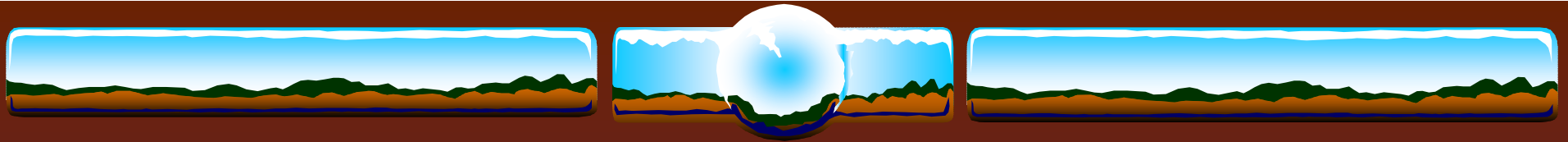


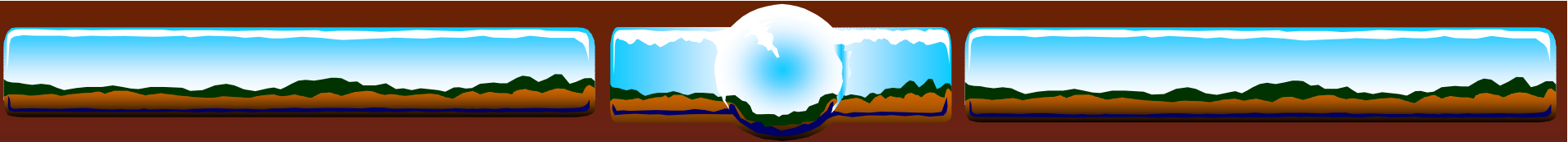
Update and Discussion on the Design Build Process

Jeff Hisem



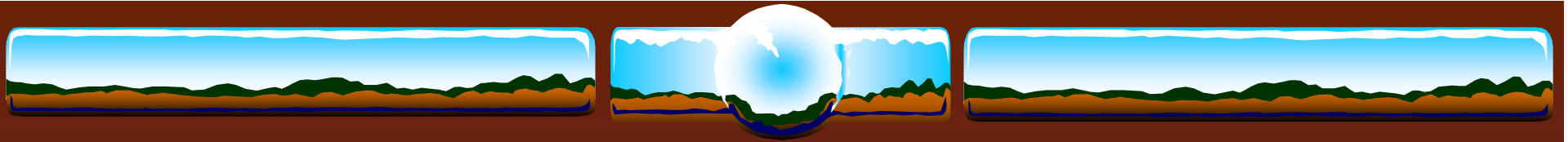
Progression of Design/Build in Ohio

- ❖ In FY2000, ODOT adopted a Strategic Initiative
 - ❖ to "ensure reliable project delivery processes and implement innovative contracting techniques."
- ❖ As part of this initiative, ODOT tested six design-build pilot projects
- ❖ ODOT's 2001 Strategic Initiatives, the design-build method was officially adopted as a project delivery method



Legislative Authority to proceed with Design/Build in FY 2001

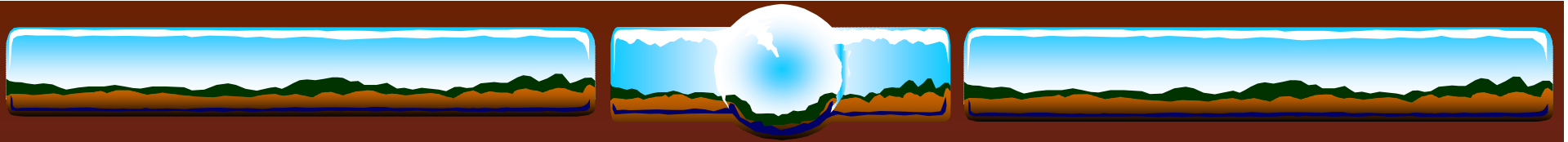
“...during the period beginning July 1, 1999, and ending June 30, 2001, the director may expand the pilot program to more contracts combining the design and construction elements of highway or bridge projects.



Legislative Authority (cont)

The total dollar value of contracts made under this division shall not exceed two hundred fifty million dollars.

The director may seek either bids or technical proposals for contracts under this division...”



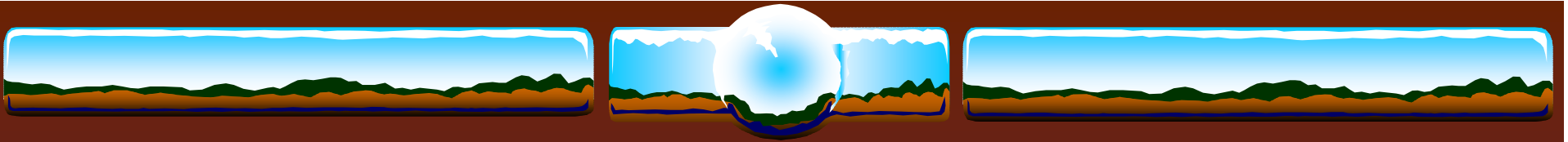
WHY DESIGN BUILD???

- ❖ Typically faster than the traditional design-bid-build process
- ❖ Combines design and construction of a project into one contract



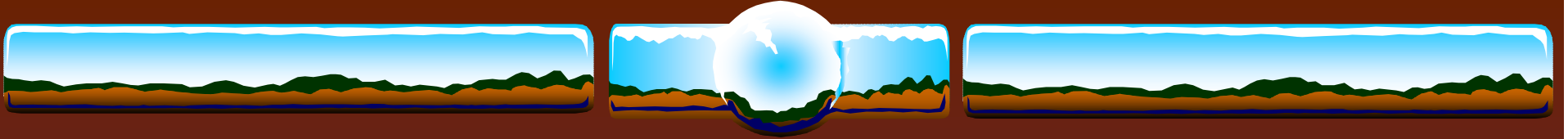
Why Design Build (cont)

- ❖ Design firm & contractor become a team
 - ❖ working concurrently on the design and construction phases of a project
 - ❖ expedites project delivery
 - ❖ Contractor's changes can be incorporated into the design phase
 - ❖ eliminates need for costly, time-consuming changes during construction
 - ❖ This benefit also allows the department to estimate project cost early in the project development process, allowing for more effective budget planning.



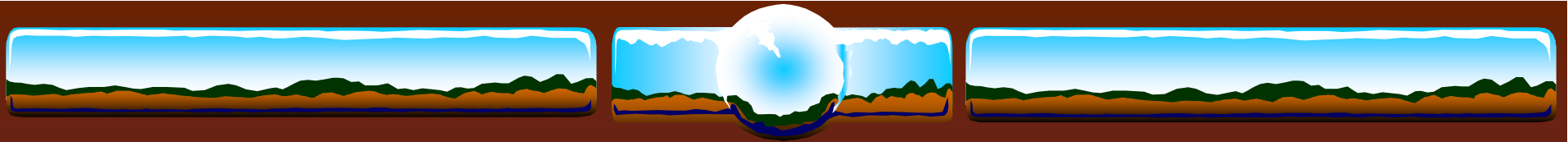
Why Design build (cont)

- ❖ **Encourages collaboration between designer and contractor**
 - ❖ develop innovative techniques to build project
- ❖ **Industry shares knowledge regarding constructability & level of detail required to bid and build a job**
- ❖ **Strengthens their appreciation of one another's role**



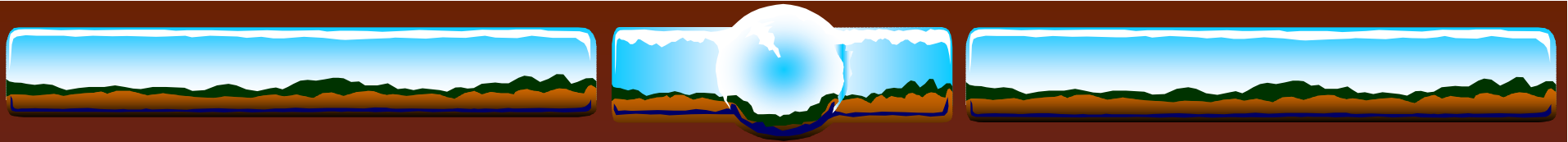
Why Design build (cont)

- ❖ Step toward performance-based construction contract requirements
- ❖ Can be accomplished with our existing resources
 - ❖ allows different offices within the organization to better cooperate and communicate with one another



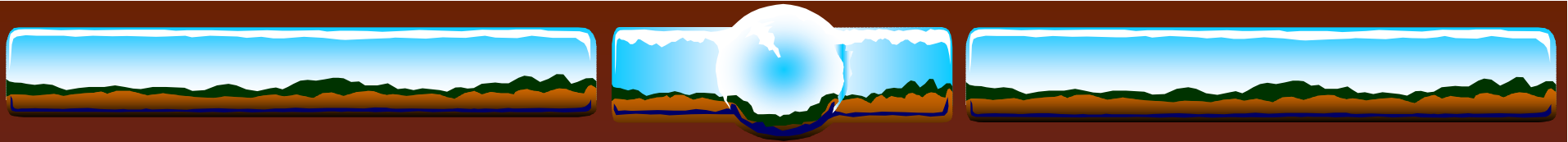
The ODOT Design Build Timeline

- ❖ 25 weeks prior to letting
 - ❖ **District submits preliminary Scope Of Services to Major Initiative Coordinator**
- ❖ 22 weeks prior to letting
 - ❖ **MIC, in cooperation with Central Office Divisions of Highway Operation, Construction, and Office of Contract Administration will review SOS and send comments back to the district**



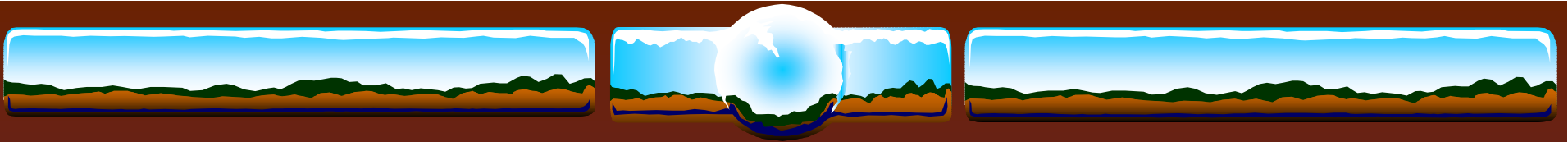
Design Build Timeline (cont)

- ❖ 19 weeks prior to letting
 - ❖ **District finalizes the SOS and sends final package, including all PDMS, design-build, and supplemental documentation, to the Office of Estimating**



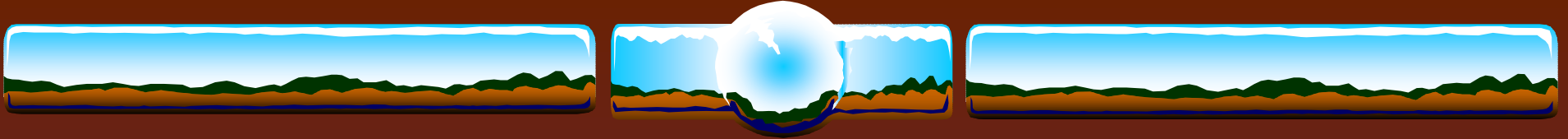
Design Build Timeline (cont)

- ❖ 18 weeks prior to letting
 - ❖ **Estimating will review the final package documentation, prepare estimate and PS&E (4 weeks)**
 - ❖ **Contract Sales will prepare a proposal that includes the SOS and any plan sheets, and send to the district for review (1 week)**



Design Build Timeline (cont)

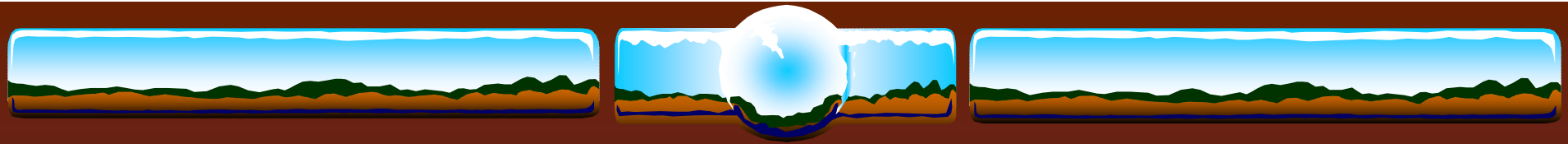
- ❖ 13 weeks prior to letting
 - ❖ **Office Of Contract Sales sends complete package to FHWA for authorization, coordinate package printing, posting of SOS on the web site, publish in the pamphlet and distribution to the industry**



Design Build Timeline (cont)

- ❖ 10 weeks prior to letting
 - ❖ **District to conduct pre-bid meeting**
 - ❖ **First addenda, pre-bid minutes, will be distributed to the plan holders no later than two weeks after the pre-bid meeting.**
 - ❖ **Second addenda, pre-bid questions and answers, will be distributed to the plan holders no later than two weeks after the first addenda**

- ❖ **LETTING**



FY00-01 Projects Awarded to Date

DIST	PID	COUNTY	ROUTE	SECTION	PROJ. NO.	COST ESTIMATE	SALE DATE	BID AMOUNT	PCT DIFF.
12	20590	CUY	IR480	19.93	990663	\$2,388,000	9/29/99	\$2,515,600	-5.34%
1	19381	VAN	US127	12.39	990677	\$1,460,000	10/13/99	\$1,009,775	30.84%
1	17124	ALL	IR75	29.564	993000	\$655,000	11/10/99	\$666,960	-1.83%
5	11208	GUE	SR660	4.98	993003	\$488,000	12/15/99	\$470,769	3.53%
9	19307	ROS	SR159	0	003000	\$1,995,000	1/19/00	\$2,229,730	-11.77%
7	11160	MIA	IR75	4.94	993001	\$59,000,000	2/1/00	\$45,480,095	22.92%
10	19905	NOB	IR77	6.22	003001	\$13,600,000	2/8/00	\$10,649,605	21.69%
3	18200	MED	IR271	0	003002	\$17,500,000	3/1/00	\$17,312,975	1.07%
8	18899	PRE	IR70	0	003003	\$19,100,000	3/15/00	\$20,534,350	-7.51%
4	18703	ATB	SR45	19.92	003005	\$3,100,000	3/15/00	\$2,963,821	4.39%
8	19394	GRE	US35	0	003004	\$10,000,000	3/29/00	\$10,497,598	-4.98%
1	20917	PAU	SR613	22.02	003007	\$725,000	4/12/00	\$566,299	21.89%
6	20681	FRA	IR71	14.39	003009	\$3,553,000	4/12/00	\$3,686,600	-3.76%
4	20411	STA	IR77	11.59	003008	\$32,900,000	5/16/00	\$24,018,600	27.00%
						\$166,464,000		\$142,602,777	



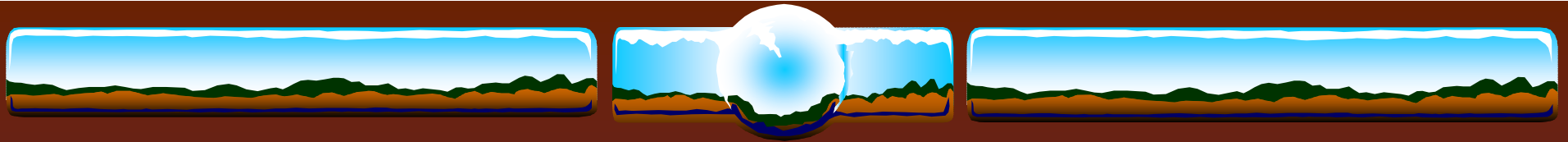
FY01 Projects to be Sold

DIST.	PID	CO	RTE	SECT	PROJ. #	PROJECT DESCRIPTION	COST EST.	SALE DATE	PRE BID
8	<u>19786</u>	HAM	IR-275	32.27	00-3012	Pavement rehab & bridge work	\$25,822,000	11/8/00	8/31/00
1	<u>21152</u>	HAN	SR-103	16.57	00-3014	bridge deck replacement	\$362,000	11/8/00	8/31/00
3	<u>17891</u>	LOR	IR-90	10.76	00-3015	Pavement replacement, resurfacing & deck	\$10,500,000	11/29/00	9/14/00
4	<u>18722</u>	MAH	SR-11	16.04	01-3000	3 Bridge decks and painting	\$3,061,960	1/10/01	11/3/00
10	<u>21053</u>	ATH	US-33	10.41	01-3001	Bridge replacement	\$3,400,000	2/7/01	11/30/00
4	<u>22163</u>	TRU	IR-80	9.08	01-3002	4 lane resurfacing and bridge rehab	\$4,900,000	2/7/01	12/5/00
11	<u>12761</u>	TUS	IR-77	3.94	01-3003	Rubbelize & roll and bridge repair	\$11,000,000	2/7/01	12/1/00
11	<u>19576</u>	BEL	IR-70	16.6	01-3004	Sign replacement & upgrade	\$460,000	2/21/01	12/15/00
8	<u>12412</u>	HAM	IR-471	0		Pavement rehabilitation	\$16,000,000	2/21/01	12/14/00
4	<u>19899</u>	ATB	SR-11	23.23		New bridge deck and painting	\$650,970	2/21/01	12/18/00
2	20761	SAN	US-6	14.76		Replace 3 bridge decks	\$3,150,000	3/14/01	1/11/01
2	20762	SAN	US-20	14.86		Replace 1 bridge deck	\$1,575,000	3/14/01	1/12/01
8	<u>19705</u>	HAM	IR-71	11.08		pavement planing & overlay	\$12,600,000	3/14/01	1/12/01
4	<u>19854</u>	POR	US-224	0		2 lane resurfacing	\$4,500,000	4/11/01	1/31/01
						FY2001 Estimated Total =	\$99,934,106		



Estimating a Design Build Project

- ❖ There are two estimates
 - ❖ District Budget Estimate
 - ❖ Official Letting Estimate
- ❖ Approx 4 wks allowed to perform letting estimate
 - ❖ If not complete in that time, District Estimate is used for PS&E
 - ❖ Official Est is completed before letting & used to compare bids



Est a D/B project (cont)

- ❖ (See Ex. of design/build items of work)
- ❖ After bids are received
 - ❖ Estimating determines discrepancy in bids
 - ❖ Conducts mandatory pre-award meeting with low bidder
 - ❖ Purpose is to listen to the bidder's approach to the project (design, quantities, and pricing)



Issues

- ❖ Open scope of services allows for wide interpretation of allowable designs
 - ❖ The design we estimate may be a completely different project
- ❖ Extremely difficult to track historical costs
- ❖ Difficult to determine when bids are unbalanced
- ❖ Questions, questions, . . . Always questions