.* Such action will enable the Commission to consider such estimates in conjunction with its consideration of the Joint Board recommendations in the *Ninth Report and Order* remand proceeding.

III. ORDERING CLAUSE

13. Accordingly. IT IS ORDERED that, pursuant to the authority contained in sections 1-4, 201-205, 214,218-220, 254, 303(r), 403, and 410 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201-205, 214, 218-220, 254, 303(r), **403,** and 410, this ORDER IS ADOPTED.

14. IT IS FURTHER ORDERED that this Order will be effective thirty days after publication in the Federal Register.

FEDERAL COMMUNICATIONS COMMISSION

William F. Maher, Jr.

Chief, Wireline Competition Bureau

[39] *2002 Line* ***Counts*** *Update Order,* 16 FCC Rcd at 224 18, para. 1.

[40] *Federal-State Joint Board* ***on*** *Universal Service, CC* Docket No. 96-45, Twentieth Reconsideration Order, FCC 00-1126, para. I8 (rel. Apr. 7,2000); *2002 Line Counts Updare Order,* 16 FCC Rcd at 22421, para. 9; *Federal-State Joint Board on Universal Service, CC* Docket 96-45, Order, 15 FCC Rcd 23960,23965, para. 11 (Corn. Car. **Bur.** 2000).

Attachment A

Stales	Monthly Cost per Loop Using Turbo-Pascal	Monthly Cost per Loop Using Delphi (with Incorporated Technical Improvements)	$Difference	%Difference
Alaska	$22.01712	$22.47113	$0.45400	2.06205
Alabama	31.64293	31.23966	($0.40327)	(1.27443)
Arkansas	27.96557	27.79555	($0.17002)	(0.60796)
Arizona	20.73340	20.94981	$0.21641	1.04379
California	18.36228	18.58156	$0.21928	1.19419
Colorado	23.35272	23.48190	$0.12918	0 55318
Connecticut	22.06188	21 86381	($0,19807)	(0.89779)
Distr. Of Col	16 03130	16 06039	$0.02909	0.18144
Delaware	20.18551	20.22798	$0.04247	0.21038
Florida	19.86697	20.07760	$0.21062	1.06016
Georgia	22 14027	22.08184	($0.05843)	(0.26392)
Hawaii	20.77071	21.01350	$0.24279	1.16889
Iowa	24.28756	24.18385	($0.10371)	(0.42699)
Idaho	26.92140	26 89352	($0.02787)	(0.10354)
Illinois	20.77270	20.86114	$0.08844	042574
Indiana	24.18936	23.96063	($0 22872)	(0 94554)
Kansas	24.71672	24.71117	($0 00556)	(0 02248)
Kentucky	29.78325	29.33534	($0 447911	(1 50389)
Louisiana	26.41917	26 30243	($0,11674)	(0.44189)
Massachusetts	19.18045	19.27705	$0.09660	0.50362
Maryland	19.90223	20.00806	$0.10583	0.53174
Maine	30.41798	28.94385	($1,47413)	(4.84625)
Michigan	23.50088	23.31444	($0.18644)	(0.79335)
Minnesota	22.25597	22.23344	($0.02253)	(0.10122)
Missouri	25.07276	24.93289	($0.13987)	(0 55784)
Mississippi	37.78217	37.06124	($0.72093)	(1.90811)
Montana	32.72822	32.59942	($0.12880)	(0.39355)
N Carolina	23.18681	23.17253	($0.01428)	(0.06158)
N. Dakota	23.97012	25.03254	$1.06242	4.43227
Nebraska	28 20475	28.23362	$0.02888	0.10238
New Hampshire	25.09483	24.04040	(81.05443)	(4.20179)
New Jersey	18.09308	18.38544	$0.29237	1.61590
New Mexico	25.70260	25.82169	$0.11909	0.46334
Nevada	19.71822	19 85380	$0.13558	0.68759
New York	19 54600	19.58764	$0.04164	0.21304
Ohio	23.36297	23.24261	($0,12037)	(0.51520)
Oklahoma	26.38137	26.26757	($0.11379)	(0.43133)
Oregon	23.41386	23.39433	($0.01953)	(0.08343)
Pennsylvania	20.64201	20.76456	$0.12255	0.59369
Puerto Rico	24 88505	25.76651	$0.88146	3.54213
Rhode Island	19.99115	20.14328	$0.15213	0.76097
S. Carolina	26.05983	26.04110	($0.01873)	(0.07186)
S Dakota	27.77254	28.05971	$0.28717	1.03400
Tennessee	26.37502	26.06114	($0.31388)	(1 19006)
Texas	21 90215	21.98471	$0 08256	0.37695
Utah	21 19423	21.31799	$0.12376	0.58392
Virginia	21.87975	21.86801	($0.01174)	(0.05365)
Vermont	32.37634	30.64906	($1 72728)	(5.33501)
Washingfon	22.31244	22.42261	$0.11017	0.49376
Wisconsin	22.71888	22.56937	($0 14950)	(0.65806)
West Virginia	33.43617	32.43423	($1 00194)	(2.99659)
Wyoming	33.71669	33.74649	$0.02980	0.08838
Average	21.92357	21.95115	$0.02758	0.12581

Compares Turbo-Pascal version with Delphi version with incorporated technical improvements using year-end 2000 line counts as input values